

Nursing students' perceptions of the impact of clinical teachers on supporting the students' coping with stress during their first clinical practice: a quantitative study

Postrzeganie przez studentów pielęgniarstwa wsparcia udzielanego przez nauczyciela w radzeniu sobie ze stresem podczas pierwszej praktyki klinicznej – badanie ilościowe

Iwona Bodys-Cupak¹, Aneta Grochowska², Anna Majda¹, Joanna Zalewska-Puchała¹, Barbara Kubik²

¹Institute of Nursing and Midwifery, Faculty of Health Sciences, Jagiellonian University Medical College, Krakow, Poland

Head of the Institute: Agnieszka Gniadek PhD, Prof. JU

²Department of Nursing, Faculty of Health Sciences, University of Applied Sciences, Tarnow, Poland

Head of the Department: Barbara Kubik PhD, Doc. PWSZ

Medical Studies/Studia Medyczne 2020; 36 (4): 272–280

DOI: <https://doi.org/10.5114/ms.2020.102321>

Key words: clinical practice, coping, nursing, student, teacher.

Słowa kluczowe: praktyka kliniczna, radzenie sobie, pielęgniarstwo, student, nauczyciel.

Abstract

Introduction: The learning environment plays an important role in the process whereby students obtain knowledge and skills. The success of a practical course and shaping of the personal competencies of students are dependent on the proper support of qualified teachers, mentors and educators.

Aim of the research: To assess the perception of the teacher in supporting nursing students' coping with stress during their first clinical practice.

Material and methods: The study included 262 nursing students after their first clinical practice. The research tools included: the authors' questionnaire and an inventory for measuring coping with stress (Mini COPE). The authors' questionnaire comprised questions concerning, among other things: the self-assessment of student preparation for classes, sources of stress, types of difficult situations and means of coping with such situations, as well as support provided by the teacher.

Results: The support of a clinical teacher is effective at stimulating the process of devising active ways of coping with stress during practical learning. The results showed that students who felt safe in the presence of the teacher running the practical course tended to choose active coping strategies or strategies based on seeking emotional support.

Conclusions: Mentoring programmes need to be implemented to strengthen students' coping skills, and decrease their clinical stress levels and perceived stress.

Streszczenie

Wprowadzenie: Środowisko odgrywa ważną rolę w procesie zdobywania wiedzy i umiejętności przez studentów. Sukces kształcenia praktycznego w środowisku klinicznym i kształtowanie osobistych kompetencji uczniów zależy od wsparcia wykwalifikowanych nauczycieli i mentorów. Wsparcie pozwala studentom na szybsze osiągnięcie przez nich celów edukacyjnych.

Cel pracy: Ocena roli nauczyciela we wspieraniu studentów pierwszego roku pielęgniarstwa w procesie radzenia sobie ze stresem podczas ich pierwszej praktyki klinicznej.

Material i metody: Badaniem objęto 262 studentów pierwszego roku pielęgniarstwa po pierwszej praktyce klinicznej. Narzędzia badawcze obejmowały: kwestionariusz autorski oraz Inwentarz do pomiaru radzenia sobie ze stresem (Mini COPE). Na kwestionariusz autorski składały się pytania dotyczące między innymi: samooceny przygotowania uczniów do zajęć, źródeł stresu, rodzajów trudnych sytuacji i sposobów radzenia sobie z takimi sytuacjami, a także wsparcia udzielanego przez nauczyciela.

Wyniki: Wsparcie nauczyciela skutecznie stymuluje proces radzenia sobie ze stresem podczas praktycznej nauki pielęgniarstwa. Wyniki pokazały, że uczniowie, którzy czuli się bezpiecznie w obecności nauczyciela, zwykle wybierali strategię aktywnego radzenia sobie lub strategię oparte na poszukiwaniu wsparcia emocjonalnego. Wsparcie nauczyciela może skutecznie wpływać na rozwój sposobów radzenia sobie ze stresem podczas praktycznej nauki zawodu.

Wnioski: Konieczne jest wdrożenie programów mentorskich w celu wzmocnienia umiejętności nauczycieli we wspieraniu radzenia sobie studentów ze stresem.

Introduction

The clinical learning environment plays an important role in the process whereby nursing students obtain knowledge and skills. It should foster this process, guarantee the possibility of applying knowledge in practice and gaining experience, motivate, and help students to stay enthusiastic about learning. The success of a practical course and shaping of the personal competencies of students are dependent on the proper support of qualified teachers, mentors and educators. The support of medical personnel plays a substantial role in students' meeting their educational goals [1]. According to Andrews and Roberts (2003), the most important factor affecting the learning of practical activities is the relation between the medical personnel, teacher, mentor and the student [2]. It is important for students to perceive the learning environment as being friendly, based on mutual trust, because they feel more motivated towards effective learning when surrounded by safety, respect, trust, and receiving honest information [3]. The educational process is a stressful experience especially during one's first clinical practice. Generally, nursing students perceive clinical practice to be stressful [4]. Nursing students in clinical practice are subjected to varying degrees of the same kind of stress that professionals suffer from [5–8]. They are not immune to a high level of stress and practice placement contributes significantly to this stress [9]. To fully benefit from this experience and develop a positive professional identity, it is imperative that nursing students successfully cope with education-related stress.

