

## Factors Influencing Nursing Student's Satisfaction in the Clinical Practice Education Program: A Systematic Review

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### ABSTRACT

**Background:** Nursing education programs' major success is arguably linked to students' practical clinical practice. The practical clinical practice provides a realistic setting in which students can safely integrate theoretical nursing knowledge into practical nursing care while also developing the attitudes and abilities required for the profession. This study aimed to examine the factors influencing nursing students' satisfaction in the clinical practice education program.

**Subjects and Method:** A systematic review was conducted by searching articles from PubMed, ResearchGate, Science Direct, Google Scholar, and EBSCO is an article published from 2012 to 2022. The keywords were "clinical practice" AND "education" AND "students, nursing" AND "satisfaction". The inclusion criteria were cross-sectional study. The articles were selected by PRISMA flow diagram.

**Results:** A total of 8 studies was included in this review. Individualized supervision model, the pedagogical atmosphere on the ward, relationship with the clinical nurse supervisors, relationship with the nurse teachers, leadership style, clinical nurse commitment, patient relationships, higher age, grade point average (GPA), completion of several clinical courses, type of service and center, the type of management, the preference in the choice of the practice center, the number of students per period per clinical educator, being a woman and being in the second-grade year group, unhealthy placement environments.

**Conclusion:** Factors influencing the satisfaction of student nurses in the clinical practice education program are the type of management, service, and center; the premises of nursing in the ward; the pedagogical atmosphere on the ward; the Ward/ Nurse Manager's leadership style; individualized supervision model; unhealthy placement environments, clinical tutors and nurse teacher.

**Keywords:** clinical practice, learning, education, students, nursing, satisfaction.

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### BACKGROUND

Nursing education programs' major success is arguably linked to students' practical clinical practice (Henderson et al. 2006). The practical clinical practice provides a realistic

setting in which students can safely integrate theoretical nursing knowledge into practical nursing care while also developing the attitudes and abilities required for the profession (O'Mara et al., 2014; Newton et al.,

2013). The term "clinical internship" or "placement" refers to learning that takes place under the supervision of a healthcare practitioner<sup>4</sup>, and involves the application of theoretical knowledge, the development of clinical skills, and the integration of professional activities (Newton et al., 2010).

According to the literature, the clinical nursing environment (the workplace) can impact student nurses positively or negatively through infusion in the work place culture<sup>5</sup>. The quality of an educational system, in this case nursing students' clinical practices, can be measured using many different variables, but student satisfaction that these practices generate among users has become a key element in teaching quality (Löfmark et al., 2012).

The satisfaction of nursing students with their clinical practice education curriculum is due to a variety of factors. Graduates have highlighted welcoming and supportive learning settings as essential contributors to their learning, as well as possibilities for active participation in patient care.

Unsupportive clinical learning environments have a negative impact on students' learning, although there has been little focus paid to an explicit analysis of problematic clinical learning environments. Student nurses' learning quality and happiness are influenced by the clinical setting and assistance they get. Students who are unhappy with their educational and clinical experiences have the option to change careers (Milton-Wildey et al., 2014).

Based on Widiyanto et al. (2018) stated that the transitional period of adolescence is marked by significant changes in various aspects. A study conducted in Sweden on the experiences of nursing students while studying in nursing homes <sup>8</sup> and primary health-care <sup>9</sup>, obtained information that good supervision from supervisors is strongly re-

lated to how students get a better clinical learning experience.

Previous research has highlighted the importance of high-quality clinical learning environments and supervision for health-care students; it is critical to identify and investigate the elements that influence these. Therefore, this study aimed to examine the factors influencing nursing student's satisfaction in the clinical practice education program.

## SUBJECTS AND METHOD

### 1. Study Design

This was a systematic review was PRISMA-P (Preferred Reporting Items for Systematic Review and Meta-Analysis Protocol).

This systematic review conducted by searching articles from PubMed, ResearchGate, Science Direct, Google Scholar, and EBSCO, entering the following keywords "clinical practice, clinical learning" AND "education" AND "students, nursing" AND "satisfaction. An examination of reference lists in retrieved papers yielded additional publications.

