

Determining Pediatric Nurses' Attitudes and Behaviors Towards Nurse-patient Interaction and Liking of Children Level

Abstract

Aim: The study was conducted descriptively in order to determine the factors affecting the attitudes and behaviors of pediatric nurses towards nurse-patient interactions and their level liking of children.

Methods: The sample size of the study, the number of individuals in the population was determined according to the known sample calculation, and the sample of 294 pediatric nurses was formed. The research data were collected using the "Data Collection Form", "Caring Nurse-Patient Interaction Scale (CNPIS)" and "Barnett Child Liking Scale (BCLS)". The data were evaluated by number, percentage, mean, standard deviation, independent samplet test, one-way ANOVA, correlation test, and linear regression.

Results: Means for the importance, competence, and feasibility dimensions of the overall scale were 319.93 ± 33.931 , 291.01 ± 42.360 , and 267.29 ± 53.673 , respectively. It was determined that the total mean scores for the "significance, adequacy, and applicability" levels of the CNPIS were 319.93 ± 33.93 , 291.01 ± 42.36 , 267.29 ± 53.67 , respectively. It was determined that the variables of age, marital status, educational status, department employed, working year, and working year as a pediatric nurse affected the mean CNPIS score of the nurses ($P < .05$). The nurses' BCLS mean score was determined as 85.80 ± 13.74 . It was determined that the nurses' child liking scores varied according to the unit they were working in ($P < .05$).

Conclusion: In the study, it was determined that there are significant predictors on the nurses' average child-liking points and the mean scores of CNPIS-Importance-Adequacy-Practicability and there is a strong positive relationship between them. It may be suggested that pediatric nurses be supported with in-service trainings so that they can plan their practices in line with child-liking and care-oriented interaction.

Keywords: Pediatric nursing, Nurse-patient interaction, Liking of children

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Akdoğan D, Uysal G. Determining Pediatric Nurses' Attitudes and Behaviors Towards Nurse-patient Interaction and Liking of Children Level. *J Educ Res Nurs.* 2021; 18(3): 282-289

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Submitted: October 17, 2019

Accepted: April 6, 2020



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Introduction

The nurse has an important place in the health care team in terms of determining the communication needs of the patients. Nursing care is based on the relationship and interaction between the nurse and the patient. Accordingly, it is essential for the nurse to plan their practices with an integrative and humanistic approach, along with establishing healthy communication and interaction with the patient in order to obtain positive patient care results.¹⁻⁴ It has been reported that effective communication and interpersonal relationships reveal positive results for patients, including patient compliance to the treatment, increased motivation, and elevated satisfaction with service.^{3,5-9} During the care of a patient, nurses have important responsibilities in initiating and maintaining nurse-patient communication and in creating a suitable environment for communication.^{6,10}

Studies evaluating the attitudes and behaviors of pediatric nurses towards care-oriented nurse-patient interaction are significantly limited. In a study that pediatric nurses were evaluated in terms of their care-oriented nurse-patient interaction levels and the family-centered care of the parents, Çetinkaya⁹ (2019) has reported that although nurses attach great importance to care-oriented nurse-patient interaction, they do not find it applicable at the same level. It should be considered that the majority of the remaining studies have been conducted with nursing students.^{4,5,11-13}

While maintaining a patient-nurse interaction in a healthy way, the pediatric nurse working with children, a special group, should also comprehend that a child has different physical and psychological characteristics compared to an adult. For this reason, knowing that the child's perception of and reaction to the disease might differ in accordance with the age and developmental features, the nurse should plan an extensive care and represent the essential compassion and attention.¹⁴⁻¹⁷ One of the important points in child patient and nurse communication is the child's love perceived by the pediatric nurse. Nurses' affection towards children enables them to be accepted easily and act more carefully and attentively during the communication process.^{15,17,18} It is significant to establish strong communication and interaction with nurses and receive affection from nurses in cases of deviation from health, where the child most needs love and attention.^{14,19}

Methods

Aim

This research was conducted to determine the attitudes and behaviors of pediatric nurses towards care-oriented nurse-patient interaction, as well as the levels of child love and the factors affecting them.

