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**NURSING STUDENT-PATIENT RELATIONSHIP - A 10-YEAR COMPARISON  
STUDY IN FINLAND**

Arja Suikkala, PhD, RN, Post doc researcher, and Principal Lecturer, University of Turku,  
Department of Nursing Science, University of Turku, Turku, Finland and Diaconia University  
of Applied Sciences, Helsinki, Finland

Helena Leino-Kilpi, PhD, RN, FAAN, FEANS, Professor, Head of the Department and Nurse  
Director, University of Turku, Department of Nursing Science, University of Turku, Turku,  
Finland, and Turku University Hospital, Turku, Finland

Jouko Katajisto, M.Pol.Sc., Senior Lecturer, University of Turku, Department of Mathematics  
and Statistics, Turku, Finland

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tion, Nursing student, Patient participation

## ABSTRACT

**Objectives:** This study aimed to describe and compare the group-level findings from 2005–2006 and 2015–2016 regarding students' and patients' views of the nursing student-patient relationship and associated factors.

**Methods:** The data were in both cases collected using Student-Patient Relationship Scales. The data were analysed statistically.

**Results:** In both student cohorts, authoritative and facilitative student-patient relationships were reported by the students more frequently than mechanistic relationships. Authoritative relationships were most common in both patient cohorts, whereas facilitative relationships had become more frequent than mechanistic relationships. A positive change of views in the student and patient cohorts was found in factors associated with the relationship.

**Conclusion:** In order to strengthen a clinical learning culture that reflects a facilitative student-patient relationship, further research is needed on the processes and outcomes of that relationship.

Maintaining therapeutic nurse-patient relationships is a core competence of all nurses and a prerequisite for patient-centred care. During the past decades, the participation of patients at various levels of health has evolved significantly. They are expected to take part in decision-making processes concerning their own health and well-being in partnership with health professionals. Concomitantly, their involvement in research is assumed, development and evaluation of health care services, and in shaping the caring qualities of professionals (Jones & Pietilä, 2018; Torjesen et al., 2017; Vrangbaek, 2015.) Furthermore, the expansion of health care delivery from hospitals to homes and community settings emphasises an ethos of partnership that respects patients' personal expertise in informed choices affecting their health and wellness, promoting their self-management, and thereby empowering them to become active partners in their own care (OECD, 2017; Sharma et al., 2015; World Health Organization [WHO], 2016). Active and collaborative involvement of patients and utilisation of their expertise based on mutuality in nurse-patient relationships and communication comprise an important part of patient satisfaction and the quality of care, and are thus primary required nursing skills (Ben Natan & Hochman, 2017; Fleischer et al., 2009; Håkansson et al., 2019).

In nursing education discourse, encounters with patients need to be learned and practised across the educational continuum. In evidence-based clinical practice and education, it is essential that students relate to patients as whole persons in order to learn joint decision-making with patients, recognising and respecting their unique needs, values, and preferences (Jylhä et al., 2017). This can become a reality in facilitative relationships with patients, where students achieve competencies to adapt to person-centred care through genuinely close and empathic relationships with patients in the ever-changing scope of health care practice (Scammell et al., 2016; Suikkala et al., 2018; WHO, 2016).

## BACKGROUND

The nursing student-patient relationship is the core substance in the field of clinical education. Simultaneously with the overall increase in patient involvement opportunities, the focus of clinical learning has gradually shifted from the relationship between professionals as preceptors and students, to the relationship between students and patients; and patients are increasingly seen as active participants in students' clinical learning and assessment through student-patient relationships (Ekebergh et al., 2018; Manninen, 2014; Suikkala et al., 2018.) Students, preceptors, and patients underline patients' active involvement in clinical education, contributing to the students' learning process (McMahon-Parkes et al., 2016; Speers & Lathlean, 2015; Stickley et al., 2010). In the best-case scenario, both students and patients can concurrently learn with, from, and about one another so that the processes of caring and learning become intertwined, benefiting both students' personal and professional development and patients' health processes (Rowland et al., 2018; Suikkala & Leino-Kilpi, 2005).