### 2. Inclusion Criteria

The inclusion criteria of this study were abstracts found in the electronic database search. Studies have to be published in a peer-reviewed English language journal, look at factors influencing nursing students satisfaction in clinical practice education programs, and be published between 2012 and 2022 to be included.

### 3. Exclusion Criteria

Exclusion criteria from this study were study procedures, meta-analyses, editorials, and publications published in non-English language journals were all excluded from this review.

### 4. Study Extraction

Each manuscript was evaluated by looking at the journal in which it was published as

well as its main characteristics. Table 1 provides a summary of this information.

### 5. Data Synthesis

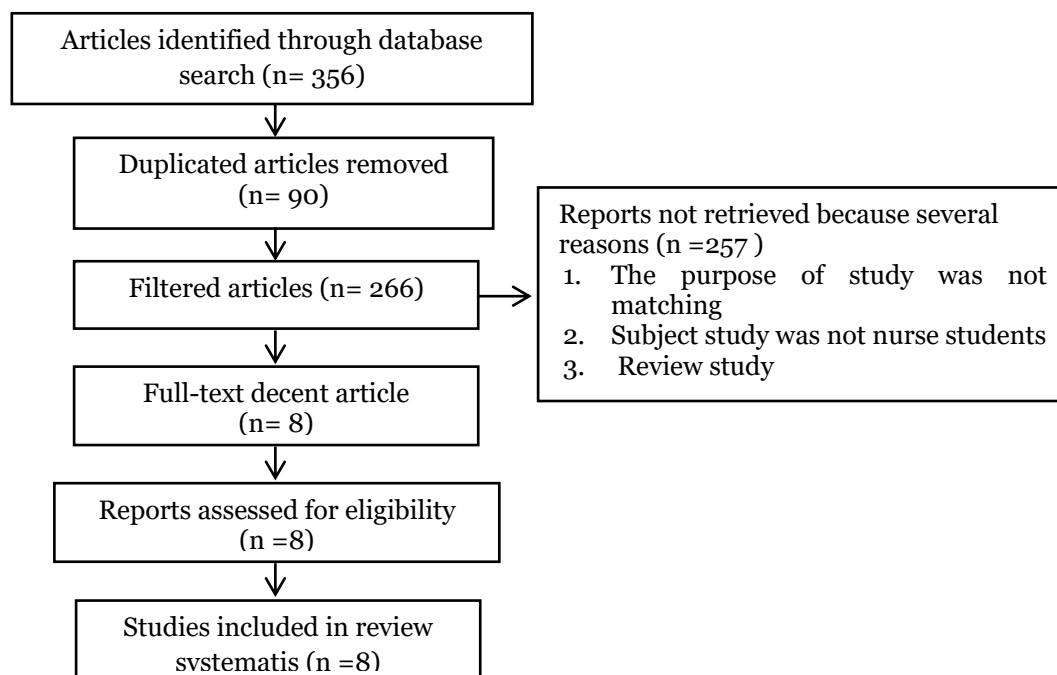
The following element's purpose of study, study design, sample characteristics, and results were used to extract the results of each article's characteristics into Table 1.

## RESULTS

Location of research. Research locations included eight, studies conducted in Europe and two, performed in Asia. None of the studies reviewed took place in America, Australia, or Africa). Publication source are the eight studies emanated from six different journals, representing diverse fields and areas of investigation. Four studies appeared in nursing-related journals (e.g., Nurse edu-

cation in practice, Nurse education today, BMC nursing). One study (Fernandez-Garcia et al., 2020) came from journals with a psychology theme.

Three study appeared in medicine and life sciences related journals (e.g., Acta Biomedica). Purpose of study are the majority of interventions reviewed focused on assessing the general aspects of factors influencing students' satisfaction with the clinical learning environment. Whereas one (Fernandez-Garcia et al., 2020) study focused on factors in the academic environment, one focused on socio-demographic and one (Galletta et al., 2017) examined the model of the relationship between student's perceived respect, role uncertainty, staff support, and satisfaction with clinical practice.



