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Determination of Emotional Intelligence, Social Intelligence and Autism Awareness Levels of Paediatric Nurses

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ABSTRACT

Objective: To determine the relationship between emotional intelligence, social intelligence, and autism awareness levels of paediatric nurses.

Materials and Methods: The study population comprised paediatric nurses. The effect size was calculated based on existing literature, resulting in a value of 0.30 for Cohen's d. The G*Power 3.1.9.7 program was used to estimate the sample size, which was determined to be 82 individuals. The data were collected between January and June 2024 using the Information Form, Trait Emotional Intelligence Questionnaire—Short Form (TEIQue-SF), Tromso Social Intelligence Scale (TSIS), and Knowledge about Childhood Autism among Health Workers Questionnaire (KCAHW). The data were analysed using the SPSS 22.0 program, employing descriptive statistics and parametric or non-parametric tests for comparative data.

Findings: The mean age of the study participants was 28.45±4.93 years old. Participants' working years as nurses were 5.93±4.94 years, while their working years as paediatric nurses were 4.24±3.54 years. The total score for the TEIQue-SF was 101.78 ± 14.71, for the TSIS it was 82.61 ± 4.24, and for the KCAHW it was 14.71 ± 4.24. The study revealed that the total and sub-dimension TEIQue-SF score was influenced by gender, education status, and Perception of competence regarding autism spectrum disorder ($p<0.05$). Worked years as a nurse, working areas with paediatric patients, and experience caring for a child diagnosed with autism spectrum disorder affected scale sub-dimension scores of TSIS. KCAHW sub-dimension was influenced by education status, and caring for a child diagnosed with autism spectrum disorder affected sub-dimension scores. ($p<0.05$). The study found no correlation between the participant's age, number of children, years working as a nurse, years working as a paediatric nurse, mean TEIQue-SF and TSIS scores, and KCAHW total scores.

Conclusion: The study's findings determined that different variables affected paediatric nurses' emotional intelligence, social intelligence, and autism awareness levels. In this context, the findings obtained on the subject are of great importance for the field of study and also emphasize the need for further research.

Keywords: Autism awareness, Emotional intelligence, Paediatric nurse, Social intelligence

INTRODUCTION

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder characterized

by a range of symptoms, including communication difficulties, repetitive behaviors, delayed language development, changes in perception, impaired socialization, and an excessive reaction to auditory stimuli [1, 2]. Despite the uncertainties of the etiology of ASD, there is a consensus that genetic, environmental, and epigenetic factors are likely to play a role in its etiology [1]. The incidence and early diagnosis of autism spectrum disorder are increasing daily, mainly due to a change in the definition of ASD, increased awareness, and easier access to health services [2, 3].

The early evaluation of children with autism spectrum disorder is of great importance to ascertain the difficulties experienced by the child, the requirements of the child and the family, and the intervention programs that may be required in the current or potential future situations that are identified. In this process, health professionals, including nurses, play a pivotal role [4, 5]. In this context, the literature indicates that early identification of ASD is a significant predictor of the prognosis for children diagnosed with ASD [1, 3, 6, 7]. In a review of the literature, no study examined the relationship between emotional and social intelligence and autism spectrum disorder (ASD) in the context of healthcare professionals. In this context, this study aimed to determine the relationship between emotional intelligence, social intelligence, and autism awareness levels of paediatric nurses.

MATERIALS & METHODS

Study Design, Sample and Setting

The study population comprised paediatric nurses in Turkey. The effect size was calculated based on the existing literature [8-11], resulting in a value of 0.30 for Cohen's d. The G*Power 3.1.9.7 program was employed to estimate the requisite sample size (effect size 0.31, 85% power, 95% confidence interval), which was determined to be 82 individuals. The participants were selected for the study using the snowball sampling method, a non-probability sampling method. The study population comprised paediatric nurses in Turkey who met the following criteria: they were 18 years of age or older, had obtained at least a bachelor's degree, had been employed in the paediatric nursing division for a minimum of three months, had experience with online data collection methods, and had consented to participate in the study.