Each person copes with stress using different strategies, thereby making the process dynamic and personal. Coping is a main factor in managing stress and preventing psychological distress [10].

The nursing team not only shapes the experience of students, but also is a major supporting force on a clinical ward. For students it is also extremely important to be accepted by the interdisciplinary team [11, 12]. Clinical practice staff who take on the role of teachers have a crucial role in supporting student nurses to develop their competence. The clinical teacher is a really significant person for the students within the clinical placement environment. The function of the clinical teachers is to support the students' integration of theory with practical learning and their fulfilment of learning outcomes, at the same time serving as a link between the academic organization and the healthcare organization. Teaching is a process intended to facilitate students' learning, and the aim of teaching is to lead and support the students in discovering knowledge by themselves [4, 13, 14]. Clinical teachers' competence is complex as it constantly changes according to the healthcare organizational and political structure [15]. Teachers have an extremely important leadership role as clinical experts, mentors, and supporters [16, 17].

In Poland there are different roles performed by clinical teachers. The first one is a teacher who is a nurse and works only in the Health Care Provider setting. The second one is a teacher who is nurse and works only in a Higher Education Institution. The third possible role is a teacher who is a nurse and works both for a Health Care Provider and in a Higher Education Institution. Interpersonal skills are an integral part of building a relationship with students. The ability to teach, support, motivate and guide students, along with communication skills, was highlighted in research on educating and mentoring competence. The teacher should be able to identify each learner's unique strengths and then motivate the student by focusing on their strengths. These findings are in line with previous knowledge of student mentoring and guiding [18, 19].

Moreover, a teacher's personal characteristics and motivation are pivotal to effective mentoring, creating a supportive, caring relationship, and enabling the individuals' learning process [20, 21]. A positive teacher experience can affect a student's decision to remain in the nursing profession [22].

Aim of the research

The aim of this study was to assess the perception of the teacher in supporting nursing students' coping with stress during their first clinical practice.

Material and methods

The research was conducted via the diagnostic survey method and estimation, using the survey technique. The research tools included the authors' questionnaire as well as an inventory for measuring coping with stress by S. Charles Carver adapted by Z. Juczyński and N. Ogińska-Bulik [23].

The authors' questionnaire comprised questions concerning, among other things: the self-assessment of student preparation for classes, sources of stress, types of difficult situations and means of coping with such situations, as well as support provided by the teacher.

The inventory to measure coping with stress (Mini-COPE) was used to assess typical reactions to and perceptions of stress in stressful situations. The inventory consisted of 28 statements divided into 14 strategies of stress management, which were further split into 7 factors: Active Coping, including Active Coping, Planning, Positive Reframing; Seeking Support, including Use of Emotional Support and Use of Instrumental Support; Helplessness, including Substance Use, Behavioural disengagement, Self-Distractation; and Avoidance Behaviours, including Behavioural Disengagement, Denial, Venting Off. Religion, Acceptance and Humour were treated as independent factors. For each claim, the participant had to choose one of four answers, from 'I almost never do that' to 'I almost always do that'. In the analysis of results

problem-focused strategies were also distinguished, including Active Coping, Planning, Use of Instrumental Support, and emotion-focused strategies, i.e. Use of Emotional Support, Religion and Denial.

Sampling

The study included 262 undergraduate nursing students in 2017–2018, after the completion of their first clinical practice. The study included nursing students in the first year of undergraduate studies of the Faculty of Health Sciences of the Jagiellonian University Medical College and University of Applied Sciences, with their headquarters in southern Poland. The students were enrolled in the study if they: 1) were studying for an undergraduate degree in nursing, 2) were in the first year of studies, 3) had completed the practical classes in the Fundamentals of Nursing, 4) had completed the general medicine module (including anatomy, physiology), the general nursing module (including the fundamentals of nursing), and parts of the humanities module (including psychology, philosophy, ethics), 5) had given informed consent to participate in the study. The investigators were not related to the previous didactic process. Students were given the opportunity to express their independent opinions without any conflict of interest.

Data collection

Questionnaires received from respondents were evaluated individually and checked for completeness, the data were then coded and entered into the database. Forty-two questionnaires were rejected due to missing data. Verification of the differences between the variables was conducted using the χ^2 independence test, the Mann-Whitney test as well as the Kruskal-Wallis test. A significance level of $\alpha = 0.005$ was assumed. The calculations were performed using the IBM SPSS Statistics 20 program.

Ethical considerations

The research was approved by the Bioethics Committee – No. of approval: 122.6120.193.2015. Students were informed of the confidentiality and anonymity of the study, that their participation was voluntary and that they had the right to cease to cooperate at any time during the study.