Design

This research was designed in descriptive type and carried out between July 2017 and September 2017. The population of the research consisted of 532 pediatric nurses working in the pediatric clinics of 11 training and research hospitals affiliated to the Ministry of Health, Istanbul Province Public Hospitals Institution, Northern and Southern Public Hospitals Association.

Participants

The sample size of the study was determined as 232 nurses according to the sample calculation of the known number of individuals in the population. Considering factors such as incomplete questionnaires and the nurses on leave, the study was designed to collect approximately 20-25% more questionnaires than the required sample number. Data were collected from 311 nurses who were willing to participate in the study and working in inpatient services, pediatric emergency services or pediatric intensive care units. A total of 294 pediatric nurses who answered the questions correctly and completed the survey were included in the sample.

Data Collection

Data were collected by face-to-face interviews with nurses in the nurses' room. It took about 15 minutes to fill out the forms.

Questionnaire

Data Collection Form: It consists of 11 questions analyzing the introductory characteristics of nurses (age, gender, marital status, graduated school, department, job, working year, etc.).

Caring Nurse-Patient Interaction (CNPI) Scale: It was developed by Cossette et al.²⁰ (2005) to describe nurse-patient interaction and to evaluate the relationship between nurses' attitudes and behaviors towards the care and patient outcomes. Validity and reliability of the scale were tested by Atar and Aşti² (2012) to ensure it is applicable in Turkish community. The scale consists of 70 items in 10 subscales. While applying the scale, the significance of CNPI scale items is questioned on a 5-item Likert-type scale, and data on the "significance" dimension of the scale are obtained. Similarly, by questioning how adequate and applicable the CNPI is on a 5-point Likert-type scale, results can be reached on the dimensions of "proficiency" and "applicability". In all three dimensions, the expressions of the question items on the Likert-type scale were evaluated as "Never:1, A little:2, Moderate:3, Much:4, Extremely:5". Cronbach α values of the scale were reported as 0.99, 0.98, and 0.99, respectively. In the evaluation of the scale, the subscales for each dimension did not change and were obtained from the same items. The total score of all three dimensions were obtained by adding the scores of all items. The lowest score that could be obtained in all three dimensions of the scale was 70, whereas the highest score was 350. As the scores of the nurses from the scale increased, their attitudes and behaviors towards care-oriented nurse-patient interaction elevated significantly. In this study, Cronbach α values were determined as 0.98 for all three sub-dimensions.

Barnett Liking of Children Scale: It is an assessment tool developed by Barnett and Sinsini²¹ (1990) to measure the attitude of people towards

children. The Turkish validity and reliability study was carried out by Gelbal and Duyan²² (2008). There are 14 items in the scale, and the participants were asked to express their opinions in seven degrees, ranging from "I totally disagree" to "I totally agree". Four out of 14 items (items 3, 6, 10, and 13) to determine liking for children are negative. It is concluded that those who score high on the scale like children more. The Cronbach α value was found to be 0.92. In this study, the Cronbach α value was determined as 0.69.

Ethical Consideration

Before starting the research, written permissions were obtained from Istanbul Okan University Faculty of Health Sciences Ethics Committee (No: 79), Ministry of Health Public Hospitals Institution, Istanbul Province Northern Public Hospitals (No: 77.517.973-770) and Southern Public Hospitals (No: 35.778,018-774.99) Union General Secretary. Permission was obtained for the Care-Oriented Nurse-Patient Interaction Scale and the Barnett Child Loving Scale. After informing the nurses about the study, written consent forms were obtained for participation.

Data Analysis

The data obtained in the research were analyzed using the IBM SPSS 21.0 package software (IBM Corp. Armonk, NY: USA Released 2012). Number, percentage, mean, and standard deviation were used as descriptive statistical methods in the evaluation of the data. Before the data analysis, Kolmogorov-Smirnov Z test was applied and it was determined that the data showed normal distribution and parametric tests were used. The *t*-test was performed for independent groups to compare quantitative continuous data between two independent groups, and the one-way ANOVA test was conducted to compare quantitative continuous data between more than two independent groups. Spearman correlation and multiple linear regression test were performed to determine the relationship between continuous variables of the study. The findings were evaluated at the 95% confidence interval and at the 5% significance level.