Data Collection

Data were collected using the Information Form, Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF), Tromso Social Intelligence Scale (TSIS), and Knowledge about Childhood Autism among Health Workers Questionnaire (KCAHW). Data collection forms were prepared using Google Forms and distributed via the online platforms WhatsApp, Instagram, and Telegram.

***Information Form*:** The form prepared by the researchers in line with the literature [12-14]; consisted of 12 questions addressing the sociodemographic and occupational characteristics of paediatric nurses. Before the form was applied to the paediatric nurses, it was submitted for review by ten experts in the field of nursing. Expert opinions were received using the Polit-Beck Method. The form was finalized after the experts' recommendations. The ten experts' grades were analysed using content validity analysis; the content validity index (S-CVI) was 0.90.

TEIQue-SF: The current complete form of the scale, which was first developed in 2001, comprises four factors and 153 items [15]. The abbreviated version shall consist of 30 items on a 7-point Likert scale, encompassing the construct of emotional intelligence (EI), comprised of four factors: emotionality, self-control, sociability, and well-being. The Turkish version of the short form shall consist of 20 items organized into four factors, rated on a 7-point Likert scale (ranging from 1, indicating strong disagreement, to 7, indicating substantial

agreement). In the Turkish adaptation study, the Cronbach alpha coefficient was 0.81 for the total scale. Higher scores on the sub-dimensions or total scores of the scale indicate that the subject displays positive emotional intelligence in the relevant sub-dimension or total score [16].

***TSIS*:** The TSIS was developed by Silvera et al. (2001) and subsequently translated into Turkish by Doğan and Çetin [17, 18]. The scale is a 5-point Likert-type scale comprising 21 items (1=strongly disagree, 2=disagree, 3=undecided, 4=agree, 5=strongly agree) and is organized into three subscales: social information processing, social skills, and social awareness. The lowest possible score on this scale is 21, while the highest is 105. A higher score indicates a higher level of social intelligence. In the Turkish adaptation study, Cronbach's alpha coefficient for the total scale was 0.83 [18].

KCAHW: The Turkish validity and reliability study of the questionnaire developed by Bakare et al. (2008) to determine the level of knowledge about childhood autism among healthcare professionals was conducted by Gürbüz Özgür et al. (2019). The questionnaire comprises 19 items, which are grouped into four domains related to autism. The initial domain encompasses eight items and pertains to the impairment in social interaction observed in children with autism. The second domain comprises a single item related to communication and language development. The third domain shall consist of four items and illustrate the obsessive-compulsive, repetitive, and stereotypic symptoms commonly observed in individuals with autism. The fourth domain, comprising six items, seeks to ascertain whether autism is a neurodevelopmental disorder. The total score that can be obtained from the questionnaire ranges from 0 to 19. The responses are dichotomous, comprising the options "yes", "no" and "I don't know". A correct answer is awarded one point, while an incorrect or unanswered question is given no credit. The final item enquires about the onset of autism and is scored 0 for newborn age or infancy. An increase in the score indicates an enhanced knowledge level about autism [19, 20].

Ethics approval and consent to participate

Ethical approval was obtained from the Selcuk University's Non-Interventional Clinical Research Ethical Committee of Nursing Faculty (Meeting Date:29th December 2023; Number of Decision: 2023/86). The researchers informed paediatric nurses about the study's aim and method and obtained written consent forms via online platform. Furthermore, permission to utilize the scales was obtained from the authors who developed the Turkish versions of the scales employed in the study or from those who conducted validity and reliability studies for the Turkish language.

STATISTICAL ANALYSIS

Statistical analysis was performed using IBM SPSS Statistics 22 software. Descriptive statistics, t-tests, Mann Whitney U tests, and correlation were performed. p-values of <0.05 were considered significant.

