



# To Attend or Not—The Reasoning Behind Nursing Students' Attendance at Lectures: A Qualitative Study

Susanne Forsgren, Tanja Christensson, Gudrun Rudolfsson & Åsa Rejnö

To cite this article: Susanne Forsgren, Tanja Christensson, Gudrun Rudolfsson & Åsa Rejnö (2020): To Attend or Not—The Reasoning Behind Nursing Students' Attendance at Lectures: A Qualitative Study, *Scandinavian Journal of Educational Research*, DOI: [10.1080/00313831.2020.1727004](https://doi.org/10.1080/00313831.2020.1727004)

To link to this article: <https://doi.org/10.1080/00313831.2020.1727004>



© 2020 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 17 Feb 2020.



Submit your article to this journal [↗](#)



Article views: 831






View related articles [↗](#)



View Crossmark data [↗](#)

# To Attend or Not—The Reasoning Behind Nursing Students' Attendance at Lectures: A Qualitative Study

Susanne Forsgren <sup>a</sup>, Tanja Christensson<sup>a</sup>, Gudrun Rudolfsson <sup>a,b</sup> and Åsa Rejnö <sup>a,c</sup>

<sup>a</sup>Department of Health Sciences, University West, Trollhättan, Sweden; <sup>b</sup>Faculty of Nursing and Health Sciences, Nord University, Bodø, Norway; <sup>c</sup>Department of Medicine, Stoke unit, Skaraborg Hospital Skövde, Skövde, Sweden

## ABSTRACT

There is a rising tendency for students in higher education not to attend lectures. Therefore, the aim of the study was to describe the reasoning behind nursing students' decisions on whether or not to attend lectures. This qualitative study was performed in a nursing education programme at a Swedish University. One hundred and thirty-one students participated. Data were collected through a questionnaire comprising open-ended questions. Qualitative content analysis was performed. The results are presented in eight categories: four concerning *reasons for attending lectures* and four concerning *reasons for not attending lectures*. Decisions, both to attend and to not attend lectures, were based on conscious choices guided by the students' self-governing of their own personal needs for learning.

## ARTICLE HISTORY

Received 29 June 2019  
Accepted 3 February 2020

## KEYWORDS


Attendance; choice; nursing education; student reasoning; qualitative method

## Introduction

The number of students participating in higher education is increasing. However, there is also an increasing tendency for students not to attend lectures (Paisey & Paisey, 2004; Young et al., 2010). The value of lectures as an effective teaching method in higher education appears to be decreasing (French & Kennedy, 2017) and there is a tendency for less face-to-face teaching (Symonds, 2014). There is also ongoing discussion about whether today's technology can replace lectures as a teaching method (French & Kennedy, 2017). However, within the realm of higher education, attendance—the *action of being present at a place or an event* is in itself not a necessary goal. For example, in Sweden, it is typical that attendance is mandatory at learning activities only when this is one of the required conditions for passing the examination. It is more important that the students learn and manage examinations. It is not a problem if students choose not to attend lectures, as long as they pass the course exams. Problems only arise, primarily for the students themselves, if they fail their exams and cannot graduate. For nursing students, this result will also affect the rest of society, since our healthcare system is dependent on the presence of nurses who have graduated. It is therefore important to understand the reasoning of nursing students with regard to their attendance at lectures.

## Background

Lecture attendance that is close to 100% is unrealistic, since there will always be unavoidable absences related, for example, to illness (Paisey & Paisey, 2004). Previous research has indicated

**CONTACT** Åsa Rejnö  asa.rejno@hv.se  Department of Health Sciences, University West, Högskolan Väst 461 86, Trollhättan, Sweden; Department of Medicine, Stoke unit, Skaraborg Hospital Skövde, Skövde, Sweden

© 2020 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group  
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

that non-attendance is more often the result of students being unable to attend than of them choosing not to attend. One study reported a mean of 2.5 on a scale ranging from *unwilling to participate* (value 0) to *something has prevented me from participating* (value 4) (Petrović & Pale, 2015).