Results

When the sociodemographic and working conditions of the nurses were examined, the majority of them were found to be women (90.1%), and 39.8% were between the ages of 18-25 years. More than half of the nurses (56.8%) were single. 33.3% of the nurses had children and 57.1% of those who had children (*n* = 98) had only one child. 65% of the nurses possessed a bachelor's degree, whereas 55.1% worked in the pediatric service and 28.9% in the intensive care unit. The majority of them (93.2%) worked as service nurses and 6.8% were responsible nurses. It was determined that 42.9% of them had been working as a nurse for 1-5 years, 50.4% worked with children for 1-5 years, 49.7% of them worked for 40-48 hours a week, and finally 87.4% worked with in a shift system (Table 1).

The mean scores of significance, proficiency, and applicability of the CNPI scale were found to be 319.93 ± 33.93 , 291.01 ± 42.36 , and 267.29 ± 53.67 , respectively. It was determined that nurses' care-oriented nurse-patient interaction materiality and applicability and proficiency score averages (Min = 70-Max = 350) were above average. The mean score of the Child Liking Scale was 85.80 ± 13.74 and below the median value (Table 2).

When the significance, proficiency, and applicability sub-dimension mean scores of the nurses participating in the study were compared with their socio-demographic characteristics, it was determined that the variables of gender, having children, and the number of children did not affect the patient-nurse interaction significance score, and

Table 1. Sociodemographic and Working Characteristics of Nurses (n = 294)

Variables	n	%
Gender		
Female	265	90.1
Male	29	9.9
Age		
18-25 ages	117	39.8
26-35 ages	116	39.5
36 age and above	61	20.7
Marital status		
Married	127	43.2
Single	167	56.8
Status of having children		
Yes	98	33.3
No	196	66.7
Number of children (n = 98)		
1 child	56	57.1
2 children and above	42	42.9
Education status		
High school graduate	49	16.6
Associate degree graduate	27	9.2
Bachelor's degree	191	65.0
Post graduate	27	9.2
Working service		
Pediatric service	162	55.1
Pediatric emergency service	47	16.0
PICU	85	28.9
Status		
Nurse manager	20	6.8
Service + intensive care nurse	274	93.2
Working time as a nurse		
Less than 1 year	27	9.2
1-5 years	126	42.9
6-10 years	62	21.1
11 years and above	79	26.8
Working time in pediatric clinics		
Less than 1 year	41	13.9
1-5 years	148	50.4
6-10 years	64	21.8
11 years and above	41	13.9
Working hours		
40-48 hours	146	49.7

Table 1. Sociodemographic and Working Characteristics of Nurses (n = 294) (Continued)

Variables	n	%
49 hours or more	148	50.3
Shift type		
Day	37	12.6
Shift	257	87.4

Table 2. Total Scores of Pediatric Nurses on the Caring Nurse-Patient Interaction Scale and the Barnett Child Liking Scale (n = 294)

Scale	Mean	SD	Min.	Max.	Median
BCLS	85.80	13.74	14	98	91
CNPIS-Significance	319.93	33.93	205	350	331
CNPIS-Proficiency	291.01	42.36	201	358	292
CNPIS-Applicability	267.29	53.67	122	395	279

the difference was found to be statistically insignificant ($PP > .05$). The findings revealed that as the age of the nurses increased, the mean scores of CNPI significance and proficiency elevated. The difference between the age groups was statistically significant ($PP < .05$). When the relationship between the marital status of the nurses and CNPI applicability scores was examined, it was determined that the applicability scores of the married nurses were higher than that of the unmarried nurses, and the difference was statistically significant ($PP < .05$). Analyzing the relationship between the graduation status of the nurses and their CNPI proficiency scores, it was detected that the proficiency scores of postgraduates were higher than that of high school graduates and undergraduate graduates. The difference between the groups was statistically significant ($PP < .05$). There was no statistical difference between the nurses' mean scores of liking children and the variables of gender, age, marital status, having a child, the number of children who have children, and graduation. ($PP > .05$) (Table 3).