RESULT

The mean age of the study participants was 28.45±4.93 years. The participants had been employed as nurses for an average of 5.93±4.94 years, while their tenure as paediatric nurses were 4.24±3.54 years. The total score for the TEIQ-SF was 101.78±14.71; for the TSIS, it was 82.61±4.24; and for the KCAHW, it was 14.71±4.24. The study revealed that the total and sub-dimension TEIQue-SF score was influenced by gender, education status, and Perception of competence regarding autism spectrum disorder ($p<0.05$). Worked years as a nurse, working areas with paediatric patients, and experience caring for a child diagnosed with autism spectrum disorder affected scale sub-dimension scores of TSIS. KCAHW sub-dimension was influenced by education status, and caring for a child diagnosed with autism spectrum disorder

affected sub-dimension scores. ($p<0.05$)
(Table 1, Table 2, and Table 3).

Table 1. Comparison of paediatric nurses' sociodemographic and occupational characteristics with the scores of TEIQue-SF (n=82).

Variable (n/%)		**Total Score x̄±sd**	**Sub-Dimension**			
			Well-being x̄±sd	**Self-Control x̄±sd**	**Emotionality x̄±sd**	**Sociability x̄±sd**
Age	26 years or less (39/47.60)	98.18±15.95	20.69±3.80	17.90±4.71	20.77±3.51	19.56±5.11
	27 years old or more (43/52.40)	105.05±12.81	22.19±3.39	19.93±4.38	20.95±3.25	20.42±3.68
	Test statistics p value	*t=-2.159 p=0.224*	*t=-1.182 p=0.563*	*t=-2.024 p=0.796*	*t=-0.247 p=0.804*	*t=-0.875 p=0.143*
Gender	Female (71/87.80)	102.67±14.04	22.85±3.33	18.94±4.63	21.25±3.17	20.01±4.42
	Male (10/12.20)	95.40±18.43	18.80±4.78	19.10±4.87	18.10±3.54	20.00±4.59
	Test statistics p value	*MW-U=247,0 p=0.109*	***MW-U=-188,0 p=0.014***	*MW-U=352,5 p=0.915*	***MW-U=177,0 P=0.009***	*MW-U=344,0 p=0.820*
Marital Status	Married (40/48.80)	102.68±13.78	21.55±3.61	18.88±4.76	21.00±3.58	20.43±3.89
	Unmarried (42/51.20)	100.93±15.66	21.40±3.72	19.05±4.55	20.74±3.16	19.62±4.90
	Test statistics p value	*t=0.355 p=0.461*	*t=0.179 p=0.800*	*t=-0.168 p=0.691*	*t=0.351 p=0.847*	*t=0.825 p=0.237*
Have child	Yes (57/69.50)	105.20±13.37	21.56±3.74	20.76±3.94	21.24±3.02	20.20±3.82
	No (25/30.50)	100.28±15.12	21.44±3.64	18.18±4.72	20.71±3.50	19.93±4.68
	Test statistics p value	*t=1.403 p=0.362*	*t=0.138 p=0.963*	*t=2.395 p=0.506*	*t=-0.667 p=0.245*	*t=0.254 p=0.637*
Educational status	Bachelor's degree (58/70.70)	103.47±13.46	21.52±3.54	19.45±4.44	21.28±2.92	20.24±4.07
	Postgraduate education (24/29.30)	97.71±16.98	21.38±3.97	17.79±4.96	19.88±4.13	19.46±5.21
	Test statistics p value	*t=1.629 p=0.167*	*t=0.160 p=0.699*	*t=1.486 p=0.392*	***t=1.742 p=0.021***	*t=0.729 p=0.420*
Working years as a nurse	4 years or less (40/48.80)	97.68±15.65	20.58±3.71	17.98±5.02	20.73±3.62	19.18±4.83
	5 years or more (42/51.20)	105.40±12.88	22.20±3.37	19.90±4.16	20.93±3.17	20.70±3.87
	Test statistics p value	*t=-2.411 p=0.210*	*t=-2.050 p=0.585*	*t=-1.867 p=0.471*	*t=-0.263 p=0.486*	*t=-1.558 p=0.173*
Working years as a pediatric nurse	3 years or less (40/48.80)	98.50±14.47	20.73±3.91	18.63±4.88	20.50±3.15	19.20±4.89
	4 years or more (42/51.20)	104.90±14.40	22.19±3.62	19.29±4.41	21.21±3.54	20.79±3.80
	Test statistics p value	*t=-2.008 p=0.947*	*t=-1.846 p=0.238*	*t=-0.644 p=0.952*	*t=-0.963 p=0.957*	*t=-1.644 p=0.094*