The study fully took into account ethical principles of human privacy, autonomy, data security, confidentiality and empathetic behaviour towards participants [24]. All of the collected data are stored as protected files accessible according to the regulations of the General Data Protection Regulation [25].

Results

There were 220 students in the research group. Most of them ($n = 214$, i.e. 97.3%) were women. The

studied group included 2.7% men ($n = 6$). The average age of the study group was 21.04 ± 1.41 . The youngest individuals were 20 ($n = 90$), and the oldest one was 29. Twenty-year-olds comprised 40.9% of the studied group ($n = 90$), and twenty-one-year-olds comprised 33.6% ($n = 74$). 25.5% of students ($n = 56$) were aged 22–29.

A total of 5.5% of students ($n = 12$) experienced difficulties during practical classes on an everyday basis. A total of 54.5% of nursing students ($n = 120$) experienced such difficulties relatively often. A group of 38.2% of the students ($n = 64$) rarely experienced difficulties during practical classes, whereas 1.8% of students ($n = 4$) experienced no such difficulties.

From among the elements of the organisation of practical classes, the students assessed the requirement to wear a uniform and comply with the requirements of a proper appearance the most positively ($n = 202$, i.e. 91.8%). The second place was taken by cooperation with internship supervisors ($n = 192$, i.e. 87.3%), and the third by the number of people in the group ($n = 190$, i.e. 86.4%). A total of 85.5% of students ($n = 188$) assessed the atmosphere in the group during practical classes as being positive. Contact with medical personnel was assessed positively by 79.1% of the students ($n = 174$), whereas 76.4% ($n = 168$) positively assessed the time at which the practical classes started. A group of 73.6% of the students ($n = 162$) positively assessed the length of the shifts. The organisation of cloakrooms was assessed as being significantly less positive ($n = 68$, i.e. 30.9%).

Most of the students assessed the teacher running the classes as someone who provides information ($n = 192$, i.e. 87.3%), and who is helpful and involved ($n = 190$, i.e. 86.4%). According to 80.9% of students ($n = 172$), the clinical teacher was trustworthy. About one fifth of the students perceived the teacher as unfair ($n = 50$, i.e. 22.7%) or overly demanding ($n = 46$, i.e. 20.9%).

Most commonly, the students felt safe in the presence of the clinical teacher ($n = 154$, i.e. 70.0%). A total of 12.7% of the students ($n = 28$) did not feel confident in the presence of a teacher. The remaining persons, i.e. 17.3% ($n = 38$), stated that the presence of a teacher did not affect their feelings. Most frequently, the students stated that the clinical teacher helped in solving problems to a sufficient extent and the students could always ask that teacher for help ($n = 96$, i.e. 43%). However, they most often received help in solving issues during practical classes from their friends from the same group ($n = 114$, i.e. 51.8%). To a lesser extent, the studied group received help from the teacher ($n = 66$, i.e. 30.0%, and to the least extent from medical personnel ($n = 40$, i.e. 18.2%).

Mini-COPE scores show that students in difficult situations chose a coping strategy based on active coping ($M = 2.08$), use of emotional support ($M = 2.04$)

and planning (M = 2.02). To a lesser degree they coped by use of instrumental support (M = 1.88). Detailed results are shown in Table 1.

Support from teachers can promote student self-efficacy by encouraging critical reflection, and providing motivational and descriptive feedback to improve practical skills.

The authors' studies have shown that students who thought that the clinical teacher was overly demanding have chosen a strategy of coping with stress based on substance use significantly more often. From among students thinking that the clinical teacher was helpful and devoted, there were more individuals who used a strategy of coping in difficult situations based on planning, positive reframing and use of emotional support. Students who thought that the clinical teacher was trustworthy were more eager to choose strategies of coping based on active coping and positive reframing. From among students who thought that the clinical teacher was not trustworthy, they were more eager to choose strategies of coping in difficult situations related with religion or denial. Students who thought that the clinical teacher was unfair were more eager to choose strategies of coping based on denial and substance use. Individuals who claimed that the teacher running the classes was honest were more eager to choose strategies of coping based on positive reframing and use of emotional support (Table 2).

As a result of the authors' own research, it was found that students who felt safe in the presence of the clinical teacher were more eager to choose strategies of coping based on active coping as well as use of emotional support. From among the individuals who thought that the presence of the teacher did not affect their feelings, a strategy based on acceptance and religion was more prevalent (Table 3).

The studies have shown that students who thought that the help of the clinical teacher was insufficient were less eager to focus on active coping or on planning, and were more lenient towards substance use or behavioural disengagement. From among persons who thought that the teacher was someone who one

can always approach for help, an increased pressure was placed on the strategy of coping based on use of emotional support (Table 4).

Students who considered medical personnel as persons who provided help in solving issues were the least likely to use strategies of coping in difficult situations based on active coping, planning and use of instrumental support. From among students who considered medical personnel or their friends as persons who were helpful in solving issues, strategies of coping in difficult situations based on denial were the most prevalent (Table 5).

Discussion

Nursing students face various difficult situations, in particular during their first clinical practice.

