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## Original Article

## Students' perceptions of teaching factors that demotivate their learning in lectures and laboratory-based skills practice

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## ABSTRACT

**Objectives:** The objective of this paper is to report students' perceptions of factors that demotivated their learning in lectures and laboratory-based skills practice settings.**Methods:** A total of 23 students were recruited from the Bachelor of Nursing courses at three Japanese universities, using purposive sampling. A semi-structured interview was conducted with each participant between November 2017 and January 2018 to elicit their perceptions about which aspects of the teaching context demotivated their engagement in learning. The results were analyzed using thematic analysis.**Results:** Three themes were generated: a restrictive environment, discouraging attitudes and discouraging teaching approaches.**Conclusions:** To prevent students from experiencing demotivation, teachers in the nursing faculty need to manage learning resources more effectively, create a quiet and focused atmosphere to allow students to concentrate, and be enthusiastic about teaching. They also need to add value to their classes, help students to follow lectures, and ensure that the workload they give their students is appropriate.© 2019 Chinese Nursing Association. Production and hosting by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## What is known?

- Students' motivation to learn facilitates their learning.
- Demotivation, in contrast, diminishes students' intention to learn and weakens their learning efforts.
- While factors that facilitate students' learning have been explored extensively, those that demotivate them from learning have been under-investigated.

## What is new?

- A restrictive learning environment, and discouraging teachers' attitudes and teaching approaches demotivate nursing students.
- Effective management of learning resources, environment and activities are required to prevent them from becoming demotivated.

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- Nursing faculties also need to avoid communicating negatively with students and should make sure that students follow the materials, and receive an appropriate load of tasks to prevent their demotivation.

## 1. Introduction

Lectures and laboratory-based skills practice are important components of university education. Lectures provide students with fundamental theoretical and ethical knowledge with which to broaden the scope of nursing, their understanding of patients, and the approaches required for resolving patients' health-related problems. Laboratory-based skills practice helps students to establish and strengthen their ability to deliver comprehensive nursing care in a non-threatening environment [1]. However, not all students are as motivated to study and actively engage in the class as nursing faculties would wish them to be. Snelgrove [2] found that approximately 40% of nursing students tended to learn superficially, and only 7% of them were motivated to try to understand topics in any depth. Baxter, Mattick [3] also found that the motivation of nursing students to apply learning content (theory)

to practice was the lowest among medical, dental, speech-therapy, social-work and clinical-psychology students. Equally, they were the most likely of these types of students to study simply to manage workloads/exams. Moreover, the motivation for nursing students to understand subjects in any depth tended to decrease over the course of their studies [4]. In particular, their motivation to learn was lower when a semester involved more theoretical components than clinical training in the laboratory [5]. These findings indicate that students demonstrate different degrees of motivation in terms of engaging in particular learning tasks.

Motivation plays an important role in learning, since its presence is a driving force in individuals, influencing the direction, strength, and persistence of their actions to achieve goals [6,7]. In other words, motivation is a primary determinant of students' learning behaviors and outcomes [8,9]. Studies have shown that when students are motivated to learn, their satisfaction with their learning journey increases [10], as does the quality of learning, the learning strategies they use, their academic achievement [11–14], and their likelihood of remaining in higher education [15].

Literature suggests that students' motivation to learn is influenced by both internal and external factors [13]. Some students may be internally motivated to learn because of their curiosity and willingness to help people [5,7,16]. Others may be motivated by external factors such as teachers' enthusiasm, teaching approaches and achieving a qualification [5,9,16]. In identifying nursing students' motivation to learn, Nilsson and Warrén Stomberg [5] found that external factors such as teachers' involvement, the way the program is organized and the contents of the studies were more frequently cited by nursing students. Indeed, students' learning corresponds to the way academic staff teaches [17]. Since the methods and quality of teaching vary considerably [18], it is important to understand which aspects of external factors such as teaching methods could motivate students' engagement in learning.