When the mean scores of CNPI Significance and Proficiency were compared with the study characteristics, it was detected that the task and working style did not affect the patient-nurse interaction significance and proficiency score, and the difference was statistically insignificant. ($PP > .05$). The CNPI-Significance scores of the nurses were compared based on the department they work in and the results demonstrated that the nurses working in the pediatric intensive care unit had a higher patient-nurse interaction significance score ($PP < .05$). The mean score of patient-nurse interaction significance of nurses elevated as the years of working in the profession and as a pediatric nurse increased ($PP < .05$). Similarly, the mean score of patient-nurse interaction proficiency of nurses elevated as the years of working in the profession and as a pediatric nurse increased ($PP < .05$). The mean scores of the Child Liking Scale were examined according to the service where the nurses worked. The findings showed that the nurses working in the pediatric intensive care unit had higher child liking scores than the nurses working in the pediatric service and pediatric emergency department. The difference was statistically significant ($PP < .05$) (Table 4).

Table 3. Comparison of Pediatric Nurses' on the Caring Nurse-Patient Interaction Scale Sub-Dimension Scores and Barnett Child Liking Scale by Descriptive Characteristics (n = 294)

Variables	CNPI-Significance				CNPI-Sufficiency				CNPI-Applicability				BCLS			
	Mean	SD	t/F	p	\bar{x}	SS	t/F	p	\bar{x}	SS	t/F	p	\bar{x}	SS	t/F	p
Gender																
Female	319.85	34.019			290.24	42.859			267.01	53.542			86.14	13.624		
Male	320.62	33.698	-0.116	.908	298.07	37.417	-0.945	.346	269.86	55.753	-0.271	.786	82.69	14.634	1.287	.199
Age																
18-25 ages ^a	308.77	35.100			277.74	38.940			263.78	49.425		.258	84.70	12.530		
26-35 ages ^b	326.16	32.339	11.459	.001**	295.64	43.392	12.005	.001**	265.60	55.499	1.361		86.26	14.522	0.690	0.503
36 and above ^c	329.48	28.729		<i>b,c > a</i>	307.69	39.425		<i>b,c > a</i>	277.25	57.541			87.05	14.484		
Marital status																
Married	321.76	33.446			295.78	42.590			274.55	53.942			86.61	14.739		
Single	318.53	34.329	0.810	.419	287.39	41.950	1.688	.093	261.77	52.964	2.033	.043**	85.19	12.939	0.883	0.378
Status of having children																
Yes	320.04	33.940			297.16	42.184	1.7	.07	273.94	56.469	1.5	.134	85.76	16.036		
No	319.87	34.013	0.041	.967	287.94	42.220	.67	.8	263.97	52.049	.05		85.83	12.479	0.042	.967
Number of children																
1 child	321.61	31.971			298.14	39.738			280.23	54.509			85.07	17.915		
2 and above	316.35	36.815	0.714	.477	293.76	45.635	0.479	.633	263.18	58.712	1.398	.166	85.41	13.612	0.095	.924
Education status																
High school ^a	313.57	37.505			284.45	46.183			266.35	54.207			84.65	12.857		
Associate ^b	320.70	34.443	2.003	.114	302.07	38.431	3.456	.017*	279.33	53.038			86.67	14.536		
Bachelor's ^c	319.55	33.801			288.25	41.254		<i>d > a,c</i>	264.49	53.134	0.914	.434	85.73	14.155	0.290	.833
Post graduate ^d	333.30	24.959			311.44	40.886			276.81	57.365			87.52	11.850		

t = t test on independent groups; F = one-way analysis of variance.

*p < .05,

**p < .01

It has been determined that there was a strong positive correlation between the nurses' mean scores of liking children and the mean scores of CNPI Significance, Proficiency, and Applicability ($PP < .01$) (Table 5).

The total score of the Barnett Child Liking Scale of the nurses participating in the study has been the indicator of the significance, proficiency, and applicability scores of the CNPI ($PP < .001$). These three variables account for 16% of the variance in the child liking score. CNPI-Significance score has been the strongest indicator of Barnett Child Loving Scale total score (Table 6).