Over half of the students participating in the study experienced difficulties in clinical practice relatively often.

The diversity of these situations necessitates using different stress coping strategies. In our study students chose a coping strategy based on active coping, use of emotional support and planning as well as use of instrumental support. Results are similar to other previous research findings [26–28].

The students assessed the cooperation with clinical supervisors and the atmosphere in the group, contact with medical personnel during practical classes as being positive. Students' sense of belonging in the clinical team was also highlighted by both students and supervisors as a positive factor supporting learning in the research of Nykvist *et al.* [29]. In a permissive atmosphere the student is allowed to be a student, but still students are treated as part of the team [20, 30].

The clinical teacher is a significant person for the students within the clinical placement. Most of the students in our study assessed the teacher as someone who provides information and is helpful and involved. Similarly, results of other studies showed that teachers are responsible for creating a motivating environment for learning [14, 31]. In previous studies students have indicated that the clinical teachers bring objectivity

Table 1. Nursing students' stress coping strategies

Parameter	Active coping	Planning	Positive Reframing	Acceptance	Humour	Religion	Use of Emotional Support	Use of Instrumental Support	Self-distraction	Denial	Venting	Substance use	Behavioural disengagement	Self-blame
Mean	2.08	2.02	1.69	1.86	1.06	1.34	2.03	1.88	1.75	0.81	1.48	0.43	0.83	1.5
Standard deviation	0.64	0.7	0.76	0.73	0.78	1.02	0.72	0.74	0.87	0.77	0.72	0.71	0.73	0.84

Table 2. Stress coping strategies and the assessment of the clinical teacher during clinical practice

Clinical teacher			Active coping	Planning	Positive Reframing	Acceptance	Humour	Religion	Use of Emotional Support	Use of Instrumental Support	Self-distraction	Denial	Venting	Substance use	Behavioural disengagement	Self-blame
Excessively demanding	Yes	Mean	2.17	1.91	1.48	1.85	0.85	1.46	2.26	2.00	2.20	1.30	1.78	0.87	1.02	1.35
		Standard deviation	0.70	0.62	0.61	0.65	0.55	0.71	0.60	0.69	0.62	0.72	0.50	0.80	0.67	0.49
	No	Mean	2.33	2.12	1.69	1.88	0.90	1.24	2.30	2.14	2.13	1.05	1.55	0.50	0.98	1.32
		Standard deviation	0.64	0.61	0.73	0.59	0.67	0.76	0.72	0.70	0.74	0.74	0.59	0.67	0.71	0.61
P-value			0.31	0.12	0.14	0.79	0.89	0.15	0.52	0.41	0.70	0.14	0.13	0.02	0.83	0.82
Helpful and involved	Yes	Mean	2.34	2.13	1.71	1.88	0.89	1.22	2.34	2.16	2.13	1.04	1.58	0.52	0.95	1.28
		Standard deviation	0.62	0.61	0.70	0.61	0.65	0.71	0.72	0.71	0.77	0.75	0.60	0.64	0.71	0.59
	No	Mean	2.03	1.73	1.27	1.83	0.87	1.70	2.03	1.80	2.20	1.50	1.70	0.97	1.23	1.57
		Standard deviation	0.77	0.56	0.65	0.56	0.61	0.88	0.40	0.59	0.25	0.50	0.37	1.01	0.62	0.50
P-value			0.11	0.02	0.02	0.82	0.99	0.00	0.02	0.06	0.87	0.00	0.63	0.11	0.11	0.05
Trustworthy	Yes	Mean	2.37	2.11	1.72	1.91	0.89	1.20	2.33	2.16	2.14	1.03	1.58	0.52	0.96	1.32
		Standard deviation	0.64	0.64	0.67	0.62	0.67	0.71	0.72	0.71	0.76	0.75	0.62	0.66	0.70	0.58
	No	Mean	2.02	1.93	1.33	1.71	0.88	1.62	2.14	1.93	2.14	1.38	1.69	0.81	1.10	1.33
		Standard deviation	0.62	0.48	0.78	0.46	0.50	0.84	0.55	0.66	0.53	0.65	0.37	0.89	0.72	0.64
P-value			0.02	0.11	0.02	0.15	0.96	0.01	0.09	0.19	0.81	0.03	0.49	0.20	0.49	0.64
Unfair	Yes	Mean	2.26	2.10	1.50	1.76	0.90	1.50	2.34	2.04	2.22	1.46	1.84	0.90	1.10	1.28
		Standard deviation	0.68	0.48	0.75	0.46	0.54	0.72	0.61	0.71	0.58	0.68	0.49	0.85	0.72	0.56
	No	Mean	2.31	2.07	1.69	1.91	0.88	1.22	2.28	2.14	2.12	0.99	1.53	0.48	0.95	1.34
		Standard deviation	0.65	0.66	0.69	0.63	0.67	0.75	0.72	0.70	0.75	0.73	0.58	0.64	0.69	0.59
P-value			0.81	0.96	0.22	0.25	0.84	0.05	0.92	0.56	0.69	0.00	0.02	0.02	0.57	0.97
Informing about what I have done right and wrong	Yes	Mean	2.33	2.11	1.70	1.86	0.91	1.30	2.36	2.15	2.19	1.06	1.57	0.54	0.96	1.34
		Standard deviation	0.62	0.61	0.69	0.59	0.65	0.74	0.65	0.70	0.71	0.74	0.60	0.70	0.69	0.59
	No	Mean	2.07	1.82	1.25	1.96	0.75	1.14	1.82	1.86	1.82	1.36	1.79	0.86	1.14	1.21
		Standard deviation	0.83	0.64	0.75	0.66	0.61	0.82	0.77	0.69	0.72	0.72	0.38	0.72	0.79	0.58
P-value			0.24	0.06	0.03	0.49	0.38	0.56	0.01	0.13	0.10	0.10	0.17	0.06	0.41	0.52