Previous research has indicated that students see lecture attendance as an important part of their learning and believe that missing a lecture decreases their understanding of the subject (Bati, Mandiracioglu, Orgun, & Govsa, 2013; Paisey & Paisey, 2004; Revell & Wainwright, 2009). The importance of structure in nursing education has been highlighted as crucial to reduce psychological stress in nursing students (Nerdrum, Rustøen, & Helge Rønnestad, 2009). Lectures support the students in structuring their studies through offering a good learning environment in community with other students (Gysbers, Johnston, Hancock, & Denyer, 2011). Attendance is believed to be important for gaining basic knowledge about the subject, for offering an opportunity to ask questions, and for providing access to hand-outs and tips for passing the exams (Bati et al., 2013; Khong, Dunn, Lim, & Yap, 2016; Paisey & Paisey, 2004; Petrović & Pale, 2015). There was evidence in one study that attendance was associated with experienced lecturers who integrated clinical examples in their lectures (Revell & Wainwright, 2009), but this was not found to explain attendance in another study (Kelly, 2012). Good relationships with fellow students may increase attendance (Rania, Siri, Bagnasco, Aleo, & Sasso, 2014) while big groups of students, strong group pressure or mobbing can lead to non-attendance (Bati et al., 2013; Paisey & Paisey, 2004; Young et al., 2010).

A conscious choice to attend a lecture may be based on prior experience of the lecturer, the lecture content or previous knowledge of the subject (Billings-Gagliardi & Mazor, 2007) and attendance may be renounced in favour of preparing for exams (Bati et al., 2013; Desalegn, Berhan, & Berhan, 2014; Petrović & Pale, 2015) or carrying out assignments (Paisey & Paisey, 2004).

Attendance can also be affected by perceived bad scheduling (Desalegn et al., 2014) and students often choose not to attend on days with only one scheduled lecture (Paisey & Paisey, 2004). Attendance varies during the week, with highest attendance on Mondays and lowest on Fridays (65% vs. 22%) (Kelly, 2012). Monday was troublesome in one study because of its proximity to the weekend (Paisey & Paisey, 2004) and Fridays had low attendance in another because the students gave higher priority to being social and travelling home at the weekends (Kelly, 2012). Attendance also decreases as the term or course progresses (Rejnö, Nordin, Forsgren, Sundell, & Rudolfsson, 2017).

Concomitant part-time work has been shown to decrease attendance at lectures (Paisey & Paisey, 2004; Revell & Wainwright, 2009; Rochford, Connolly, & Drennan, 2009), to have no or possibly a positive effect on attendance (Kelly 2012) or to detrimentally affect the students' management of their education (Rochford et al., 2009). Students who finance their own studies through part-time work have also been shown to be more likely to attend learning activities (Kelly 2012).

Research on attendance in the field of nursing education, that also considers factors such as age and gender, is scarce. This can be explained in part by the fact that nursing students are predominantly female. An integrative review on nursing students academic performance have revealed conflicting evidence of the impact of age and gender but the relation to attendance were not considered (Pitt, Powis, Levett-Jones, & Hunter, 2012). One study have found that attendance was the only statistically significant factor influencing academic performance when age and gender were included in the analysis (Rejnö et al., 2017).

Research has to date mainly reported the causes of non-attendance using quantitative methods and questionnaires. Focus has more rarely been on the students' own descriptions, which motivated this study. Subsequently, the aim of this study was to describe the reasoning behind nursing students' decisions on whether or not to attend lectures.

## Methods

This qualitative study is part of a larger project on nursing students' attendance, comprising both quantitative and qualitative data. For the analysis, we have used an inductive content analysis (Graneheim & Lundman, 2004) The part of the project using quantitative data is presented in detail

elsewhere (Rejnö et al., 2017). In the present study, we are capturing the nursing students' descriptions of their reasoning about attendance at lectures.

### Study Population

The study was conducted at a university in western Sweden which admits students twice a year into the nursing education programme, with an intake of approximately 100 students every semester. The participants comprised nursing students from two classes, from the third term of the semesters starting in spring and autumn 2013, who were attending a medical course offering 15 HE credits: *Clinical medicine in physical ill-health*. The course included mandatory and non-mandatory teaching activities such as lectures, seminars, clinical practice and practical exercises in medical technology. According to the university's guidelines, a teaching activity is only considered mandatory if it includes an examination. Hence attendance at non-mandatory activities is not required in order to pass courses. Twenty-two of the activities were non-mandatory; an absolute majority of these were lectures. The course underwent only minor adjustments between the two semesters. Altogether, 176 students took part in the course, 154 women and 22 men. The median age of the students was 25.7 years, with a range of 20–57 years, as calculated from registration data. Out of these 176 students 131 (74%) agreed to participate in the study. No identifying data were collected and consequently we do not have detailed demographic information on the participating students.