**Figure 1. Results of Prisma Flow Diagrams**

**Table 1. Article Search Results**

Author (Year)	Title	Method	Results	Conclusion
Antohe et al. (2016)	Clinical education and training of student nurses in four moderately new European Union countries: Assessment of students' satisfaction with the learning environment	Cross-sectional quantitative study	The students evaluated their clinical learning environment mainly positively. The student satisfaction with their clinical placements reached a high level and strongly correlated with the supervisory model. Although the commonest model for supervision was traditional group supervision, the most satisfied students had the experience of individualized supervision. The study gives a picture of the satisfaction of students with the learning environment and, moreover, with clinical placement education of student nurses in four EU countries.	The results highlight the individualized supervision model as a crucial factor of students' total satisfaction during their clinical training periods.
Cremonini et al. (2015)	Nursing students' experiences of and satisfaction with the clinical learning environment: the role of educational models in the simulation laboratory and in clinical practice	A cross-sectional descriptive design	94% of our sample answered questionnaires. Students expressed a higher level of satisfaction with their training experiences. The highest mean value was in the sub-dimension "Pedagogical atmosphere on the ward". Third year students expressed higher satisfaction levels in their relationship with the CNS and lower satisfaction levels in their relationship with the NT.	The main finding in this study was that the students' satisfaction with the supervisory relationship and the role of NT depend on how supervision in the clinical practice and in the simulation laboratory is organized.
D'Souza et al. (2015)	Perception of and satisfaction with the clinical learning environment among nursing students	Cross-Sectional	Satisfaction with the clinical learning environment (CLE) sub-dimensions was highly significant and had a positive relationship with the total clinical learning environment. In the path model 35% of its total variance of satisfaction with CLE is accounted by leadership style, clinical nurse commitment (variance=28%), and patient relationships (R2) =27%).	Nurse educators can improvise clinical learning placements focusing on leadership style, premises of learning and nursing care, nurse teacher, and supervision while integrating student, teacher and environmental factors. Hence the clinical learning environment is integral to students' learning and valuable in providing educational experiences.

Author (Year)	Title	Method	Results	Conclusion
Fernandez-Garcia et al. (2021)	Satisfaction with the clinical practice among nursing students using regression models and qualitative comparative analysis	Observational, cross-sectional study.	The results indicate that sociodemographic variables such as sex, being a woman, and being in the second-grade year group, influence student satisfaction in both methodologies.	According to our results, establishing specific academic plans for students in higher years (3rd and 4th) could improve nursing students' satisfaction with their clinical practice. Adequate training of students is a key factor in the provision of high-quality nursing care.
Galletta et al. (2017)	Lack of respect, role uncertainty and satisfaction with clinical practice among nursing students: The moderating role of supportive staff.	Cross-sectional study	The result found that lack of respect was positively related to role uncertainty, and this relationship was moderated by supportive staff, especially at lower levels. Also, role uncertainty was a mediator of the relationship between lack of respect and internship satisfaction; lack of respect increased role uncertainty, which in turn was related to minor satisfaction with clinical practice.	placement environments, characterized by lack of respect, trust, and support increase nursing students' psychosocial risks, thus reducing their satisfaction with their clinical placements.
Nejad et al. (2019)	Investigation of Nursing Student Satisfaction with the First Clinical Education Experience in Universities of Medical Sciences in Iran	cross-sectional study	Descriptive statistics were used to hypothesis test in SPSS 22. The highest rate of student satisfaction was related to the third domain labeled "Instructor's behavior", and the lowest rate of student satisfaction was related to the fifth and seventh domains labeled "Emotional atmosphere and learning in the clinical setting" and "Creating appropriate learning opportunities", respectively. The results of statistical tests suggested a statistically significant relationship between the mean satisfaction score (based on the 10-degree scale) and gender (p=0.01). statistically significant relationship was observed between the mean satisfaction score and other demographic characteristics such as age, grade point average (GPA), and university type.	Student satisfaction rate varies in different domains of the questionnaire. Accordingly, it is recommended that schools of nursing and midwifery incorporate the findings of this study into their first clinical, educational experience planning and take into account the educational needs of students to bring greater satisfaction.