Table 3. Stress coping strategies and feelings related to the presence of the clinical teacher

Feeling related to the presence of the clinical teacher		Active coping	Planning	Positive Reframing	Acceptance	Humour	Religion	Use of Emotional Support	Use of Instrumental Support	Self-distraction	Denial	Venting	Substance use	Behavioural disengagement	Self-blame
Safe	Mean	2.44	2.16	1.69	1.85	0.90	1.21	2.42	2.17	2.21	1.12	1.62	0.51	0.97	1.31
	Standard deviation	0.51	0.59	0.62	0.59	0.64	0.65	0.67	0.74	0.73	0.73	0.63	0.62	0.58	0.61
Hesitant	Mean	1.75	1.71	1.50	1.61	1.00	1.71	1.89	2.00	2.07	1.36	1.61	1.07	1.36	1.50
	Standard deviation	0.85	0.73	0.94	0.59	0.71	0.78	0.59	0.65	0.73	0.69	0.45	1.07	1.10	0.48
Does not affect my feelings	Mean	2.13	2.03	1.55	2.16	0.76	1.24	2.11	1.97	1.89	0.84	1.50	0.47	0.76	1.24
	Standard deviation	0.78	0.56	0.86	0.55	0.63	1.02	0.74	0.54	0.64	0.78	0.44	0.61	0.69	0.56
Total	Mean	2.30	2.08	1.65	1.87	0.89	1.28	2.30	2.11	2.14	1.10	1.60	0.58	0.99	1.32
	Standard deviation	0.65	0.62	0.71	0.60	0.64	0.75	0.69	0.70	0.72	0.74	0.58	0.71	0.70	0.58
P-value		0.00	0.06	0.64	0.03	0.63	0.04	0.01	0.31	0.14	0.11	0.64	0.2	0.25	0.35

Table 4. Stress coping strategies and the help of the clinical teacher in solving issues

Feeling related to the presence of the clinical teacher		Active coping	Planning	Positive Reframing	Acceptance	Humour	Religion	Use of Emotional Support	Use of Instrumental Support	Self-distraction	Denial	Venting	Substance use	Behavioural disengagement	Self-blame
Helps to a sufficient degree	Mean	2.25	2.19	1.69	1.88	0.79	1.19	2.28	2.13	1.99	1.00	1.51	0.53	0.91	1.25
	Standard deviation	0.71	0.68	0.77	0.66	0.63	0.77	0.80	0.63	0.74	0.78	0.60	0.77	0.61	0.64
Help is insufficient	Mean	1.65	1.60	1.35	1.95	0.95	1.70	1.85	1.70	1.95	1.60	1.90	1.15	1.70	1.45
	Standard deviation	0.78	0.57	0.78	0.50	0.55	1.01	0.47	0.71	0.64	0.66	0.39	0.85	0.98	0.83
Always approach him for help	Mean	2.48	2.07	1.69	1.92	0.93	1.25	2.43	2.20	2.31	1.09	1.65	0.55	0.97	1.36
	Standard deviation	0.48	0.55	0.62	0.55	0.65	0.66	0.59	0.77	0.70	0.69	0.59	0.59	0.66	0.49
Cannot approach him asking for help	Mean	2.38	2.00	1.38	1.13	1.38	1.75	2.00	2.00	2.38	1.13	1.38	0.00	0.38	1.38
	Standard deviation	0.25	0.00	0.75	0.25	0.75	0.50	0.00	0.00	0.25	0.75	0.25	0.00	0.25	0.25
Total	Mean	2.30	2.08	1.65	1.87	0.89	1.28	2.30	2.11	2.14	1.10	1.60	0.58	0.99	1.32
	Standard deviation	0.65	0.62	0.71	0.60	0.64	0.75	0.69	0.70	0.72	0.74	0.58	0.71	0.70	0.58
P-value		0.01	0.02	0.51	0.06	0.38	0.15	0.03	0.22	0.11	0.09	0.13	0.02	0.01	0.69

Table 5. Stress coping strategies and individuals who provided the most support to the studied group in solving issues during clinical practice