There are a rising number of strategies and interventions that highlight the patient as an integral part of the students' learning process (e.g. Ekebergh et al., 2018; Rowland et al., 2018; Staun et al., 2010). Furthermore, the client-centred competency defined as a learning outcome for registered nurses has been established in countries such as Finland, mostly since Salminen et al. (2010) pointed out the role of the healthcare client as a challenge for nursing education from a European perspective. Therefore, the intertwining of caring and learning in clinical placements provides genuine opportunities for students to establish relationships with patients and prepare them for working with patients in a mutually beneficial partnership (Scammell et al., 2016; Suikkala et al., 2018). However, previous literature has indicated that the culture in health care does not necessarily provide sufficient support for patient involvement (Duygulu & Abaan, 2013; Håkansson et al., 2019). Over the past ten-year period, clinical settings have become increasingly demanding for students due to socio-

demographic, epidemiological, and technological transitions that pose constant demands on students' intellectual competence as well as holistic approaches to care and initiation of relationships with patients (OECD, 2017; WHO, 2016). At the same time, the relative decrease in hospital-based and increase in home-based health care, coupled with the rising number of students due to increased enrolment, put pressure on achieving more and more nursing skills and abilities in simulated learning environments without authentic and meaningful student-patient relationships (Rowland et al., 2019; Salminen et al., 2010).

The structure and features of the nursing student-patient relationship have been described in limited robust empirical research (Scammel et al. 2016; Suikkala & Leino-Kilpi, 2001; Suikkala, et al. 2018). In this study, the student-patient relationship refers to three types of student-patient relationships found in an earlier study (Suikkala & Leino-Kilpi, 2005). In an ascending order of involvement, the types of student-patient relationships are mechanistic, authoritative, and facilitative. The mechanistic relationship is preceptor-led, focusing merely on students' intent on practising technical skills by performing physical care. As a student-led initiative, the authoritative relationship focuses on student perception of what is in the best interest of patients in delivering patient care. In a facilitative relationship, with patient-led initiative, reciprocal knowledge-sharing benefiting both the student and the patient emphasises patient's active participation and can be considered ideal to be pursued (Suikkala et al., 2018; Suikkala & Leino-Kilpi, 2005.)

Previous literature has shown that actual contacts with patients are considered important, beneficial, and pivotal by students and patients in contributing to educating nursing students and empowering patients to be involved in their own care (Suikkala et al., 2018; Towle et al., 2010). The depth and extent to which patients engage and participate in the clinical education of students is, however, variable (Bleakley & Bligh, 2008; Rhodes, 2012; Rowland et al., 2018). Student-patient relationships are determined by the sociodemographic

characteristics of both nursing students and patients, students' proficiency in providing safe care, patients' commitment to self-care and to taking part in students' learning process, and the atmosphere of caring and learning (Suikkala et al., 2018). Students understand patient encounters as important, but, at the same time, challenging, as they attempt to balance their own learning needs and patient care needs in a complex and unpredictable clinical reality (McCarthy et al., 2018; Pulido-Martos et al., 2012; Suikkala & Leino-Kilpi, 2001). Patients, for their part, emphasise the humanistic and compassionate elements of caring rather than theoretical and technical proficiency as qualifications that future nurses should have. For students, these are essential qualities for becoming deeply involved with patients and for establishing reciprocity in relationships with patients in order to meet individual patients' health care needs (Griffith, et al., 2012; Suikkala et al., 2018; Suikkala & Leino-Kilpi, 2001.)

The aim of this study was to describe and compare the group-level findings from two cross-sectional cohorts in 2005-2006 and 2015-2016 regarding students' and patients' views of the nursing student-patient relationship and associated factors. The research questions were: (1) How do students and patients in the two cohorts view the student-patient relationship? (2) How do students and patients in the two cohorts view factors associated with the student-patient relationship? (3) If there are differences in how the two cohorts of students and patients view the student-patient relationship and associated factors, what are they? Ultimately, the aim of this study was to open understanding about how the student-patient relationship, as a core component of nursing students' clinical learning, has been established over the past 10 years in order to strengthen the use of the patient perspective in students' clinical learning and assessment processes.

## METHODS

### Design and Sample

The descriptive, comparative design study comprised data from two cross-sectional cohorts of Finnish bachelor-level nursing students and patients ten years apart. In Finland, bachelor-level nursing degree studies are arranged in universities of applied sciences (UASs). The bachelor-level nursing studies consist of 210 European Credit Transfer and Accumulation System (ECTS) credits equalling 3.5 years of full-time studies. The content and duration of theoretical and clinical training are determined by the European Union Directives 2005/36/EC and 2013/55/EU (European Commission, 2005, 2013). Clinical practice consists of 90 ECTS credits of the degree program in different types of health care institutes and in the community.