Discussion

A nurse is a professional member equipped with the knowledge and skills that provides appropriate support to individuals who have health

problems and need help in order to cope with the current situation. Nursing practices that make nursing care special develop with the theoretical and practical knowledge of nurses, their ability to understand human behavior, their commitment to professional values, as well as their ability to maintain effective communication and interaction with the patient.^{1,3-5,11,23}

Pediatric nursing, which cares for individuals in childhood who are still growing physically, psychologically, and socially, also has important responsibilities. It is crucial that the interaction with the child proceeds during the stages of diagnosing care-related problems, planning, and implementing interventions.¹⁴⁻¹⁸ Maintaining this interaction and communication in a healthy way might be related to the nurse's love for children. In this section, the results of the research on the

Table 4. Comparison of Pediatric Nurses' Caring Nurse-Patient Interaction Scale Sub-Dimensional Mean Scores and Barnett Child Liking Scale by Work Characteristics (n = 294)

Variables	CNPIS-Significance				CNPIS-Sufficiency				CNPIS-Applicability				BCLS			
	Mean	SD	t/F	p	Mean	SD	t/F	p	Mean	SD	t/F	p	Mean	SD	t/F	p
Working service																
Pediatric service ^a	314.80	34.839			287.51	41.929			265.96	53.882			84.16	14.848		
Pediatric emergency ^b	315.23	35.209	8.346	.001**	288.26	37.076	2.271	.105	265.49	53.322	0.259	.772	85.89	13.363	3.346	.037*
PICU ^c	332.29	28.156		c > a,b	299.22	45.172			270.82	53.935			88.88	11.105		c > a,b
Status																
Nurse manager	314.80	34.839			287.51	41.929			265.96	53.882			89.10	12.527		
Service + intensive care nurse	315.23	35.209	-0.076	0.940	288.26	37.076	-0.111	.912	265.49	53.322	0.053	.958	85.56	13.814	1.112	.267
Working time as a nurse																
Less than 1 year ^a	292.89	40.709			278.93	36.705			273.52	45.144			80.96	13.282		
1-5 years ^b	319.87	31.216	8.180	.001**	282.28	41.332	5.967	.001**	261.32	50.151	0.978	.404	85.75	12.805	1.357	.256
6-10 years ^c	320.18	36.014		b,c,d > a	296.32	43.442		d > a,b	269.35	57.333			86.77	15.433		
11 years and above ^d	329.05	29.308			304.91	41.059			273.08	58.587			86.77	13.838		
Working time in pediatric clinic																
Less than 1 year ^a	300.83	39.804			282.07	36.638			274.32	43.000			81.15	13.942		
1-5 years ^b	320.89	31.077	6.172	.001**	285.89	42.929	4.243	.001**	262.23	52.539	1.119	.342	86.32	12.875	1.881	.133
6-10 years ^c	323.25	35.786		b,c,d > a	297.52	41.675		d > a,b	268.36	55.682			87.03	14.833		
11 years and above ^d	330.34	27.867			308.29	41.720			276.88	63.118			86.66	14.362		
Shift type																
Day	321.95	30.430			294.00	44.565			270.95	56.148			84.95	14.970		
Shift	319.65	34.594	0.382	.702	290.50	42.104	0.468	.640	266.33	53.617	0.486	.627	85.71	13.642	-0.314	.754

t = t test on independent groups; F: analysis of variance.

*P < .05, **P < .01.

Table 5. The Relationship between Nurses' Barnett Child Liking Scale and Caring Nurse-Patient Interaction Scale's Mean Significance, Sufficiency, and Applicability (n = 294).

	1	2	3	4
<i>BCLS</i> ¹	1			
<i>CNPIS-Significance</i> ²	0.345*	1		
<i>CNPIS-Sufficiency</i> ³	0.332*	0.632*	1	
<i>CNPIS-Applicability</i> ⁴	0.311*	0.356*	0.754*	1

Spearman correlation test P < .01.

Table 6. Factors Associated with Pediatric Nurses' Levels of Liking Children (n = 294).

BCSL	B	SE	(B)	t	p	95% CI	
						Lower limit	Upper limit
CNPIS- Significance	0.140	0.022	0.345	6.280	.001*	0.096	0.183
CNPIS- Sufficiency	0.108	0.018	0.332	6.010	.001*	0.072	0.143
CNPIS- Applicability	0.080	0.014	0.311	5.599	.001*	0.052	0.108

*CI: Confidence interval.
 R:0.40;R²:0.16; F: 18.373; P < .001; Durbin Watson: 1.978.
 P < .01.

factors affecting the patient-nurse interactions of pediatric nurses and their level of liking for children were discussed in the light of the relevant literature.