<b>Author (Year)</b>	<b>Title</b>	<b>Method</b>	<b>Results</b>	<b>Conclusion</b>
Papastavrou et al. (2016)	Nursing students' satisfaction of the clinical learning environment: A research study.	Cross-sectional study	nursing students were highly satisfied with the clinical learning environment and their satisfaction has been positively related to all clinical learning environment constructs namely the pedagogical atmosphere, the Ward Manager's leadership style, the premises of Nursing in the ward, the supervisory relationship (mentor) and the role of the Nurse Teacher ( $p < 0.001$ ). Students who had a named mentor reported more satisfied with the supervisory relationship. The frequency of meetings among the students and the mentors increased the students' satisfaction with the clinical learning environment. It was also revealed that 1st year students were found to be more satisfied than the students in other years.	The supervisory relationship was evaluated by the students as the most influential factor in their satisfaction with the clinical learning environment. Student's acceptance within the nursing team and a well-documented individual nursing care is also related with students' satisfaction.

The 8 studies varied in terms of the use of approaches and statistical analysis. Two studies by Fernández-García et al. (2020) and Fernández-García et al. (2021) utilized Hierarchical regression models (HRM) and fuzzy sets qualitative comparative analysis (fsQCA). Two studies by Antohe et al. (2016) and Nejad et al. (2019) used descriptive statistics. A study utilized Multivariate analysis of variance (MANOVA), with Bonferroni correction for multiple comparisons. A study used a confirmatory factor analysis (CFA) with the maximum likelihood method of estimation. A study by Papastavrou et al. (2016) used Spearman's rho correlation coefficient, chi-square tests, and multinomial logistic regression. Whereas, a study by D'Souza et al. (2015) used ANOVA and structural equation modeling.

## DISCUSSION

### 1. Type of management and service center

Student satisfaction with the learning environment and activities was influenced by the type of center (hospital) and public management. The type of service provided is an important factor in clinical educator and activity satisfaction. According to the literature, publicly administered facilities have varied human resources, materials, and even the way pupils are supervised (O'Brien et al., 2018). Suitable planning of the type of center, service, clinical placement, and clinical learning activities for students is critical to ensuring that the environment provides the student with an appropriate learning environment (Sundler et al., 2013).

### 2. The pedagogical atmosphere on the ward.

A pedagogical atmosphere can be defined as all of the essential emotional circumstances and sentient human qualities that exist between the instructor and the child and that serve as the foundation for all pedago-

gical relationships (Ballnow, 2004). This instance could also be referred to as emotional atmosphere and clinical learning.

The relationship between the students and the clinical nurse supervisors or nurse teachers might also be used to analyze the nursing premises in the ward. Student learning during clinical placement is influenced by the clinical supervisory relationship and the clinical environment (Henderson et al. 2006; Saarikoski and Leino-Kilpi, 2002).

### 3. Leadership style.

Positive engagement in nursing care and patient relationships typified the leadership style, resulting in a supportive clinical learning environment. Recognition as a member of the nursing team and involvement in patient care resulted in excellent student learning and demonstrated clinical nurse dedication. To promote continuity in clinical teaching, nurse instructors should create adequate learning opportunities by ensuring a pleasant atmosphere in the ward with open communication and cooperation, commitment, and relationships between students, teachers, and staff nurses (Cremonini et al., 2015).

Clinical learning environment experiences were influenced by relationships between supervising ward nurses and students, organizational structure and ward setting, and knowledge and experience 22. In the clinical setting, student satisfaction plays an important role in achieving student learning goals. Individualization and educational innovation are two areas of concern relating to the common themes found. Student satisfaction with the clinical learning environment was significantly impacted by these two characteristics (Phillips et al., 2017).