Individuals who provided the most support to the studied group in solving issues during clinical practice		Active coping	Planning	Positive Reframing	Acceptance	Humour	Religion	Use of Emotional Support	Use of Instrumental Support	Self-distraction	Denial	Venting	Substance use	Behavioural disengagement	Self-blame
Clinical teacher	Mean	2.33	2.15	1.77	2.03	0.89	1.33	2.44	2.03	2.08	0.85	1.62	0.50	0.94	1.30
	Standard deviation	0.48	0.52	0.66	0.57	0.69	0.67	0.61	0.77	0.64	0.77	0.57	0.68	0.48	0.59
Medical personnel	Mean	1.95	1.73	1.50	1.70	0.73	1.08	2.03	1.85	1.93	1.15	1.55	0.65	0.93	1.38
	Standard deviation	0.72	0.57	0.89	0.59	0.70	0.78	0.68	0.46	0.52	0.75	0.65	0.88	0.82	0.76
Friends from the group	Mean	2.40	2.16	1.62	1.84	0.94	1.32	2.31	2.25	2.25	1.23	1.61	0.60	1.04	1.32
	Standard deviation	0.68	0.65	0.66	0.61	0.59	0.78	0.72	0.70	0.80	0.69	0.56	0.67	0.77	0.52
In general	Mean	2.30	2.08	1.65	1.87	0.89	1.28	2.30	2.11	2.14	1.10	1.60	0.58	0.99	1.32
	Standard deviation	0.65	0.62	0.71	0.60	0.64	0.75	0.69	0.70	0.72	0.74	0.58	0.71	0.70	0.58
P-value		0.012	0.013	0.509	0.154	0.268	0.457	0.087	0.043	0.06	0.031	0.913	0.743	0.883	0.715

to the clinical experience and help them reflect on practice [13, 32], facilitate the relationship between the students and clinical team and also provide personal support for students and reduce their feeling of being abandoned [32]. Research findings provided by Kuivila *et al.* indicated that a teacher should be able to identify each learner's unique strengths and then motivate the learner by focusing on their strengths [33].

Most commonly, the students felt safe in the presence of the teacher. A total of 12.7% of the students investigated in the current study did not feel confident in the presence of a teacher. These results are consistent with findings of previous studies, which showed that students feel secure and are allowed to try new things, can explore and gain a higher level of knowledge during their clinical education [29, 34]. These findings are in line with research results presented by other authors [19, 35]. Students need to feel safe, and the teachers play an important role in creating a safe atmosphere [20, 36]. Most frequently, the students stated that the clinical teacher helped in solving problems to a sufficient extent and the students could always ask that teacher for help. However, they most often received help in solving issues from their friends from the same group, next the students received help from the teacher and to the least extent from medical personnel. In studies conducted by Rafiee *et al.*, which analysed the issues related to the assessment of practical classes, it was found that students notice

a lack of time from the instructors, short course times, collecting insufficient data from students, lack of information provided by teachers, and teachers making assessments without acquiring full information about a given student [37].

The studies confirmed that the students acquire better results when teachers notice their individuality and the fact that each individual has a different way in which they learn [38]. Students ask for a motivated and inspirational teacher in another study [29]. Creating a reciprocal relationship with the student was emphasised in research findings by Tuomikoski *et al.* [35].

The authors' own study has shown that students who perceived the clinical teacher positively (helpful and devoted, trustworthy, honest) were more eager to choose strategies of coping based on active coping, planning, positive reframing and use of emotional support.

Students who perceived the teacher negatively were more eager to choose strategies of coping based on denial and substance use. Results of research by Landmark *et al.* showed that teachers were aware that their behaviour influences students' attitudes and behaviours [39]. The ability to teach, support, motivate and guide students, along with communication skills, is an important part of educating and mentoring competence. The creation of a reciprocal and trusting mentor-nursing student relationship requires that clinical

placements are well-organized and include practical activities arranged by educated mentors [35, 40].

Other researchers have suggested that continuous education for teachers is crucial to maintaining the skills and competences that are needed to operate in a practical environment [41] and that it significantly impacts the student's knowledge, skills, attitudes and behaviours [42].

Teachers as well as peer support allow for sharing experiences, reinforcing knowledge, and increasing a sense of support, confidence, and critical thinking skills [43, 44]. More intervention studies are needed to identify and compare what interventions are effective in supporting students to cope with stress during their undergraduate education. Further studies could provide more knowledge about how best to organize the clinical teachers' role.

All of the participants in the study were Polish and, as such, they shared perceptions of the teacher that were related to the Polish education system. However, as educational systems vary from country to country, the presented results may therefore not necessarily be generalizable to the international educational context.

Conclusions

The support of a clinical teacher is important at stimulating the development of active coping strategies during practical learning. There is a need to identify the challenges accompanying the teachers' mentoring in further research.

A positive, mutual relation between students and the clinical teacher is of the utmost importance when creating a positive educational environment. Good relations between clinical teachers/medical staff and students is the key for successful learning experiences and active coping.