When the results of the research are examined, the mean scores for the "significance, proficiency, and applicability" levels of the CNPI scale were; 319.93 ± 33.93, 291.01 ± 42.36, and 267.29 ± 53.67, respectively (Table 2). There are limited studies concentrated on nurse-patient interactions. Çetinkaya⁹ (2009) conducted a study with pediatric nurses and reported that the average CNPI score significance of the nurses was 316.80 ± 26.12, whereas average proficiency was 293.48 ± 27.85, and average applicability was 282.25 ± 32.39. In the study of Kaçmaz and Çam²⁴ (2019) where the nurses that care for psychiatric patients examined in terms of their levels of care-oriented nurse-patient interaction, it was found that the total score averages of the significance, proficiency and applicability dimension of the CNPI were 313.08 ± 30.45, 283.79 ± 37.43, and 268.01 ± 47.65, respectively. According to these results, it is worth noting that nurses and pediatric nurses evaluate their attitudes and behaviors towards care-oriented nurse patient interaction to be important, yet do not consider them viable at the same rate. In this context, although nurses found attitudes and behaviors towards patient interaction to be crucial in whatever specialty they were in, it could be assumed that they did not believe in their applicability due to the current conditions.

In this study, the average score of the nurses' Child Liking scale was 85.80 ± 13.74 and it was determined that the level of Child Liking was high (Table 2). The studies performed on this subject have published high Child Liking scores.^{19,25-27} These results may be due to the fact that the pediatric nurses care for children whose needs and dependencies were higher than that of other age groups. In addition, the love of children could be an expected situation for many individuals regardless of profession due to human nature.

As a result, it was determined that as the age of the nurses increased, the mean scores of CNPI Significance and Proficiency increased (Table 3). This result may be related to the fact that the

professional experience and awareness of the nurses increase with age, as well as the importance of care-oriented nurse-patient interaction and feel more adequate in this regard. In the literature, Bayraktar and Eşer²⁸ (2017) evaluated the attitudes and behaviors of nurses towards care-oriented nurse-patient interaction, and Kaçmaz and Çam²⁴ (2019) investigated the care-oriented nurse-patient interaction levels of nurses who care for psychiatric patients, and the "significance" score increased directly proportional to age. In the study of Kara¹⁵ (2014), it was reported that as the age of nurses increases, their communication skills also increase. On the other hand, in some similar studies on nurse-patient interactions and communication skills, it is observed that there is no relationship between the age of nurses and their communication skills.^{9,10,29,30}

The study demonstrated that the married nurses had higher CNPI Applicability scores compared to ones who were single (Table 3). This result might be explained by married nurses' experience of caring for children, along with their life experiences and environments, and being more aware of the need. In the study of Kara¹⁵ (2014), it was stated that married nurses had stronger communication with children. In a similar study by Çetinkaya⁹ (2019) with pediatric nurses and in some studies on nurses' communication and empathy skills, it was reported that marital status was not related.²⁹⁻³¹

In this study, it was determined that nurses with a master's degree had higher CNPI-proficiency scores (Table 3). The fact that nurses with higher education levels were more competent in the patient interaction might be explained by the improvement of nurses in theory and practice with the increased education level, and they know the limitations of their duties and authorities. When the studies examining the communication and empathic skill levels were analyzed, it was detected that the higher the education level of the nurses yielded better communication with the patient.³²⁻³⁵

In this study, the nurses working in the pediatric intensive care unit were shown to have higher patient-nurse CNPI-Significance scores

than those working in other services (Table 4). Nurses believed that the interaction with the child has been more important, which could be explained by the fact that the children followed in the intensive care unit needed more care.

In the study, the findings demonstrated that as the years of working in the profession and the years of working as a pediatric nurse increased, the mean scores of CNPI-Significance increased as well (Table 4). The reason behind this finding might be the increase in the working experience of nurses, their knowledge and experience. Accordingly, the importance of care-oriented nurse-patient interaction was also positively influenced. In a similar study by Bayraktar and Eşer²⁸ (2017), it was determined that the care-oriented nurse-patient interaction of nurses with a long working time in the profession has been important. In the study of Kumcağız et al.¹⁰ (2011) nurses with longer working years were shown to have improved communication skills.