The literature also suggests that it is important to understand not only the factors that motivate students to learn but also those that demotivate. Demotivation is referred to as “specific external forces that reduce or diminish the motivational basis of a behavioral intention or an ongoing action” [19]. Katt and Condly [20] maintain that motivators and demotivators are not on the same continuum, but are independent factors influencing the level of an individual's motivation in different ways. Individuals are motivated by certain factors but demotivated by others. The presence of motivators induces a driving force within an individual to achieve a goal, but the absence of them does not cause dissatisfaction and demotivation. In contrast, the presence of demotivators induces the student's dissatisfaction and diminishes motivation. This means that nursing faculties need to design their classes based on what motivates students, and what prevents their demotivation, to maximize students' motivation and minimize demotivation.

A review of the literature indicated that there are a number of studies that have investigated factors affecting students' motivation to engage in learning. Some researchers interviewed students to explore their perceptions of the motivating factors [e.g., 1,9]. Others used a survey design to determine the intensity of their motivation or identify the presence of motivating factors [e.g., 5,7]. However, most of these studies focused on a clinical practice setting [e.g., 21] or the overall teaching context [e.g., 5,7,9,22]. Few studies have explored these factors specifically in relation to lectures and/or laboratory practice settings. In addition, there are fewer studies that have explored the demotivating factors in students' learning compared to those that have explored motivating factors. While the current trend in higher education is to facilitate students' learning motivation by incorporating active learning approaches, such as the flipped-classroom [23] and problem-based learning [24],

traditional lectures and laboratory-based skills practice are still dominant teaching styles in nursing education. Therefore, nursing faculties should understand which aspects of their everyday teaching practice and learning environment may motivate or demotivate students as regards their active engagement in lectures and laboratory-based skills practice. Understanding these aspects will help faculties develop their teaching skills, with a consequent improvement in students' learning.

The aim of this paper is to report students' perceptions of factors which demotivate their learning in lectures and laboratory-based skills practice settings. It should be noted that this study is part of a larger study that explored students' learning approaches, including their perceptions of motivating or demotivating teaching factors in lectures, laboratory-based skills practice, and clinical practice settings. The findings of other parts of the study will be reported elsewhere.

## 2. Methods

### 2.1. Study design

A descriptive qualitative design was used to explore students' perceptions of factors that demotivated them from learning. A qualitative design was adopted due to its flexible approach [25]. While a quantitative design is useful in measuring the intensity of the presence of demotivating factors, such a design does not allow exploration of factors affecting students' demotivation beyond what is pre-specified in a questionnaire. On the other hand, a qualitative design allows exploration of these factors in relation to students' responses. Since the aim of this study was to explore students' perceptions of factors that demotivated them from learning, a qualitative design was considered an appropriate approach.

### 2.2. Participants and setting

Students were recruited, using purposive sampling, from Bachelor of Nursing courses at three Japanese universities. The following criteria were used to select the students: 1) they had been studying at the above universities for more than one year, 2) they had had lectures and received laboratory-based clinical skills practice specific to nursing, and 3) they intended to continue with their current nursing courses.

During the data collection, the first author listened to the recorded interviews to determine if the saturation of data had been achieved, and no extra information had been gained from interviews. Participants' recruitment was ceased when data were considered saturated. This strategy resulted in the recruitment of 23 nursing students.

### 2.3. Data collection

Semi-structured interviews were conducted to collect data between November 2017 and January 2018. In the interviews, the participants were asked about the following: 1) at which times they felt demotivated to learn (or any event which might prevent them from engaging in learning) in lecture subjects, and 2) the reasons for feeling demotivated. In addition, to elicit more detail accounts of the participants' perceptions of demotivating factors, they were asked probing questions about what aspects of lecture content, teaching methods, assessment types, class climate, and teacher's attitudes demotivated them from learning. The same questions were repeated for laboratory-based skills practice subjects. The interviews were conducted in a quiet room at each participant's university and audio-recorded with the participants' permission.

During the interview, the participants were identified using pseudonyms to prevent their identification in the analysis phase. At the end of the interview session, each participant was given a 1000-yen library card as a reward for his/her participation. The interviews lasted on average 50.43 ( $SD = 7.45$ ) minutes.