Nursing students in the 2005-2006 ( $n = 310$ ) and 2015-2016 cohorts ( $n = 1244$ ) in the first, second, and last year of their studies were invited to take part in the study. Students in the 2005-2006 cohort were recruited by their preceptors who distributed the paper-and-pencil questionnaires to students during the latter half of their clinical practicum period at either university or central hospital units. In the 2015-2016 cohort, students were recruited by UASs contact persons who sent out the web survey hyperlink via e-mail to students during the latter part of their clinical practicum either at hospital or diverse outpatient units. The response rates among the student participants was 96% ( $n = 290$ ) in the 2005-2006 cohort, and 68% ( $n = 852$ ) in the 2015-2016 cohort.

For each student in clinical practicum, one Finnish-speaking patient was recruited by students' preceptors on the basis of the following selection criteria: Aged 18 or more who had experienced moments of being involved in the student's clinical education, volunteered to participate, and capable of answering the paper-pencil questionnaire. In total, 310 patients in the 2005-2006 cohort were invited to the study. In the 2015-2016 cohort, 288 patients out of 1,244 met the selection criteria and could be invited to participate in the study. The response rate among the patients who were invited, completed, and returned the questionnaire to the



researcher in a sealed envelope was 94% ( $n = 242$ ) in 2005–2006 and 94% ( $n = 272$ ) in 2015–2016.

## **Instrument**

The parallel Student-Patient Relationship Scales (SPR scales) were used in both cohorts. The SPR scales were based on a literature review (Suikkala & Leino-Kilpi, 2001) and an interview study (Suikkala & Leino-Kilpi, 2005) of student-patient relationships. The SPR scales included self-ratings concerning mechanistic (9 items), authoritative (11 items) and facilitative relationships (13 items). Furthermore, the questionnaires included items about students' personal and professional attributes (9 items), patients' attributes as a patient (9 items), atmosphere as contextual factors during collaboration (5 items), and finally, students' personal and professional growth (4 items), students' increased confidence and self-esteem (4 items), and patients' improved health and commitment to self-care (5 items) as consequences of the relationship. The parallel 5-point Likert-type scales (5= strongly agree, 1=strongly disagree) for students and patients varied only in their demographic items.

The internal consistency of the variables was examined using Cronbach's alpha coefficients and item analysis to ascertain the suitability of scale items with the instrument (see Table 1). The results indicated acceptable reliability (0.7), with a few exceptions presented in Table 1 (Tavakol and Dennick, 2011.) In the 2015-2016 study phase, the alpha values of the scales measuring mechanistic, authoritative, and facilitative relationships ranged from good (0.83) to questionable (0.63), while reliability coefficients of the factors associated with the relationship ranged from good (0.87) to questionable (0.67). These values corresponded to those achieved with the scales in 2005-2006, ranging from 0.63 to 0.86 and from 0.60 to 0.88, respectively.

**Table 1**

*Cronbach's alpha reliability coefficients of variables in study phases in 2005–2006 and 2015–2016.*

Variables	Number of scale items	<u>Cronbach's alpha</u>			
		Student cohort 2005–2006 <i>n</i> = 290	Student cohort 2015–2016 <i>n</i> = 852	Patient cohort 2005–2006 <i>n</i> = 242	Patient cohort 2015–2016 <i>n</i> = 272
Mechanistic relationship	9	0.80	0.63	0.63	0.67
Authoritative relationship	11	0.64	0.71	0.85	0.82
Facilitative relationship	13	0.80	0.80	0.86	0.83
Student's personal and professional attributes	8	0.76	0.82	0.88	0.88
Patient's attributes as a patient	8	0.67	0.68	0.60	0.67
Atmosphere during collaboration	5	0.78	0.81	0.75	0.74
Student's personal and professional growth	4	0.69	0.80	0.80	0.83
Student's increased confidence and self-esteem	4	0.7	0.81	0.87	0.87
Patient's improved health and commitment to self-care	5	0.7	0.82	0.85	0.85

## Data Analysis

Data analysis was carried out using the statistical software package SPSS 22.0 (SPSS Inc., Chicago, USA), and the data were described using frequency tables and descriptive statistics. To describe the type of student-patient relationship and contextual factors related to the type of relationship and consequences related to the type of relationship as associated factors, nine variables were formed by summing up the answers' values and dividing this sum by the number of scale items to obtain mean values for the variables. This meant that the variables had the same range as the scale items.

The internal consistency of the sum variables was examined using Cronbach's alpha coefficients and item analysis to ascertain the suitability of single items with the instrument. Pearson's chi-square test and Fisher's exact test were used to determine the differences between categorical variables of the two cohorts of students and patients. Besides numerical

background variable (age), independent samples *t*-test was used to compare the means and the variables to determine whether there was a statistically significant difference between the means in the two student and patient cohorts' views over the 10-year period. The level of significance was set at  $p < 0.05$ . (Kim, 2015.)