Mentoring programmes need to be implemented to strengthen students' coping skills, and decrease their clinical stress levels and perceived stress. Mentoring programmes are needed for students and clinical teachers. The purpose of the programmes should be disseminating information on effective ways to deal with stress. It may also be important to strengthen the offer of studies in the field of coping with stress and mentoring programmes for teachers to improve their clinical mentoring skills, e.g. choosing, encouraging, and offering suitable learning situations for the student.

Acknowledgments

The authors thank the students who took part in the study, for their patience answering questionnaires.

Conflict of interest

The authors declare no conflict of interest.

References

1. Chuan OL, Barnett T. Student, tutor and staff nurse perceptions of the clinical learning environment. *Nurse Educ Pract* 2012; 12: 192-197.
2. Andrews M, Roberts D. Supporting student nurses learning in and through clinical practice: the role of the clinical guide. *Nurse Educ Today* 2003; 23: 474-481.
3. Rowbotham MA. Teacher perspectives and the psychosocial climate of the classroom in a traditional BSN program. *Int J Nurs Educ Scholarsh* 2010; 7: 1-4.
4. Blomberg K, Bisholt B, Engstrom AK, Ohlsson U, Johansson AS, Gustafsson M. Swedish nursing students' experience of stress during clinical practice in relation to clinical setting characteristics and the organisation of the clinical education. *J Clin Nurs* 2014; 23: 2264-2271.
5. Kowalczyk K, Krajewska-Kułak E. Influence of selected sociodemographic factors on psychosocial workload of nurses and association of this burden with absenteeism at work. *Occupat Med* 2015; 66: 615-624.
6. Grobceker PA. A sense of belonging and perceived stress among baccalaureate nursing students in clinical placement. *Nurse Educ Today* 2016; 36: 178-183.
7. Suarez-Garcia JM, Maestro-Gonzales A, Zuazua-Rico D, Sanchez-Zaballos M, Mosteiro-Diaz MP. Stressors for Spanish nursing students in clinical practice. *Nurse Educ Today* 2018; 64: 16-20.
8. Kowalczyk K, Krajewska-Kułak E, Sobolewski M. Working excessively and burnout among nurses in the context of sick leaves. *Front Psychol* 2010; 11: 285.
9. Doody O, Tuohy D, Deasy C. Final-year student nurses' perceptions of role transition. *Br J Nursing* 2012; 21: 684-688.
10. Deasy C, Coughlan B, Pironom J, Jurdan D, Mannix-McNamara P. Psychological distress and coping amongst higher education students: a mixed method enquiry. *PLoS One* 2014; 9: e115193.
11. Mohamed Z, Newton JM, McKenna L. Belongingness in the workplace: a study of Malaysian nurses' experiences. *Int Nurs Rev* 2014; 61: 124-130.
12. Levet-Jones T, Lathlean J, McMillan M, Higgins I. Belongingness: a montage of nursing students' stories of their clinical placement experiences. *Contemp Nurse* 2007; 24: 162-174.
13. Kristofferzon M, Mårtensson G, Mamhidir A, Löfmark A. Nursing students' perceptions of clinical supervision: the contributions of preceptors, head preceptors and clinical lecturers. *Nurse Educ Today* 2013; 33: 1252-1257.
14. Gustafsson M, Engström AK, Ohlsson U, Sundler AJ, Bisholt B. Nurse teacher models in clinical education from the perspective of student nurses – a mixed method study. *Nurse Educ Today* 2015; 35: 1289-1294.
15. Mikkonen K, Ojala T, Sjögren T, Piirainen A, Koskinen C, Koskinen M, Koivula M, Sormunen M, Saaranen T, Salminen L, Koskimäki M, Ruotsalainen H, Lähteenmäki ML, Wallin O, Mäki-Hakola H, Kääriäinen M. Competence of health science teachers – a systematic review of quantitative studies. *Nurse Educ Today* 2018; 70: 77-86.
16. Sayers J, Lopez V, Howard PB, Escott P, Cleary M. The leadership role of nurse educators in mental health nursing. *Issues Ment Health Nurs* 2015; 36: 718-724.
17. O'Driscoll M, Allan H, Smith P. Still looking for leadership – who is responsible for student nurses' learning in practice? *Nurse Educ Today* 2010; 30: 212-217.