### Data Collection

Data were collected from the answers to the open-ended questions about the nursing students' reasoning behind their decision to attend the lectures or not. The questionnaire was specifically constructed for this study and was handed out to the students in the last lecture of the course. The two questions were as follows: (a) "If you have attended the lectures, what made you decide to attend?" (b) "What were your reasons for not attending the lectures?"

### Analysis

An inductive qualitative content analysis, as described by Graneheim and Lundman (2004), was performed. The first steps were carried out by the first and second authors (SF and TC). All data from the questionnaires were initially read several times to familiarise the researchers with the data and were subsequently sorted into two content areas: one concerning the reasons for attending the lectures and one the reasons for not attending. In the next step, meaning units were attributed to the various types of content. Thereafter, the meaning units were condensed and codes describing the content were created and grouped based on similarities (Table 1). Preliminary categories were in this way created. The results were then sorted further by the whole research group to ensure there was no overlapping content between the categories. The categories were ordered and re-ordered until consensus on categorisation was reached, resulting in eight final categories (Table 2).

**Table 1.** An example of the analysis process.

Meaning unit	Condensation	Code	Category
<b>I thought that if I watched, listened and read, then it might stick better</b>	To watch, listen and read makes it stick better	To watch, listen and read supports learning	The lectures engaged several senses
<b>Because they (the lectures) were of differing quality, different focus and much felt not of relevance, messy.</b>	Lacking in quality, differing focus, irrelevant and messy.	Messy and lacking focus.	The lectures were confusing, and the surroundings detracted from learning

**Table 2.** An overview of content areas and categories.

Content areas	Categories
<b>Reasons for attending lectures</b>	The lecturers made the lectures vivid The lectures engaged several senses The student was helped to capture the essential points of a subject The lectures created structure and offered a shortcut to learning
<b>Reasons for not attending lectures</b>	Refraining lectures provided time for reflection and learning at the student's own pace The lecturers failed to communicate knowledge The lectures were confusing and the surroundings detracted from learning The student's personal life took priority over the lectures

## Ethical Considerations

The study followed guidelines from the Declaration of Helsinki (World Medical Association, 2013). Data were collected after the course ended. The students were given oral information about the study and the voluntary nature of participation at the distribution of the questionnaire form. No formal written informed consent was obtained but this was presumed for students who chose to return a filled-out form. No attempts were made to persuade the students to participate and the questionnaires were returned in the course teachers' university post boxes to ensure confidentiality. No identifying data were included in the forms. The study was approved by the ethical board of University West, Sweden (ref: 2015/502 B22).

## Results

The results are presented in [Table 2](#). Exemplifying quotations are provided.

### *Reasons for Attending Lectures*

#### *The Lecturers Made the Lectures Vivid*

One of the students' main reasons for attending lectures was that the lecturers made them vivid. The students thought that the lecturers ought to be engaged with their subjects and with their students. The way that the lectures were organised was also important and the students emphasised that the lectures should be easy to follow, should concern the subject and should help in students' professional development. They also described the significant role that the lecturers played in making the lectures rewarding and compelling, thus motivating the students to attend.

*It shows which lecturers are engaged; they make their subjects interesting and can answer questions. Attendance is incredibly dependent on the lecturer.*

The students appreciated when the lecturer developed what was in the PowerPoint presentation rather than being governed by it. When the lecturer spoke freely about the subject and made the lectures vivid, they found the lectures to be more rewarding and educative.

#### *The Lectures Engaged Several Senses*

The students' attendance at lectures was also dependent on the facilitation of learning by the engagement of several senses, for example seeing, listening and taking notes (i.e., moving). Writing down what was said in the student's own words increased their understanding of the literature and the notes helped their self-study.

*I learn much better from taking notes and answering the questions at home; I understand more easily when I have my notes and can link them to what I read.*

The subject was also easier to understand after hearing the examples given during the lectures. The real-life cases provided during the lectures facilitated the students' acquisition of knowledge.

They emphasised that they wanted more examples of patient cases during lectures because these increased their understanding.