### **Ethical Considerations**

Good research practices were followed at all stages of this study (Finnish Advisory Board on Research Integrity, 2012). Ethical approval to conduct this study was obtained from the Helsinki and Uusimaa University Hospital Ethical Committee (185/13/03/01/2014, 13.08.2014). Permission to collect data was obtained from the relevant hospital authorities and the UASs according to their ethical committee policies.

The volunteer participants were informed of the nature of the study orally and in writing by contact persons at each UAS and preceptors in each clinical placement. Written consent was obtained from each participant. All participants were informed about anonymity, confidentiality, the right to withdraw from the study at any stage, and the fact that participation in the study would not in any way affect students' studies or patient care.

## **RESULTS**

### **Characteristics of Respondents**

In the 2015-2016 cohort, students' mean age was significantly higher ( $p < 0.001$ ) and they had significantly more previous professional qualifications in social and health care ( $p < 0.001$ ), working experience in nursing care ( $p = 0.014$ ), and experience of caring for ill family members ( $p < 0.001$ ) compared to the 2005-2006 cohort. As noted in Table 2, more students in the 2015-2016 cohort were first-year students compared to students in the 2005-2006 cohort ( $p < 0.001$ ).

Fewer students in the 2015-2016 cohort reported being assigned to a specific patient ( $p = 0.001$ ), but more of them agreed that they had enough time for the patient ( $p = 0.006$ ) as compared to students in the 2005-2006 cohort. Support was more often received from the supervising nurse ( $p = 0.006$ ) and less often from teacher ( $0.001$ ) and student colleagues ( $p < 0.001$ ) among the 2015-2016 cohort students compared to students in the 2005–2006 cohort. The characteristics of both student cohorts are presented in more detail in Table 2.

In the 2015-2016 cohort, patients' mean age was significantly higher ( $p < 0.001$ ) and fewer were married ( $p = 0.001$ ). Furthermore, fewer of them needed care or examination due to acute illness ( $p < 0.001$ ) compared to the 2005-2006 cohort (see Table 3).

In the 2015-2016 cohort, patients also had more previous experience of student participation in their care ( $p < 0.001$ ). The characteristics of both patient cohorts are presented in more detail in Table 3.

More of the 2015–2016 cohort patients reported that they had a named nursing student ( $p < 0.001$ ) and that the student had enough time for them ( $p < 0.001$ ) compared to the 2005-2006 cohort. In the 2015–2016 cohort, patients also had more previous experience of student participation in their care ( $p < 0.001$ ). The characteristics of both patient cohorts are presented in more detail in Table 3.

### **Students' and patients' views of the nursing student-patient relationship**

Students in both cohorts rated authoritative and facilitative relationships more highly than mechanistic relationships. Patients rated authoritative relationships the highest, followed by mechanistic and facilitative relationships in the 2005–2006 cohort. In the 2015–2016 cohort, authoritative relationships were rated the highest, and mechanistic the lowest by patients (see Table 4).

**Table 2**

Characteristics of student respondents in cohort 2005–2006 and cohort 2015–2016

Characteristics	Cohort 2005–2006 ( <i>n</i> = 287–290)			Cohort 2015–2016 ( <i>n</i> = 851–852)			<i>p</i> -value
	<i>n</i>	%	Mean (SD)	<i>n</i>	%	Mean (SD)	
Age			25.7 (7.0)			29.3 (9.2)	< 0.001 <sup>a</sup>
Gender							ns
<i>Male</i>	27	9.3		99	11.6		
<i>Female</i>	262	90.7		753	88.4		
Education							< 0.001 <sup>b</sup>
<i>Senior secondary or Matriculation</i>	180	62.1		361	42.4		
<i>Social or health care</i>	78	26.9		291	34.2		
<i>Other</i>	32	11.0		200	23.5		
Working experience in nursing care							0.014 <sup>b</sup>
<i>Yes</i>	121	41.7		427	50.1		
<i>No</i>	169	58.3		425	49.9		
Experience of caring for ill family member							<0.001 <sup>b</sup>
<i>Yes</i>	102	35.3		466	54.7		
<i>No</i>	187	64.7		386	45.3		
Current years of studies							<0.001 <sup>b</sup>
<i>1<sup>st</sup> year</i>	30	10.4		365	42.8		
<i>2<sup>nd</sup> year</i>	150	51.9		253	29.7		
<i>3<sup>rd</sup> year</i>	81	28.0		133	15.6		
<i>4<sup>th</sup> year</i>	28	9.7		101	11.9		
Duration of clinical placement *							ns
<i>2-5 weeks</i>	207	71.4		616	72.3		
<i>6-8 weeks</i>	83	28.6		235	27.6		
Assessment of supervised clinical placement							ns
<i>Inspiring</i>	262	90.3		755	88.6		
<i>Frustrating</i>	28	9.7		97	11.4		
Assigned to a specific patient							<0.001 <sup>b</sup>
<i>Yes</i>	186	64.1		368	43.2		
<i>No</i>	104	35.9		484	56.8		
Having enough time for the patient							<0.001 <sup>b</sup>
<i>Yes</i>	216	75.3		704	82.6		
<i>No</i>	71	24.7		148	17.4		
Support received from							
<i>Teacher</i>	59	20.4		104	12.2		0.001 <sup>b</sup>
<i>Supervising nurse</i>	244	84.4		771	90.5		0.006 <sup>b</sup>
<i>Student colleague</i>	93	32.2		164	19.2		<0.001 <sup>b</sup>
<i>Other person within or outside the ward</i>	53	18.3		137	16.1		ns