Working areas in paediatric patient	Emergency or intensive care (39/48.00)	101.54±15.99	21.56±3.74	18.18±5.01	21.08±3.58	20.64±4.75
	Paediatric patient clinics (43/52.00)	102.00±13.63	21.40±3.60	19.67±4.18	20.67±3.17	19.44±4.05
	Test statistics p value	*t=-0.141 p=0.291*	*t=0.208 p=0.827*	*t=-1.471 p=0.281*	*t=0.540 p=0.795*	*t=1.223 p=0.317*
Perception of their own competence regarding autism spectrum disorder						
I have sufficient knowledge about autism spectrum disorder.	Yes (29/35.40)	105.03±17.06	22.14±4.08	20.00±4.85	19.90±3.50	21.07±4.74
	No (53/64.60)	100.00±13.08	21.11±3.37	18.40±4.45	21.40±3.18	19.43±4.15
	Test statistics p value	***t=1.382 p=0.044***	*t=1.221 p=0.080*	*t=1.512 p=0.387*	***MW-U=534.5 p=0.022***	*t=1.620 p=0.378*
Experiences about caring for a child diagnosed with autism spectrum disorder						
Have an experience	Yes (38/46.30)	102.16±15.35	21.42±3.67	19.74±4.88	19.84±3.38	20.11±4.41
	No (44/53.70)	101.45±14.29	21.52±3.67	18.304.58	21.75±3.10	19.93±4.46
	Test statistics p value	*t=0.215 p=0.694*	*t=-0.125 p=0.764*	*t=1.415 p=0.655*	*t=0.176 p=0.543*	*t=0.176 p=0.972*

TEIQue-SF: Trait Emotional Intelligence Questionnaire—Short Form

Table 2. Comparison of paediatric nurses' sociodemographic and occupational characteristics with the scores of TSIS (n=82).

Variable (n/%)		**Total Score x̄±sd**	**Sub-Dimension**		
			Social information processing x̄±sd	**Social skills x̄±sd**	**social awareness x̄±sd**
Age	26 years or less (39/47.60)	82.97±4.89	23.26±3.07	17.46±2.02	31.56±3.02
	27 years old or more (43/52.40)	82.28±3.58	22.84±2.61	18.56±2.73	30.56±2.68
	Test statistics p value	*t=0.739 p=0.053*	*t=0.669 p=0.717*	*t=-2.050 p=0.148*	*t=1.601 p=0.224*
Gender	Female (71/87.80)	82.71±4.37	23.01±2.84	18.26±2.23	30.96±2.96
	Male (10/12.20)	81.90±3.31	23.20±2.90	16.40±3.50	31.60±2.12
	Test statistics p value	*MW-U=326,0 p=0.629*	*MW-U=314,5 p=0.516*	*MW-U=241,0 p=0.089*	*MW-U=310,5 P=0.480*
Marital Status	Married (40/48.80)	82.43±4.37	22.98±2.69	18.05±2.75	30.80±2.45
	Unmarried (42/51.20)	82.79±4.72	23.10±2.98	18.02±2.19	31.26±3.23
	Test statistics p value	*t=-0.383 p=0.164*	*t=-0.191 p=0.955*	*t=0.048 p=0.507*	*t=-0.727 p=0.282*
Have child	Yes (57/69.5)0	82.61±4.50	23.09±2.89	17.96±2.36	31.12±3.09
	No (25/30.50)	82.60±3.66	22.92±2.72	18.20±2.74	30.84±2.32
	Test statistics p value	*t=-0.014 p=0.280*	*t=0.346 p=0.936*	*t=-0.395 p=0.890*	*t=0.409 p=0.202*
Educational status	Bachelor's degree (58/70.70)	82.29±3.94	22.83±2.72	18.14±2.37	30.93±2.74
	Postgraduate education (24/29.30)	83.38±4.89	23.54±3.06	17.79±2.73	31.29±3.21
	Test statistics p value	*t=-1.052 p=0.247*	*t=-1.042 p=0.467*	*t=0.576 p=0.646*	*t=-0.515 p=0.441*