*Understanding is often deepened, and it can be easier to comprehend if examples are given; the lecturer often describes a case and explains at the same time. I personally take in information and new knowledge much more easily when I listen to lectures and hear personal examples from the lecturers.*

PowerPoint presentations were appreciated as a support to learning. The students stated that it was easier to remember the facts when pictures were provided. Slides from the presentations also facilitated self-study and helped the students to understand the literature better.

### ***The Student was Helped to Capture the Essential Points of a Subject***

A strong argument for attending lectures was that they were a method of discovering the essential facts of the course. The students received guidance on the key points of the subject and advice on where to focus their self-study. Lectures were seen as an important method of keeping up with the course and the students were afraid, they would miss something critical if they did not attend.

*I need an introduction to the subject before I begin my own reading, to discover the framework within which I should study, to find out what is important.*

The lectures were seen as both preparation for and revision after self-study, and as a place where questions could be answered. They were also a place where difficult subjects and concepts could be explained by the lecturers both before and after self-study. The students emphasised that their understanding and knowledge were increased if the subject was explained and clarified and a grasp of the context was provided.

*I learn more from listening to a lecturer explaining than from reading literature that does not explain. I learn a lot from lectures, it has been both interesting and educational.*

Discussions during the lectures and among the students were seen as an important complement to self-study. The discussions were rewarding as they led to later reflection that could be used in self-study. The students used their course mates' thoughts and questions to expand their own understanding of the subject.

### ***The Lectures Created Structure and Offered a Shortcut to Learning***

The students stated that they needed support to create structure in their studies so as to handle feelings of anxiety, fear and panic before the exam.

*The lectures give guidance on key knowledge that is useful partly for adding to my own understanding and partly for dampening panic about the exam.*

Attendance provided both an opportunity for difficult work to be explained and an idea of the direction of the studies, enabling more structured self-study. Through attending, the students could also discover any recent or new content within the subject.

Attending lectures was seen as a shortcut to learning; the students believed that by attending they would not have to study so much on their own.

*I wanted to grasp the opportunity to get the information "for free" so that I would not have to read everything from scratch in the literature.*

Having question times was important for some students, and the possibility to ask questions was an important reason for attendance. The students wanted to be able to prepare questions and know in advance when they would be able to ask them, so they could plan and structure their own time.

## **Reasons for not Attending Lectures**

### ***Refraining Lectures Provided Time for Reflection and Learning at the Student's Own Pace***

The students listed many reasons for not attending lectures. Some students stated that time was an important aspect of the decision not to attend, or to leave lectures early. Some preferred to study on their own, finding that they profited more than by attending lectures. They felt that they learned better through self-study and that study at home increased the possibility of structuring their studies to suit them best, studying at their own pace and in ways that best supported their learning.

*To be honest, I profited more by reading the books. I learn best by sitting at home studying at my own pace and in my own way.*

The students also indicated that since the lectures were based on the course literature, attendance sometimes did not offer anything more than reading it by themselves. Another argument for not attending lectures was that some subjects were considered easy to study on one's own, when the students had control over which aspects were needed. When they felt that they already had a lot of knowledge in a subject or if the lecture was perceived as too basic, the students sometimes chose not to attend.

Another factor that contributed to non-attendance was the time needed to read the literature and to prepare between lectures. When lectures were scheduled several days in a row, it led to non-attendance in favour of self-study for some students. When lectures were scheduled for the whole day, some students found it hard to keep their concentration and sometimes refrained from attending or left after half a day. They also stated that the lecturer was attentive to the need for breaks.

### ***The Lecturers Failed to Communicate Knowledge***

One reason for choosing not to attend lectures was that the lecturers were hard to understand, thus reducing the lecture's effect. The students lost interest when lecturers were experienced as uncommitted or monotonous, boring, uninteresting or hard to listen to, and they chose not to attend or to leave the lecture early.

*Because some lecturers, in my view, don't talk in a way that makes it interesting to listen, it is simply too boring to stay or even to come in the first place.*

Where lecturers were experienced as being lacking in quality, such as seeming to have muddled thinking, lacking teaching skills or focusing on the wrong things, the students chose to leave the lectures since they did not support their learning.

*I went home because the lecturer was lacking in quality, focused on the wrong things, and much was not relevant but was messy, fuzzy and farfetched.*

When lecturers failed in pedagogical ability and just read from the PowerPoint screen without deepening the lecture from the teaching material, the students felt that the lectures did not add any value and they then chose not to attend in favour of studying on their own.