Notes: \* Missing data

<sup>a</sup> Independent samples *t*-test

<sup>b</sup> Pearson's chi-square test and Fisher's exact test

ns Not significant

The significance level was set at .05.

**Table 3***Characteristics of patient respondents in cohort 2005–2006 and cohort 2015–2016*

Characteristics	Cohort 2005–2006 (n = 236–242)			Cohort 2015–2016 (n = 261–272)			
	n	%	Mean (SD)	n	%	Mean (SD)	
Age			59 (16.1)			63.81(17.78)	<0.001 <sup>a</sup>
Gender*							ns
<i>Male</i>	97	40.1		89	34.1		
<i>Female</i>	145	59.9		172	65.9		
Education*							<0.001 <sup>b</sup>
<i>No vocational education</i>	79	33.1		93	34.4		
<i>Vocational training course</i>	48	20.1		71	26.3		
<i>Secondary level</i>	54	22.6		21	7.8		
<i>College diploma</i>	36	15.1		44	16.3		
<i>Univ. of applied sciences</i>	6	2.5		11	4.1		
<i>University</i>	15	6.3		26	10.0		
<i>Other</i>	1	0.4		3	1.1		
Marital status*							0.001 <sup>b</sup>
<i>Married/cohabiting</i>	148	61.2		117	43.3		
<i>Unmarried</i>	26	10.7		46	17.0		
<i>Divorced</i>	27	11.2		47	17.4		
<i>Widowed</i>	41	16.9		60	22.2		
Previous hospitalisations or other institutional care*							ns
<i>None</i>	10	4.1		14	5.3		
<i>One</i>	26	10.7		32	12.1		
<i>Two</i>	31	12.8		21	8.0		
<i>Three or more</i>	175	72.3		197	74.6		
Reason for hospital or other institutional care admission*							<0.001 <sup>b</sup>
<i>Medical problem</i>	70	29.2		61	22.8		
<i>Diagnostic examination</i>	11	4.6		7	2.6		
<i>Emergency</i>	159	66.3		83	31.1		
<i>Other (outpatient or home-based care)</i>	0	0		116	43.4		
Caring environment*							0.034 <sup>b</sup>
<i>1-patient room</i>	37	15.5		63	23.6		
<i>2-patient room</i>	95	39.9		85	31.8		ns
<i>3-patient room</i>	67	28.2		29	10.9		<0.001 <sup>b</sup>
<i>&gt;3 patients in room</i>	78	32.8		33	12.4		<0.001 <sup>b</sup>
<i>Other</i>	23	9.7		57	21.3		0.001 <sup>b</sup>
Previous experience of student participation in care*							0.001 <sup>b</sup>
<i>Yes</i>	145	60.7		176	65.4		
<i>No</i>	94	39.3		93	34.6		
Named nursing student*							<0.001 <sup>b</sup>
<i>Yes</i>	79	33.2		102	39.1		
<i>No</i>	159	66.8		159	60.9		
Student has enough time for the patient*							<0.001 <sup>b</sup>
<i>Yes</i>	197	83.8		245	92.5		
<i>No</i>	38	16.2		20	7.5		
Experience of caring for ill family member*							ns
<i>Yes</i>	94	39.5		101	38.3		
<i>No</i>	144	60.5		163	61.8		