18. Tuomikoski AM, Ruotsalainen H, Mikkonen K, Miet-tunen J, Kääriäinen M. The competence of nurse mentors in mentoring students in clinical practice – a cross-sectional study. *Nurse Educ Today* 2018; 71: 78-83.
19. Bristol TJ. Building community in the online course. *Teach Learn Nurs* 2019; 14: 72-74.
20. Hilli Y, Melender HL, Salmuc M, Jonsénd E. Being a preceptor – a Nordic qualitative study. *Nurse Educ Today* 2014; 34: 1420-1424.
21. McIntosh A, Gidman J, Smith D. Mentors' perceptions and experiences of supporting student nurses in practice. *Int J Nurs Pract* 2014; 20: 360-365.
22. Flott EA, Linden L. The clinical learning environment in nursing education: a concept analysis. *J Adv Nurs* 2016; 72: 501-513.
23. Juczyński Z, Oginska-Bulik N. Narzędzia do pomiaru stresu i radzenia sobie ze stresem. Pracownia Testów Psychologicznych Polskiego Towarzystwa Psychologicznego, Warszawa 2012.
24. Declaration of Helsinki. Ethical principles for medical research involving human subjects. *JAMA* 2013; 310: 2191-2194.
25. European Parliament (2016). Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46/EC (General Data Protection Regulation).
26. Wolf I, Stidham AW, Ross R. Predictors of stress and coping strategies of US accelerated vs. generic baccalaureate nursing students: an embedded mixed methods study. *Nurse Education Today* 2015; 35: 201-205.
27. Bodys-Cupak I, Grochowska A, Zalewska-Puchała J, Majda A. Stress and coping strategies of medical students during their first clinical practice – a pilot study. *Medical Studies* 2019; 35: 294-303.
28. Bodys-Cupak I, Majda A, Grochowska A, Zalewska-Puchała J, Kamińska A, Kuzera G. Patient-related stressors and coping strategies in baccalaureate nursing students during clinical practice. *Medical Studies* 2019; 35: 41-47.
29. Nykvist J, Brolin K, Nilsson T, Lindström V. The learning environment and supportive supervision promote learning and are based on the relationship between students and supervisors – a qualitative study. *Nurse Educ Today* 2020; 42: 102692.
30. Jokelainen M, Jamookeeah D, Tossavainen K, Turunen H. Finnish and British mentors' conceptions of facilitating nursing students' placement learning and professional development. *Nurse Educ Pract* 2013; 13: 61-67.
31. Aktas YY, Karabulut N. A Survey on Turkish nursing students' perception of clinical learning environment and its association with academic motivation and clinical decision making. *Nurse Educ Today* 2016; 36: 124-128.
32. Price L, Hastie L, Duffy K, Ness V, McCallum J. Supporting students in clinical practice: pre-registration nursing students' views on the role of the lecturer. *Nurse Educ Today* 2011; 31: 780-784.
33. Kuivila HM, Mikkonen K, Tuulikki S, Koivula M, Koskimäki M, Mannisto M, Lukkarila P, Kaariainen M. Health science student teachers' perceptions of teacher competence: a qualitative study. *Nurse Educ Today* 2020; 84: 104210.
34. Jonsen E, Melender HL, Hilli Y. Finnish and Swedish nursing students' experiences of their first clinical practice placement – a qualitative study. *Nurse Educ Today* 2013; 33: 297-302.
35. Tuomikoski AM, Ruotsalainen H, Mikkonen K, Kääriäinen M. Nurse's experiences of their competence at mentoring nursing students during clinical practice: a systematic review of qualitative studies. *Nurse Educ Today* 2020; 85: 104258.
36. Carlson E, Pilhammar E, Wann-Hansson C. Teaching during clinical practice: strategies and techniques used by preceptors in nursing education. *Nurse Educ Today* 2009; 29: 522-526.
37. Rafiee G, Moattari M, Nikbakht AN, Kojuri J, Mousavinasab M. Problems and challenges of nursing students' clinical evaluation: a qualitative study. *Iran J Nurs Mid Res* 2014; 19: 41-49.
38. Lambert V, Glacken M. Clinical education facilitators: a literature review. *J Clin Nurs* 2005; 14: 664-673.
39. Landmark B, Hansen G, Bjones I, Bohler A. Clinical supervision-factors defined by nurses as influential upon the development of competence and skills in supervision. *J Clin Nurs* 2003; 12: 834-841.
40. Maxwell E, Black S, Baillie L. The role of the practice educator in supporting nursing and midwifery students' clinical practice learning: an appreciative inquiry. *J Nurs Educ Pract* 2015; 5: 35-45.
41. Hendrickx L, Winters C. Access to continuing education for critical care nurses in rural or remote settings. *Crit Care Nurse* 2017; 37: 66-71.
42. Harden K, Price D, Duffy E, Galunas L, Rodgers C. Palliative care: improving nursing knowledge, attitudes, and behaviors. *Clin J Oncol Nurs* 2017; 21: E232-E238.
43. Houghton CE. Newcomer adaptation: a lens through which to understand how nursing students fit in with the real world of practice. *J Clin Nurs* 2014; 23: 2367-2375.
44. Wong C, Stake-Doucet N, Lombardo C, Sanzone L, Tsimicalis A. An integrative review of peer mentorship programs for undergraduate nursing students. *J Nurse Educ* 2016; 55: 141-149.

Address for correspondence:

Iwona Bodys Cupak PhD
 Institute of Nursing and Midwifery
 Faculty of Health Sciences
 Jagiellonian University
 Medical College, Krakow, Poland
 Phone: +48 512396382
 E-mail: i.bodys-cupak@uj.edu.pl