Working years as a nurse	4 years or less (40/48.80)	82.85±4.38	23.13±2.46	17.65±2.14	31.30±2.97
	5 years or more (42/51.20)	82.38±4.14	22.95±3.16	18.40±2.71	30.79±2.78
	Test statistics p value	*t=0.498 p=0.887*	***t=0.275 p=0.043***	*t=0.810 p=0.275*	*t=0.810 p=0.824*
Working years as a pediatric nurse	3 years or less (40/48.80)	83.50±4.15	23.53±2.48	17.98±1.98	31.38±2.50
	4 years or more (42/51.20)	81.76±4.20	22.57±3.08	18.10±2.88	30.71±3.18
	Test statistics p value	*t=1.884 p=0.525*	*t=1.540 p=0.087*	*t=-0.219 p=0.063*	*t=1.043 p=0.075*
Working areas in paediatric patient	Emergency or intensive care (39/48.00)	81.44±4.25	22.69±2.52	18.05±2.66	30.64±3.33
	Paediatric patient clinics (43/52.00)	83.67±3.99	23.35±3.08	18.02±2.31	31.40±2.36
	Test statistics p value	*t=-2.460 p=0.460*	*t=-1.051 p=0.421*	*t=0.051 p=0.530*	***t=-1.192 p=0.014***
Perception of their own competence regarding autism spectrum disorder					
I have sufficient knowledge about autism spectrum disorder.	Yes (29/35.40)	82.79±4.14	23.14±2.77	18.48±2.63	31.21±2.90
	No (53/64.60)	82.51±4.33	22.98±2.88	17.79±2.36	30.94±2.88
	Test statistics p value	*t=0.288 p=0.684*	*t=0.239 p=0.884*	*t=1.215 p=0.502*	*t=0.396 p=0.975*
Experience about caring for a child diagnosed with autism spectrum disorder					
Have an experience	Yes (38/46.30)	82.87±3.99	23.05±3.08	17.79±2.45	31.55±2.20
	No (44/53.70)	82.39±4.48	23.02±2.62	18.25±2.49	30.59±3.30
	Test statistics p value	*t=0.511 p=0.543*	*t=0.047 p=0.263*	*t=-0.841 p=0.983*	***t=1.526 p=0.026***
TSIS: Tromso Social Intelligence Scale					

Table 3. Comparison of paediatric nurses' sociodemographic and occupational characteristics with the scores of KCAHW (n=82).