#### 2.4. Data analysis

Prior to the analysis, all the interviews were transcribed verbatim. Thematic analysis was then used to analyze the interview scripts (Rice & Ezzy, 1999) and to identify themes, categories, and subcategories, using NVivo 12 (QSR International, Melbourne, Australia). First, each interview script was read repeatedly. Second, the contents of each interview script were divided into meaningful phrases, and codes were assigned to describe their semantic contents. Third, codes describing demotivating factors for learning in lectures and laboratory-based skills practice were gathered, and subcategories were created by comparing and contrasting each code, and by gathering semantically analogous codes. This was done separately for codes related to lectures and laboratory-based skills practice. Finally, subcategories and themes were created by repeating the above procedures. In this step, subcategories related to lectures and laboratory-based skills practice were combined. In this way, the overall themes and categories for demotivating students' learning could be identified, while keeping the specific factors in lecture and skills practice subjects visible.

#### 2.5. Rigour of study

The data collection process was monitored by the first author by listening to the audio-recorded sessions and checking whether the pre-specified interview procedures were followed. Then, the first author, who was not involved in the data collection and thus was unable to identify the participants, conducted the whole analysis to avoid researcher bias. On the completion of the analysis, the results produced by the first author using NVivo were shared by the second and third authors, who were experienced qualitative researchers. Since NVivo visualizes the trace of developing codes, subcategories, categories and themes, the appropriateness of the analysis can be judged by others.

#### 2.6. Ethical considerations

Prior to the study, ethical approval was obtained from the three universities (Reference Number of 170004 for Yasuda Women's University, E-914 for Hiroshima University, and 17MH048 for Prefectural University of Hiroshima), where this study was conducted. In the recruitment period, oral and written explanations about the purpose and methods of the study were given to the potential participants. They were also informed that any decision to participate in or to withdraw from the study would not affect their academic grades so that they did not feel coerced to take part in the study. Furthermore, the participants were assured of the confidentiality of their data. Finally, at the beginning of the interview sessions, the purpose and method of the study were explained to the participants again, and then written consent was obtained from each participant before the data collection.

### 3. Results

The demographic characteristics of the 23 students were as follows. The mean age of the students was 20.82, and 47.83% of them were in the fourth grade, followed by 39.13% in the second grade and 13.04% in the third grade. Of 23 students, four were male (17.39%) and 19 were female (82.61%). At the time of the study, 14

(60.86%) students intended to work as nurses, three (13.04%) as midwives, one (4.35%) as a school nurse or public-health nurse and three were undecided (13.04%).

Using thematic analysis, three themes, six categories, and 13 subcategories (see Table 1) were identified as factors which demotivated students from learning in lectures and laboratory-based skills practice.

#### 3.1. Restrictive learning environment

This theme is concerned with the physical and psychosocial environment, which resulted in demotivating students from learning. The theme consists of the following two categories: Lack of learning resources, and Environment that hinders students' concentration.

##### 3.1.1. Lack of learning resources

This category consists of subcategories related to laboratory-based skills practice. The category illustrates that a lack of resources for practicing clinical skills within and outside of teaching time demotivated them from learning.

The students said that a lack of sufficient teaching staff, medical equipment and simulators made it difficult for them to practice. The students also stated that a lack of time for practicing each skill to a sufficient level in class demotivated them from trying to master the skill. One student stated, "*We had just one class (a 3-h class including instructions and practice) on learning how to insert a bedpan, change a patient's pads and insert a urinary catheter. I'm not sure if there was enough time to teach all of these things, but we all said that it was impossible to finish learning about the tasks!*" (ID 5).

Acquiring these skills usually involves practicing outside the classroom. This type of practice involves the use of a laboratory facility, equipment which includes a high-fidelity mannequin/simulator, and a practice partner who plays the role of a patient. As the number of laboratory rooms and equipment were limited, some students could never access them for their private practice time. This also demotivated them from practicing.

##### 3.1.2. An environment which hinders students' concentration

This category was extracted from subcategories related to both lectures and laboratory-based skills practice. They became distracted when the atmosphere of the class lacked focus, and when the class was noisy.