### ***The Lectures were Confusing and the Surroundings Detracted from Learning***

Attending lectures could sometimes increase confusion if different lecturers gave differing information about the same thing. The students emphasised that clarity around the guidelines and requirements for the course was important. The degree of clarity and the amount of information given affected the students' motivation to attend. Some stated that they did not attend lectures when they anticipated that information would be unclear or too extensive.

*It was almost as if they threw a bunch of different information at us that only confused me and increased the stress; it seemed better for me not to hear any more.*

The students also abstained from attending or left the lectures if there were disturbances such as course mates posing too many extraneous questions. Noise in the lecture hall from students talking or moving also led to difficulties concentrating on the lecture.

*The causes for me leaving some (lectures) were the level of clatter in the hall, and the gabby and ill-timed questions.*

Another disturbing factor was when the technology failed and the lecturer had to spend time trying to start the projector or making the audio system work. Attributes of the hall could also be experienced as disturbing or tiring; for example there could be insufficient ventilation, cold, bad acoustics or uncomfortable chairs.

### ***The Student's Personal Life Took Priority Over the Lectures***

Some students de-prioritised lectures that were judged to be relatively unimportant in favour of other things in their lives such as paid work or leisure activities. Long itineraries, tiredness and poor motivation were also causes for non-attendance.

*Some lectures have not felt so important compared to work or my other duties; I actually had a slump in motivation.*

Illness, parental leave and caring for a sick child were common reasons for non-attendance. Other reasons included having an operation, going through a difficult family situation, stress, crisis, and death within the family.

Another reason was having an active private life. Some lectures were thought to take too much time, which the students chose to spend elsewhere.

*Too much to do at home; it was simply a matter of prioritising; some lectures have not felt as important as other things I was doing.*

One example was that vacations were often prioritised over studies. Timetables for buses and trains also affected attendance if the students needed to go home in time for other activities.

## **Methods Discussion**

The use of questionnaires allowed all the students from the two classes to participate in the project. However, written responses to open-ended questions did not provide the opportunity for the investigators to develop the answers through follow-up questions. Many answers to the open-ended questions were short, only consisting of one or more sentences, but extensive answers were also given. The material obtained were considered rich enough for an inductive content analysis with a manifest approach (cf. Graneheim, Lindgren, & Lundman, 2017).

The trustworthiness of the study was heightened by providing a detailed description of the analysis in the Methods section, and remaining committed to the outlined steps (Graneheim & Lundman, 2004). The first and second authors (SF and TC) performed the initial analysis and the findings were thereafter discussed in the research group until consensus on categorisation was achieved. Quotations were included to give the readers the possibility to judge the trustworthiness of the findings and the categorisation made (cf. Graneheim et al., 2017). Although the results were derived from only one educational institution, we find it fair to assume that these results could be transferred to students at other universities with nursing educational programmes with the same approach and view on attendance and which include non-mandatory lectures as part of the teaching activities on offer.

## **Results Discussion**

The main reason for attending lectures was that the lecturer was engaged and made the subject vivid for the students, which in turn promoted learning. This was described in the



categories *The lecturer made the lectures vivid* and *The student was helped to capture the essential points of a subject*. A “good” lecture increases understanding of the subject and offers a structure for understanding the context (Gysbers et al., 2011), especially for the development of professional expertise, such as in nursing education (Elvira, Imants, Dankbaar, & Segers, 2017). Lecturers who are engaged and allow the discussion to occur during lectures also stimulate attendance.

However, when students refrain from attending lectures, the learning process is interrupted, as described in the category *The lecturer failed to communicate knowledge*. Skilled lecturers were not experienced as monotonous or unengaged. The lecturer having extensive knowledge about the subject is considered a prerequisite for a good lecture. Further, if lecturers focus on perceived wrong content, the students prefer self-study to attending lectures (Friedman, Rodriguez, & McComb, 2001).

In *Avoiding lectures provided time for reflection and learning at the student's own pace*, self-study was the primary choice of students who claimed they learned more that way. Arguments given included their need for control and their opinion that their requirements for learning were not met by the lecturer. This study did not examine the students' performance in exams and consequently does not investigate the outcomes of self-study versus attendance at lectures. However, previous research has shown that participation in learning activities promotes the passing of exams (Gump, 2005; Rejnö et al., 2017).