In this study, it was determined that nurses whose professional working years and working years as a pediatric nurse were less than 1 year and 1-5 years had lower mean CNPI-Proficiency scores (Table 4). This result could be explained by the fact that as the working years of nurses increase, they gain proficiency with experience and gain experience in patient-nurse interaction with the same parallelism. In their study, Oermann and Garvin³⁶ (2002) reported that the stress reasons frequently stated by new graduates were feeling inadequate due to lack of confidence, fear of making mistakes due to increased workload and responsibilities and working with nurses who were unwilling to help. In the study conducted by İleri³⁷ (2007) on the perception of the transition process of newly graduated nurses to their professional roles and the factors affecting it, it was stated that newly graduated nurses expressed the transition process as difficult.

In this study, it was determined that nurses working in the pediatric intensive care unit had higher child liking scores (Table 4). It can be thought that this result may be due to the conclusion that children in the intensive care process may need more love and attention and the high level of child liking of pediatric intensive care (PICU) nurses. In the study of Altın³⁸ (2019), the level of liking for children was found to be high in nurses working in intensive care.

In the study, the nurses' mean scores of liking children and the mean scores of NHSES-Significance-Proficiency-Applicability were found as significant predictors and there was a strong positive relationship between them (Tables 5,6). Consequently, it can be thought that nurses with a high level of liking for children find care-oriented nurse-patient interaction more important and consider themselves competent and able to apply patient-nurse interaction. The positive effect of the strong communication between the patient and nurse is known to have a positive effect on the recovery results, and the polite, loving and sincere behavior of the nurses increase the quality of care and the expectations of the patients can be met more effectively.³⁹ When similar studies on child liking and communication with pediatric nurses were examined, it was detected that as the level of liking increased, the ability to communicate with the patient also increased.^{15,27} Tural et al.¹⁷ (2014) also stated in their study with a mixed group of nurses that the level of liking children is parallel to the ability to communicate. In a study by Yiğit et al.³⁴ (2019), it was reported that nurses with good communication had higher child liking scores because they felt competent and happy in their clinic. In the study conducted by Günel²² (2018) to determine the status of liking children and empathic tendencies of nursing students, it was concluded that those with a high level of liking for children did not have difficulty in communicating with children. Nurses are the people with whom children interact the most in the hospital. Children demand hearing nice words from nurses, along with compassion and trust.

Conclusion

As a result, it is noteworthy that the care-oriented patient-nurse interaction scores of the pediatric nurses participating in the study are significant, proficient and applicable above the average. In addition, it was determined that nurses with a high level of liking for children found care-oriented nurse-patient interaction significant, felt sufficient in terms of patient interaction and found the care-oriented working style applicable. Based on these results, it can be suggested that nurses who want to work in this field and love children should be given to children's services. Nurses who love children should be determined, and those with high levels of child liking should be directed to children's services and supported with in-service training, thus that they can plan their practices in line with care-oriented interaction. On the other hand, studies on care-oriented nurse-patient interaction seem to be limited. It is recommended to conduct further studies that focus on the effects of nursing care practices on patient outcomes in pediatric clinics.

Ethics Committee Approval: Ethics committee approval was obtained from the Ethics Committee of the Faculty of Health Sciences of Istanbul Okan University (Ethics committee no: 79). Hospital permits were obtained from the General Secretariat of the Ministry of Health, Public Hospitals Institution, Istanbul Province Northern Public Hospitals Association (no:775 17973-770) and Southern Public Hospitals association (no:35778018-774.99).

Informed Consent: After the nurses participating in the study were informed about the research, their written consent was obtained, and participation in the study was based on volunteerism. It has been announced that the data obtained will be published without using names for scientific purposes.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept – D.A., G.U.; Design – D.A., G.U.; Supervision – D.A.; Resources – D.A.; Materials – D.A.; Data Collection and/or Processing – D.A.; Analysis and/or Interpretation – D.A., G.U.; Literature Review – D.A., G.U.; Manuscript – D.A., G.U.; Critical Review – G.U.

Acknowledgements: We wish to thank the pediatric nurses who participated in this study.

Conflict of Interest: The authors have no conflict of interest to declare.

Financial Disclosure: The authors declared that this study has received no financial support.

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