In the clinical laboratory setting, students' attention dwindled when they felt that skills practice was not sufficiently real (e.g. when a fellow student was playing the role of a patient), when students practicing together lacked any stimulus, and when they had to practice non-invasive care. For instance, when students practiced non-invasive care, they lacked a sense of tension, which created a relaxing atmosphere. This is because they felt failing to carry out the procedures properly would not lead to the patient's death. This lack of tension hindered their concentration. One student said, "*We ... kind of played ... chatted a lot during the practice of oral care ... because oral care does not lead to a patient's death.*" (ID 9) In a lecture setting, the lack of some form of stimulus made them lose concentration. Another student stated, "*Well, the reason why we fall asleep in a class is probably related to a lack of stimulus ... such as a lecturer calling on a student to answer a question or something to get the adrenalin going.*" (ID 19).

A noisy classroom environment, with students speaking among themselves, also demotivated other students from listening to a lecture with any enthusiasm. It not only made it difficult to listen to the lecture but also sent an unintended message from the teacher that the subject was not important. One student suggested that "... for some teachers, it seems to be OK if we don't listen to the lecture ..."

**Table 1**  
Themes and categories illustrating factors which demotivated students' learning.

Themes	Categories	Subcategories	Examples	
			Lecture subjects	Laboratory-based skills practice
Restrictive learning environment	Lack of learning resources	Lack of resources within teaching time	NA	Lack of time, teaching instructors and medical equipment/simulators
		Lack of resources outside teaching time	NA	
Discouraging attitudes	Environment which hinders students' concentration	No stimulation	Lack of stimulating events during lectures	Lack of practice facilities, medical equipment/simulators and a partner to practise with
		A noisy classroom environment	Noise produced by peers speaking among themselves during lectures	Lack of reality
Discouraging teaching approaches	Discouraging attitudes in teachers	Negative comments by teachers	A teacher providing negative comments/feedback about students	Lack of stimulation between peers
		Teachers lacking enthusiasm	A teacher showing no interest in students and no enthusiasm for teaching	Learning non-invasive skills
Discouraging teaching approaches	Unable to find good reasons to attend a class	Lack of relevance/significance in the learning content.	Study content with limited relevance to future careers.	NA
		Lack of chances to acquire new knowledge in a class.	Low relevance to nursing. A teacher reading a textbook aloud or giving out textbook-like handouts, and not providing extra knowledge	A teacher showing no enthusiasm for teaching
Discouraging teaching approaches	Feeling left-out and lost	Being difficult to follow.	A teacher changing PowerPoint slides too quickly. A teacher assuming too much about students' previous knowledge of the subject when explaining.	Learning obsolete clinical skills and procedures.
		Lack of students' activities.	Non-comprehensive or unordered explanations of a teacher. Lecture with a lack of students' activities such as note-taking and discussion.	NA
Discouraging teaching approaches	Tasks being too easy or too demanding	Lack of advice or feedback from teachers.	NA	Lack of clear instructions. Inconsistent instructions among instructors.
		Tasks being too demanding.	Too many assignments. Exams which were difficult to pass.	NA
Discouraging teaching approaches	Tasks being too easy or too demanding	Tasks being too easy.	Passing exams easily. No exams required.	NA

(ID 13).

### 3.2. Discouraging attitudes

This theme is related to teachers' attitudes, which demotivated students from learning, and was formed by one category: Discouraging attitudes in teachers.

This category was identified from a subcategory that describes students' experience of attending a lecture. The students' motivation to learn was jeopardized when teachers sent negative verbal and attitudinal messages to the students or made a negative comment about them. The students were sensitive to what teachers said, and to what they meant by it. The same message could be conveyed to students either positively or negatively, depending on the words and tone of voice used by a teacher. How teachers selected words had a significant impact on students' motivation. One student recalled, ... instead of saying, "Well, you're here now, but if you work really hard from now on, you'll be OK," the teacher said, "I doubt if you'll be OK' ...". That discouraged me." (ID 11).