The students stressed the importance of gaining knowledge through *engaging several senses*. Seeing the lecturers' slides, listening and taking notes during lectures was described as facilitating learning and deeper understanding; this emphasises the importance of taking the differing needs of students into account. Johnston et al. (2015) wrote that while most students learn best kinaesthetically (28%), a number learn best by listening (17%), verbally/orally (16%) or visually (9%). This supports the present study results and suggests that lectures might be an appropriate learning activity for students with various learning styles, since they have the potential to activate several senses.

When surrounding factors, such as interruptions to the lecture from other students asking questions, were experienced as disturbing, some students chose not to attend. External factors such as noise are important; the number of students who prefer a certain amount of sound is greater than those who prefer it to be silent (19% vs 0.8%) (Hallin, 2014). However, our study has shown that when it is too noisy, students choose to leave or not attend lectures. Thus, the lecturer must take responsibility for balancing the learning environment to account for the opposing needs of students: to be able to ask questions about things that are unclear while keeping disturbance of other students to a minimum.

When *The student's personal life takes priority over the lectures*, unavoidable non-attendance such as illness or deaths in the family resulted in a level of non-attendance in line with what was shown by Paisey and Paisey (2004) but other reasons for non-attendance, as reported by the students' active choices, also existed. These included work, family and leisure activities being given higher priority than lectures. It could be considered reasonable that students take work wages into consideration when considering attendance and performance.

The finding that students thought of lectures as a shortcut to learning was surprising. Lectures were seen as an easier way of gaining knowledge without having to spend too much time or effort on reading the course literature. To consider this as a shortcut is an interesting view of learning. Previous research has, to our knowledge, not reported this view. Attendance at lectures was also described as getting knowledge for free. This can be viewed as a favourable way of thinking about lectures and acting accordingly, also from the lecturer's point of view. It was also surprising that the students did not see their own contribution to their learning while attending lectures. It would be interesting to discover what students think learning is. This could be a question for future research using deepened individual interviews.

## Conclusions

This study adds to our understanding of students' views about attendance at lectures. Decisions, both to attend and to not attend lectures, were based on conscious choices. These were guided by the students' self-governing of their own personal needs for learning, including factors such as time and structure of their learning. Since it is a challenge for lecturers to support all the differing needs of the students, further discussions of different teaching methods are required. The effect of students choosing to study by themselves instead of attending lectures has not been clarified and requires further investigation, for example by linkage to study results and through individual interviews.

## Acknowledgements

We would like to thank the participating nursing students, without whose participation in this study could never have been carried out.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## ORCID

Susanne Forsgren  <http://orcid.org/0000-0002-9716-5113>

Gudrun Rudolfsson  <http://orcid.org/0000-0002-3593-4511>

Åsa Rejnö  <http://orcid.org/0000-0002-6454-9575>

## References

- Bati, A. H., Mandiracioglu, A., Orgun, F., & Govsa, F. (2013). Why do students miss lectures? A study of lecture attendance amongst students of health science. *Nurse Education Today*, 33(6), 596–601. doi:10.1016/j.nedt.2012.07.010
- Billings-Gagliardi, S., & Mazor, K. M. (2007). Student decisions about lecture attendance: Do electronic course materials matter? *Academic Medicine*, 82(10 Suppl), S73–S76. doi:10.1097/ACM.0b013e31813e651e
- Desalegn, A. A., Berhan, A., & Berhan, Y. (2014). Absenteeism among medical and health science undergraduate students at Hawassa University, Ethiopia. *BMC Medical Education*, 14, 81. doi:10.1186/1472-6920-14-81
- Elvira, Q., Imants, J., Dankbaar, B., & Segers, M. (2017). Designing education for professional expertise development. *Scandinavian Journal of Educational Research*, 61(2), 187–204. doi:10.1080/00313831.2015.1119729
- French, S., & Kennedy, G. (2017). Reassessing the value of university lectures. *Teaching in Higher Education*, 22(6), 639–654. doi:10.1080/13562517.2016.1273213
- Friedman, P., Rodriguez, F., & McComb, J. (2001). Why students do and do not attend classes. *College Teaching*, 49(4), 124–133. doi:10.1080/87567555.2001.10844593
- Graneheim, U. H., Lindgren, B.-M., & Lundman, B. (2017). Methodological challenges in qualitative content analysis: A discussion paper. *Nurse Education Today*, 56, 29–34. doi:10.1016/j.nedt.2017.06.002
- Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), 105–112.
- Gump, S. E. (2005). The cost of cutting class: Attendance as a predictor of success. *College Teaching*, 53(1), 21–26. doi:10.3200/CTCH.53.1.21-26
- Gysbers, V., Johnston, J., Hancock, D., & Denyer, G. (2011). Why do students still bother coming to lectures, when everything is available online? *International Journal of Innovation in Sciences and Mathematics Education*, 19(2), 20–36.
- Hallin, K. (2014). Nursing students at a university – A study about learning style preferences. *Nurse Education Today*, 34(12), 1443–1449. doi:10.1016/j.nedt.2014.04.001
- Johnston, A. N., Hamill, J., Barton, M. J., Baldwin, S., Percival, J., Williams-Pritchard, G., ... Todorovic, M. (2015). Student learning styles in anatomy and physiology courses: Meeting the needs of nursing students. *Nurse Education in Practice*, 15(6), 415–420. doi:10.1016/j.nepr.2015.05.001
- Kelly, G. E. (2012). Lecture attendance rates at university and related factors. *Journal of Further and Higher Education*, 36(1), 17–40. doi:10.1080/0309877X.2011.596196