### 4. Individualized supervision model

The supervisory relationship was more satisfying for students who had a personal preceptor than for the others. The importance

of the preceptor and supervisory connection was reinforced by the students' responses. The preceptor's approach and communication style had a significant impact on the students' learning (Sundler et al., 2014).

Having multiple preceptors can make learning more difficult for students, and the number of preceptors has been mentioned as being important for the learning environment in clinical practice Papastavrou (2010). Following patients and having multiple preceptors depending on who is in charge is thus better than having a personal preceptor. Having only one preceptor, on the other hand, can be a disadvantage if the student and preceptor do not get on (Budgen & Gamroth, 2008).

#### **5. The preference in the choice of the practice center.**

Student satisfaction with clinical placement is associated with their perceptions of the clinical learning environment (Chan, 2002; Smedley and Morey, 2009). The number of students per period per clinical educator universities are struggling to locate enough quality clinical placements due to the growing number of students on practicum. As a result of the increased demand for student placements and the increased workload of universities in order to secure and manage enough placements, students felt a greater focus on satisfying supervisors than on appeasing students, which could lead to unhealthy placement conditions.

A physiotherapy student once felt disadvantaged in her final placement since she was not involved in direct patient care, but she was discouraged from expressing the matter. An unfavorable final year clinical placement, according to one student, might potentially damage her confidence and feelings about her career. A positive experience with a supervisor on placement, on the other hand, may impact the speciality in

which a student chooses to pursue a nursing career (O'Brien et al., 2019).

#### **6. Patient relationships**

Students' accomplishment of learning outcomes, self-confidence, and even their decision to stay in the healthcare profession are all influenced by meaningful patient connections and pleasant Clinical Learning Environment experiences (Suikkala and Leino-Kilpi, 2005). Focusing learning on the student-patient interaction provides patients with a variety of educational and assessment-related responsibilities that can enhance students' clinical learning and evaluation, so encouraging them to provide holistic, comprehensive treatment. As a result, all patients with expertise and capacity can participate in learning connections with students, improving the education's overall quality. However, it is critical to ensure patient safety and patients' informed consent to engage in students' learning and assessment in the context of student-patient partnerships (Rowland et al., 2019).

#### **7. Higher age group**

It means that the lower the level of satisfaction with the clinical practice environment, the older the age group (second or third year). Other research has found that students in higher year groups have lower levels of satisfaction because they have received more knowledge and skills and, as a result, have greater judgment and awareness of the real difficulties in clinical practice: ethical dilemmas, patient care quality, unit workloads, supervising, and student follow-up (Warne et al., 2010; Milton-Willey et al., 20114).

As in previous studies by Pitkänen et al. (2018)<sup>30</sup> found that these pupils have better critical thinking skills in earlier studies. Papastavrou et al. (2016), 17 students in higher year groups are more demanding in terms of the supervisory relationship. As a result, the frequency of inter-



actions between students and mentors may have an impact on their degree of happiness.

### **8. Grade point average (GPA)**

One study showed the significance between GPA and nurse student satisfaction. However, one study did not<sup>16</sup>. The relation between GPA and nurse students' satisfaction might also relate to the completion of some clinical.

In conclusion, factors attributed to the satisfaction of student nurses in their clinical practice education program are the type of management, service, and center; the premises of nursing in the ward; the pedagogical atmosphere on the ward; the Ward/Nurse Manager's leadership style; individualized supervision model; unhealthy placement environments; the preference in the choice of the practice center; the number of students per period per clinical educator, patient relationships; being a woman; being in the second grade year group or higher age group; grade point average (GPA), the relationships between students and patient; the frequency of meetings among the students and the mentors; and completion of several clinical.

### **AUTHORS CONTRIBUTION**

Arief Wahyudi Jadmiko is the main author who select research topics, search for articles, process articles, and create publication manuscripts.

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### **CONFLICT OF INTEREST**

There is no conflict of interest in this study.

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