Teachers can send both verbal and non-verbal messages to students, and the latter is reflected in their attitudes. Teachers' attitudes to teaching told the students whether the teachers were interested in them, engaged in teaching and enthusiastic about it. If teachers never looked at their students during a lecture, and if the lecture was a one-way experience, this sent a message to the students that their teachers were not interested in them. Reluctant teachers also sent a message that they were not enthusiastic about teaching. "We won't be engaged if a teacher is ambivalent about teaching, and his attitude is reflected in comments like 'I'm not sure if you need to know this, but I'll teach it to you anyway'." (ID 3).

### 3.3. Discouraging teaching approaches

This theme was related to teaching approaches of teachers, and was identified from three subcategories: Unable to find good reasons to attend a class, Feeling left-out and lost, and Tasks are too easy or too demanding.

#### 3.3.1. Unable to find good reasons to attend a class

This category was identified from subcategories related to the students' experience of both lectures and skills practice. The theme illustrates the students' uncertainty about how beneficial it would be to attend a class, in terms of whether it is relevant or significant to their careers, or whether they will acquire any new knowledge in the class.

The students' motivation to learn decreased when they found that the content of their studies had limited relevance to their future careers. Learning obsolete clinical skills that are seldom used in current nursing practice was also cited as a demotivating factor. One student noted, "I won't be motivated to study things if I'm not sure when I'll need them." (ID 18).

The students' motivation to learn also decreased when they found that listening to a lecture did not provide them with any new information. This happened when a lecture simply involved knowledge which could be found in textbooks, or when a lecturer read a textbook aloud or gave out textbook-like handouts. Another student elaborated, "When a teacher gives a lecture directly from a textbook ... when it goes on for hours, I feel sleepy ... I stop listening to the lecture when I realize that I could read the textbook at home ... it means I can't be enthusiastic about the lecture or engage with it." (ID 5).

### 3.3.2. Feeling left-out and lost

This category, consisting of three subcategories, illustrates approaches to teaching which negatively impacted on the students' motivation to learn in lectures and laboratory-based skills practice.

In a lecture setting, the students' motivation to learn was reduced when teachers changed PowerPoint slides too quickly for the students to follow, assumed too much about students' previous knowledge of the subject, and did not explain in a sufficiently understandable or organized way. These problems made it difficult for students to follow and understand the learning content. In addition, students found lectures boring and difficult to engage in when they had no active involvement so that they did nothing but sit and listen to the lecture. One student commented, "*I can't actively listen to a lecture if the lecturer just expects us to 'listen quietly'.*" (ID 4).

In laboratory-based skills practice, the students' motivation was influenced by how much advice they received from teachers. A lack of clear instructions about how to proceed with the skills practice also reduced the students' motivation to learn. In addition, their engagement in skills practice was adversely affected when they were dissatisfied with the amount and quality of advice given by teachers. A student described this as follows: "*When we were practicing, we got little advice from a teacher in terms of improving our skills. She didn't respond to our questions either ... We didn't know how to proceed.*" (ID 12).

### 3.3.3. Tasks are too easy or too demanding

The last category was identified mostly from students' experiences of attending a lecture and is comprised of two subcategories. It demonstrates that inappropriate levels and volumes of tasks (i.e. exams and assignments) demotivated students from learning.

The students complained about excessive demands on them, including several exams in a semester, which were often difficult to pass. When assigned goals were too difficult for them to achieve, and when their efforts were less likely to be rewarded, the students' motivation to learn diminished. One student explained, "*We were given a mid-term exam as well as an end-of-semester one ... We had to memorize the entire content ... no multiple-choice questions in the exam, and we had to write down all the answers. Marks were deducted for wrong spellings ... I couldn't motivate myself to learn everything by heart.*" (ID 16) The students were also dissatisfied with the large volume of written/oral assignments they were given, because completing assignments by the due dates became their main task rather than immersing themselves in the topics, which made them question the meaningfulness of their work. "*In one subject, we were given assignments after every lecture and had to submit them the next ... we had to write an assignment during the class where we were supposed to be listening to a lecture ... it was meaningless.*" (ID 6).