Notes: \* Missing data <sup>a</sup> Independent samples *t*-test <sup>b</sup> Pearson's chi-square test and Fisher's exact test  
 ns Not significant; The significance level was set at .05

**Table 4**

*Means and SDs of variables concerning types of student-patient relationship for students and patients in both cohorts.*

	<b>Students in 2005– 2006 n = 290</b>	<b>Students in 2015– 2016 n = 852</b>		<b>Patients in 2005– 2006 n = 242</b>	<b>Patients in 2015– 2016 n = 272</b>	
<b>Variables</b>	<b>Mean (SD)</b>	<b>Mean (SD)</b>	<b><i>P</i>- value*</b>	<b>Mean (SD)</b>	<b>Mean (SD)</b>	<b><i>P</i>- value*</b>
Mechanistic	2.91(0.56)	3.13 (0.53)	<0.001	3.57 (0.66)	3.37 (0.65)	<0.001
Authoritative	4.01 (0.41)	4.02 (0.48)	ns	3.82 (0.74)	3.90 (0.68)	ns
Facilitative	4.01 (0.53)	4.01 (0.54)	ns	3.41 (0.81)	3.74 (0.69)	<0.001

Notes: 1 = Strongly disagree, 2 = Disagree, 3 = Not agree nor disagree, 4 = Agree, 5 = Strongly agree  
 \* The significance level for *p*-values in independent samples *t*-test was set at 05.  
 ns Not significant

### **Students' and patients' views of factors associated with their relationship**

In both cohorts, students and patients expressed positive views ( $M > 4.0$  on a 5-point Likert scale) for both contextual factors indicating student personal and professional attributes and atmosphere during collaboration, and the consequences of the relationship for student personal and professional growth and increased confidence and self-esteem. The student views of personal and professional attributes ( $p = 0.042$ ) and the atmosphere during collaboration ( $p < 0.001$ ) were statistically significantly higher, while their views of patient attributes as a patient ( $p < 0.001$ ) were significantly lower in the 2015–2016 cohort compared to the 2005-2006 cohort. Patients in the 2015-2016 cohort gave significantly higher ratings than the 2005-2006 cohort on patient own attributes as a patient ( $p < 0.002$ ), student personal and professional growth ( $p < 0.023$ ), and student improved confidence and self-esteem ( $p < 0.024$ ) (see Table 5).

**Table 5**

*Means and SDs of variables concerning contextual factors and consequences of the relationship for students and patients in both cohorts.*

Variables	Students in 2005–2006 <i>n</i> = 290	Students in 2015–2016 <i>n</i> = 852	<i>P</i> - value*	Patients in 2005–2006 <i>n</i> = 242	Patients in 2015–2016 <i>n</i> = 272	<i>P</i> - value*
	Mean (SD)	Mean (SD)		Mean (SD)	Mean (SD)	
Student personal and professional attributes	4.53 (0.37)	4.58 (0.40)	0.042	4.49 (0.55)	4.57 (0.54)	ns
Patient attributes as a patient	3.76 (0.56)	3.54 (0.57)	<0.001	3.83 (0.58)	4.00 (0.61)	0.002
Atmosphere during collaboration	4.16 (0.65)	4.33 (0.66)	<0.001	4.42 (0.58)	4.44 (0.59)	ns
Student personal and professional growth	4.50 (0.48)	4.54 (0.52)	ns	4.03 (0.71)	4.18 (0.72)	0.023
Student increased confidence and self-esteem	4.55 (0.51)	4.59 (0.55)	ns	4.21 (0.68)	4.35 (0.69)	0.024
Patient improved health and commitment to self-care	3.92 (0.59)	3.86 (0.71)	ns	4.12 (0.78)	4.21 (.076)	ns

Notes: 1 = Strongly disagree, 2 = Disagree, 3 = Not agree nor disagree, 4 = Agree, 5 = Strongly agree

\* The significance level for *p*-values in independent samples *t*-test was set at 05.

ns Not significant

### **Differences in student and patient views on their relationship and associated factors**

As presented in Table 4, the variable mean value for authoritative or facilitative relationships did not differ significantly between the students in the two cohorts. The students' rating of the mechanistic relationship was, however, statistically significantly higher in the 2015-2016 cohort compared to the 2005-2006 cohort ( $p < 0.001$ ). The patients in the 2015-2016 cohort rated the facilitative relationship ( $p < 0.001$ ) statistically significantly



higher than the 2005-2006 cohort, whereas the opposite was true for the mechanistic relationship ( $p < 0.001$ ) (see Table 4).