- Khong, R. W. L., Dunn, J. S., Lim, C.-M., & Yap, W. S. P. (2016). Why do students attend lectures? Exploring justifications for attendance among undergraduate students from a British University in Asia. *Journal of Developing Areas*, 5, 497.
- Nerdrum, P., Rustøen, T., & Helge Rønnestad, M. (2009). Psychological distress among nursing, physiotherapy and occupational therapy students: A longitudinal and predictive study. *Scandinavian Journal of Educational Research*, 53(4), 363–378. doi:10.1080/00313830903043133
- Paisey, C., & Paisey, N. J. (2004). Student attendance in an accounting module – Reasons for non-attendance and the effect on academic performance at a Scottish University. *Accounting Education*, 13, 39–53. doi:10.1080/0963928042000310788
- Petrović, J., & Pale, P. (2015). Students' perception of live lectures' inherent disadvantages. *Teaching in Higher Education*, 20(2), 143–157. doi:10.1080/13562517.2014.962505
- Pitt, V., Powis, D., Levett-Jones, T., & Hunter, S. (2012). Factors influencing nursing students' academic and clinical performance and attrition: An integrative literature review. *Nurse Education Today*, 32(8), 903–913. doi:10.1016/j.nedt.2012.04.011
- Rania, N., Siri, A., Bagnasco, A., Aleo, G., & Sasso, L. (2014). Academic climate, well-being and academic performance in a university degree course. *Journal of Nursing Management*, 22(6), 751–760. doi:10.1111/j.1365-2834.2012.01471.x
- Rejnö, Å, Nordin, P., Forsgren, S., Sundell, Y., & Rudolfsson, G. (2017). Nursing students' attendance at learning activities in relation to attainment and passing courses: A prospective quantitative study. *Nurse Education Today*, 50, 36–41. doi:10.1016/j.nedt.2016.11.025
- Revell, A., & Wainwright, E. (2009). What makes lectures 'unmissable'? Insights into teaching excellence and active learning. *Journal of Geography in Higher Education*, 33(2), 209–223. doi:10.1080/03098260802276771
- Rochford, C., Connolly, M., & Drennan, J. (2009). Paid part-time employment and academic performance of undergraduate nursing students. *Nurse Education Today*, 29(6), 601–606. doi:10.1016/j.nedt.2009.01.004
- Symonds, M. R. E. (2014). Lecturing and other face-to-face teaching – Too much or too little? An assessment based on student feedback and fail rates. *Higher Education Research & Development*, 33(6), 1221–1231. doi:10.1080/07294360.2014.911256
- World Medical Association. (2013). World Medical Association declaration of Helsinki: Ethical principles for medical research involving human subjects. *JAMA*, 310(20), 2191–2194. doi:10.1001/jama.2013.281053
- Young, P., Yates, S., Rickaby, C., Snelling, P., Lipscomb, M., & Lockyer, L. (2010). Researching student absence: Methodological challenges and ethical issues. *Nurse Education Today*, 30(4), 291–295. doi:10.1016/j.nedt.2009.08.003