On the other hand, the students felt demotivated if it was too easy to pass a subject. For example, they were demotivated if an exam did not require much serious studying, or if they could obtain a credit simply by submitting a report (i.e. without an exam). This demotivation happened because there were no external driving forces for them to study. This category indicates that an appropriate level of workload is necessary in order not to demotivate students from learning.

## 4. Discussion

### 4.1. Discussion on the findings

This study explored students' perceptions of teaching factors that demotivated them from learning in lectures and laboratory-based skills practice. Three themes emerged from the exploration: Restrictive learning environment, Discouraging attitudes and Discouraging teaching approaches.

The restrictive learning environment has two aspects: a lack of resources and an environment that hinders students' concentration, both of which demotivated students from learning. A lack of learning resources is often identified as a barrier to learning in laboratory-based skills practice in the literature. For instance, previous studies have shown that a lack of teaching staff, and a lack of time and resources for practicing not only led to students' dissatisfaction [1,26] but also increased their anxiety levels [18]. As learning involves acquiring new behavioral patterns or improving pre-existing behavior through experience [27,28], it implies learning is a composite of behavior changes. Three factors are involved in behavior change: motivation, ability and an unrestrictive environment which allows an individual to engage in intended behavior [29]. A lack of resources clearly hinders students from engaging in learning, and this perceived difficulty may reduce their motivation. Since under-resourcing is a common problem in nursing education, creative solutions are required.

An environment that hinders students' concentration is another factor in demotivating their learning. Students need to concentrate if they are to remain focused on their learning, but when a class is noisy and there is no stimulation, they can be easily distracted. One study suggested that an event that introduces some sort of stimulation (i.e. a stressful event) during the class can enhance memory encoding, consolidation, retrieval and updating [30]. Therefore, an appropriate level of stimulation is required if students are to learn effectively. A quiet environment is also necessary for students to pay attention and concentrate in class, but this is sometimes difficult to achieve. In particular, large classes (e.g. over 60 students) contribute to an increased level of noise [31], and this was the case in this study, where class sizes ranged from 60 to over 120. A study showed that attention suppressed task-irrelevant perceptual learning, while it increased task-relevant learning [32]. Thus, appropriate class management, which introduces a level of stimulation but maintains a quiet environment, is needed to avoid students' demotivation.

Discouraging teachers' attitudes, and what they say, also negatively impacted on students' motivation to learn. For example, where teachers conveyed negative or judgemental comments to students or showed a lack of enthusiasm for teaching, this was a contributory factor in demotivating learning. In contrast, previous studies have suggested that enthusiastic attitudes from teachers positively influenced nursing students' motivation to learn [9,16,22]. Thus, a teacher's positive attitude can serve as a motivator, and a negative one serves as a demotivator. One of the reasons why teachers' attitudes are so important in students' motivation is that they indicate how trustworthy and credible a teacher is. Varagona and Hold [33] found that attitudes such as being non-judgemental, empathetic and validating others improved students' perception of how trustworthy a faculty was. Trustworthiness forms a basis for students' perception of teachers' credibility [34], and this credibility inspires and motivates students to engage in what credible teachers are trying to teach them. In fact, one study shows that teachers' credibility and students' motivation have a strong positive correlation with each other [34]. In other words, positive teaching attitudes are important for preventing students' demotivation and for motivating them.

In addition to attitudes, how teachers approach their teaching is an important factor in influencing students' motivation levels. In particular, what teachers teach is critical as regards students' motivation. For students to be motivated to learn, the content of learning needs to be relevant and of value to their future career [8,9,14,35]. A lack of relevancy, in contrast, demotivates students. Sometimes, students do not understand how their learning content fits into their future careers, so taking the time to explain the relevance and importance of their learning materials is essential

during a class [11]. Teachers also need to keep pace with current nursing practice. This is because previous studies have demonstrated that the difference between what they teach in a skills laboratory and what students are taught in a clinical setting can make students unsure of their competence [26]. Moreover, for lectures to be of value to students, teachers need to provide extra knowledge which is not accessible via textbooks and which cannot simply be read from a textbook during a lecture. To avoid students' demotivation, teachers need to add 'value' to their class.