Student views of their personal and professional attributes ( $p = 0.042$ ) and the atmosphere during collaboration ( $p < 0.001$ ) were statistically significantly higher, while their views of patient attributes as a patient ( $p < 0.001$ ) were significantly lower in the 2015-2016 cohort compared to the 2005-2006 cohort. Patients in the 2015-2016 cohort gave significantly higher ratings than the 2005-2006 cohort on patients' own attributes as a patient ( $p < 0.002$ ), students' personal and professional growth ( $p < 0.023$ ), and students' improved confidence and self-esteem ( $p < 0.024$ ) (see Table 5).

## DISCUSSION

The student-patient relationship is considered a cornerstone for a person-centred approach in clinical education (Suikkala et al., 2018). Over the 10-year period, students' prominent views of authoritative and facilitative relationships have remained quite stable. Even if students in the 2015-2016 cohort reported more previous experience of caring relationships with patients, they related less often to the specific patients assigned to them compared to the 2005-2006 cohort. These results indicate that in their relationships with patients, students make assumptions about patients' best interests rather than acknowledging and respecting patients' values and preferences in a mutually beneficial dialogue. This reflects the professional dominance that hinders patients' active participation in the student-patient relationship due to inadequate time to build relationships and insufficient knowledge and communication shared by the student and patient (Angel & Frederiksen, 2015; Håkansson et al., 2019).

The use of simulation-based education has become more common over the past decade, and it has been found to be most effective in the cognitive and psychomotor domains of learning, mostly benefiting senior and graduating students. However, there seems to be

negligible transfer of shared decision-making skills from simulations to actual patient care situations (Cantrell et al., 2017). At the same time, clinical placements have become more and more demanding and students are increasingly stressed due to high workloads, feeling that they have inadequate competence in dealing with patients with diverse conditions (Labrague & McEnroe-Petitte, 2018). This might explain the somewhat increased incidence of mechanistic relationships among students.

The 2015-2016 cohort consisted of many more 1<sup>st</sup> year students compared to the 2005-2006 cohort. The findings of this study need to recognize the fact that the cohorts were different with regard to the stage of their educational process. Clinical placements, especially initial ones, can be an extremely stressful for students and they tend to have concerns of causing harm to patients. This can make them focus on learning to apply clinical procedures in their care and depend on their clinical preceptors' close supervision. As a result, interactions between patients and students tends to be scarce, characterised by a mechanistic relationship (Alshahrani et al., 2018; Kaldal et al., 2018; Pulido-Martos et al., 2012).

Authoritative relationships were most common among both patient cohorts. At the same time, among patients, facilitative relationships had become more frequent than mechanistic relationships. These results reflect that the untapped potential of patients' knowledge and experience has become slightly more visible, and thus show a strengthening trend in patients' active participation in students' clinical education (Suikkala et al., 2018). The reasons for patients' involvement in relationships with students, such as opportunities to contribute to students' learning, thereby influencing the competence of future professionals shaping health care services, have also been found in earlier studies (Griffith, et al., 2012; Suikkala et al., 2018; Suikkala & Leino-Kilpi, 2001). One explanation for the differences between the two patient cohorts in this study may have resulted from the patients' significantly positive perceptions of themselves as patients and their contribution to students' abilities and competencies in the 2015-2016 cohort compared to those in the 2005-2006

patient cohort. Furthermore, nearly half of the patients in the 2015-2016 cohort were outpatients or in home-based care while in 2005-2006, two thirds were emergency patients. At home, patients had more privacy to engage in interaction with students, which enabled them to develop therapeutic relationships with them (Stickley et al., 2010). They were also better equipped for self-care and thus probably more empowered compared to inpatients. The importance of listening to patient voices and enabling them to express their views of the implementation of person-centred approach to care has been highlighted in contributing to student and nursing practice development. Furthermore, patient feedback and opinions help students to identify areas where they need to improve their performance (McMahon-Parkes et al., 2016; Speers & Lathlean, 2015; Stickley et al., 2010).

There is evidence that a positive pedagogical atmosphere during the clinical practicum is associated with the quality of the student-patient relationship and student competence (Kajander-Unkuri et al. 2014; Suikkala et al. 2020). Therefore, it is noteworthy that according to the students' assessments, the atmosphere during collaboration, and thus opportunities for supportive supervisory relationships as prerequisites in issues concerning students' relationships with patients have improved in the last decade. This aligns with the findings of the 10-year evaluation of the national benchmarking data of the clinical learning environment and student supervision (Meretoja et al., 2018). This might also be one explanation for students' assessments of their personal and professional attributes being significantly more positive in the 2015-2016 cohort as compared to students 10 years earlier. For nursing students, preceptors are the most important professional group who can provide a safe environment for students and support them in dialogue and facilitative relationships with patients through reciprocal collaboration (Alshahrani et al., 2018; Ekebergh et al., 2018). With support from nurse educators, preceptors should consider continuity in the relationship between student and patient as a prerequisite for a person-centred pedagogical approach in clinical education (Fröberg et al., 2018; Suikkala et al., 2018). In contrast, based on the

results, increasing attention needs to be paid to peer support among nursing students, enabling them to share and reflect feelings and experiences to enhance their confidence in interpersonal relationships with patients (Carey et al., 2018).

Preparing future nursing workforce to deliver person-centred care in diverse settings is a global health priority (WHO, 2016). Collaboration between educational institutions and health-care organisations plays a central role in ensuring the development of the competencies in delivering person-centred and relationship-based care. Nursing curricula designed for an evidence-based approach acknowledging patient preferences create the framework for person-centred care. This challenges preceptors and nurse educators to develop pedagogical approaches to promote and support patients' participation and make clinical education and practice visible from the person-centred care perspective (Scammell et al., 2016; Suikkala et al., 2018.) Involving patients, also those from marginalized or vulnerable groups, and considering their individual needs, values, and preferences should be established throughout the nursing education process to prepare students, as future professionals, to work in equal partnership with patients (Jylhä et al., 2017; Suikkala et al., 2018.) Furthermore, there is a need to educate and coach preceptors and all staff on how to use a person-centred approach as an alternative to the traditional pedagogical approaches to what nurses do in student supervision (Fröberg et al., 2018; Suikkala et al., 2018.) Switching from a traditional towards a more person-centred approach requires that preceptors and all staff act in a person-centred manner, serving as positive role models for students, to help students understand that patient participation and involvement, and the nurse-patient relationship, including the context of care delivery, are the core elements of nursing (Kitson et al., 2013; Suikkala et al., 2018.)

### **Limitations**

There were limitations related to the sample, data collection, and instrument. The participants were not selected randomly, but in both cohorts, the data were collected from different parts of the country. In the latter cohort, patients were underrepresented compared to

students, which raises crucial questions about the representativeness of the data. Compared to the student sample, many patients were excluded for not meeting the selection criteria because they were under 18 or unable to participate in the study due to poor health status. Even if the results are, to some extent, specific to the samples of this study, especially as concerns the demographic differences between the groups being compared, they can be generalised, with caution, to nursing students and patients in clinical placements across Finland.

The student-patient relationship was evaluated using parallel questionnaires developed based on a literature review (Suikkala and Leino-Kilpi, 2001) and an interview study (Suikkala and Leino-Kilpi, 2005). The scales have previously been tested with nursing students and internal medicine patients in Finland (Suikkala et al., 2008a, 2008b, 2009). It is important to consider that the self-assessed scales used in this study give information about two separate student and patient cohorts' views of their relationship at a group level, not their actual performance in that relationship. Thus, it is possible that there might have been a tendency to present a favourable image of the relationship while answering the questionnaire; this was reduced by anonymity while answering.

The SPR scales were developed for the purposes of this study. The SPR scales have not been used in other studies and thus they lack evidence of validity and reliability in other studies. This, together with some low alpha values, raises questions about the validity of the study and interpretation of the findings.

## **CONCLUSIONS**

The student-patient relationship should form the foundation of health care education and emphasise the participation of patients and utilisation of their expertise in education in the rapidly evolving health care environment and the changing scope of clinical practice. In this study, the comparison of the group-level reports from two cross-sectional cohorts of students and patients in 2005-2006 and 2015-2016 shows that the untapped potential of patient

knowledge and experience has become slightly more visible in student clinical education. More research is needed to gain understanding of how to include patients as active participants in students' clinical learning and assessment processes.

Facilitative relationships between students and patients should be in the interest of both academic and clinical organizations, influencing the practice of person-centred care as opposed to professionally focused care, by bringing the patient perspective to students' clinical learning and assessment processes. In fostering an active role for patients, it is of great importance that clinical education be organized in such a way that students can benefit from longitudinal interaction with the same patients. Furthermore, preceptors need to be sensitive to the needs of both students and patients and facilitate mutually beneficial encounters. Highlighting and strengthening the student-patient relationship is the core of students' clinical learning, and as patient participation in nursing education is an international concern, this should be further studied.

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