Equally important in teaching approaches are the teaching methods used by teachers. During a class, teachers need to ensure that students are following their lectures and have understood their instructions. The existing studies have shown that a lack of clear and consistent instructions or advice from teachers led to students' frustration and confusion in laboratory-based skills practice [1,26]. These problems arise because skills practice involves several different teachers, all of whom have the different background knowledge and ways of carrying out nursing care. In other words, students can consider teaching to be inconsistent if they think there is only "one" way of conducting a specific nursing procedure. Hence, while an agreement is necessary between teachers on how they teach each skill, it is also important to explain to students that there are as many ways of conducting care as there are patients. This will also help students understand the concept of individualized care. In a lecture, teachers also need to provide students with explanations that relate one piece of knowledge to another and integrate areas of knowledge. Explanations should also be well-organized, to ensure an element of cohesion [36]. Moreover, teachers need to arrange class activities, as listening passively to a lecture demotivates students from learning. The research demonstrated that today's students prefer to learn by doing and feeling [37,38], so this type of active learning can help them learn and can improve their academic performance [37,39]. Since confidence in learning outcomes motivates students [35,40], introducing class activities through which they can actively engage with the study materials is important in both motivating and avoid demotivating students from learning.

The final factor concerning teaching approaches that affect students' motivation to learn is having an appropriate volume of tasks assigned to students. The findings of the present study show that excessive demands/workloads demotivate students. This finding is consistent with those of other studies, in which demanding schedules and difficult tasks reduced students' motivation [5] and created stress and anxiety for them [18]. Overload has also been known to make students resort to rote learning to cope with the demands made of them [41]. Therefore, excessive workloads not only reduce students' motivation but also make it difficult for learning to be effective. The findings of the current study, however, suggest that a workload that is not sufficiently challenging can have the same effect and reduce students' motivation. This is because smaller workloads and easy tasks could bore them, or send a message that the subject in question is not important for their career. It could also make them feel insecure, because they understand that they have a great deal to learn and that their teacher is not preparing them for it [9]. The findings suggest that an appropriate degree of challenge is necessary to prevent students from losing their motivation.

In sum, the findings of the present study suggest that the following precautions are necessary to prevent students from becoming demotivated. First, nursing faculties need to manage learning resources more effectively and create a quiet and more stimulating atmosphere to help students concentrate. Second, the faculties need to show more enthusiasm for teaching. Lastly, the faculties need to devise teaching approaches that add value to their class, support students in following the material, introduce

learning activities, and give them an appropriate number of tasks.

#### 4.2. Limitation of the study

Although this study was conducted in multiple educational sites, the findings may not be transferrable to other educational institutions, where a different educational approach is adopted and a different education environment exists. As has been noted, studies that explored demotivating factors of nursing students are scant, and the present study needs to be replicated in other institutions.

The findings of the present study are also limited in that the study explored only the factors affecting students' demotivation, but not to what degree these factors influence their motivation. Therefore, it is not clear from these findings which of the demotivators is the most important. A quantitative study is necessary to investigate this issue. The outcome of such a study will enable the faculties to prioritize the areas for improvement in nursing education.

#### 5. Conclusion

To help nursing students engage in their learning, nursing faculties need to promote the students' learning motivation as well as reduce their demotivation. Past studies have focused on investigating factors that affect the students' motivation or exploring ways to improve it. However, what has been overlooked was the exploration of factors that affect the opposite side of motivation, namely demotivation. The present study demonstrated that a restrictive learning environment, discouraging attitudes, and discouraging teaching approaches are the factors which lead to the students' demotivation. These findings, as well as those of other motivational studies, would help conceptualize the development of an effective educational approach that maximizes students' motivation and minimizes demotivation.

#### Conflicts of interest

The authors declare that there are no conflicts of interest.

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#### Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.ijnss.2019.08.001>.

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