Variable (n/%)		**Total Score x̄±sd**	**Sub-Dimension**			
			Domain 1: Information on social interaction x̄±sd	**Domain 2: Impairment in communication and language development x̄±sd**	**Domain 3: Obsessive and repetitive behavioural pattern x̄±sd**	**Domain 4: Type of autism disorder and associated co-morbidity x̄±sd**
Age	26 years or less (39/47.60)	13.18±2.32	6.51±1.20	0.79±0.41	2.92±0.81	2.95±1.07
	27 years old or more (43/52.40)	12.93±2.47	6.58±1.37	0.79±0.42	2.74±0.90	2.81±1.22
	Test statistics p value	*t=0.470 p=0.694*	*t=-0.241 p=0.368*	*t=0.046 p=0.927*	*t=0.942 p=0.104*	*t=0.528 p=0.425*
Gender	Female (71/87.80)	12.96±2.43	6.51±1.30	0.81±0.40	2.79±0.87	2.85±1.19
	Male (10/12.20)	13.70±2.00	6.80±1.14	0.70±0.48	3.10±0.74	3.10±0.74
	Test statistics p value	*MW-U=309,5 p=0.470*	*MW-U=319,0 p=0.549*	*MW-U=322,0 p=0.443*	*MW-U=292,0 P=0.306*	*MW-U=310,0 p=0.460*

Marital Status	Married (40/48.80)	12.83±2.20	6.45±1.34	0.78±0.42	2.68±0.89	2.93±1.12
	Unmarried (42/51.20)	13.26±2.57	6.64±1.23	0.81±0.40	2.98±1.19	2.83±1.19
	Test statistics p value	*t=-0.827 p=0.659*	*t=-0.681 p=0.509*	*t=-0.381 p=0.448*	*t=-1.605 p=0.508*	*t=0.359 p=0.431*
Have child	Yes (57/69.50)	13.11±2.45	6.54±1.28	0.81±0.40	2.89±0.82	2.86±1.08
	No (25/30.50)	12.92±2.27	6.56±1.29	0.76±0.44	2.68±0.95	2.92±1.32
	Test statistics p value	*t=0.322 p=0.665*	*t=-0.052 p=0.742*	*t=0.478 p=0.356*	*t=1.044 p=0.224*	*t=-0.218 p=0.383*
Educational status	Bachelor's degree (58/70.70)	12.79±2.38	6.41±1.28	0.76±0.43	2.76±0.90	2.86±1.16
	Postgraduate education (24/29.30)	13.67±2.33	6.88±1.23	0.88±0.34	3.00±0.72	2.92±1.13
	Test statistics p value	*MW-U=518,5 p=0.068*	*t=-1.498 p=0.787*	*MW-U=615,0 p=0.240*	***t=-1.275 p=0.045***	*t=-0.195 p=0.980*
Working years as a nurse	4 years or less (40/48.80)	12.95±2.49	6.43±1.36	0.80±0.41	2.88±0.91	2.85±1.03
	5 years or more (42/51.20)	13.14±2.31	6.67±1.20	0.79±0.42	2.79±0.81	2.90±1.27
	Test statistics p value	*t=-0.364 p=0.300*	*t=-0.854 p=0.290*	*t=0.158 p=0.753*	*t=0.469 p=0.581*	*t=-0.215 p=0.411*
Working years as a paediatric nurse	3 years or less (40/48.80)	13.38±2.38	6.65±1.27	0.83±0.38	3.00±0.82	2.90±1.17
	4 years or more (42/51.20)	12.74±2.38	6.45±1.29	0.76±0.43	2.67±0.87	2.86±1.13
	Test statistics p value	*t=1.211 p=0.811*	*t=0.698 p=0.885*	*t=0.698 p=0.163*	*t=1.782 p=0.248*	*t=0.168 p=0.737*
Working areas in paediatric patient	Emergency or intensive care (39/48.00)	13.26±2.56	6.77±1.20	0.79±0.41	2.87±0.86	2.82±1.14
	Pediatric patient clinics (43/52.00)	12.86±2.52	6.55±1.33	0.79±0.41	2.79±0.86	2.93±1.16
	Test statistics p value	*t=0.748 p=0.359*	*t=1.499 p=0.593*	*t=0.046 p=0.927*	*t=0.425 p=0.948*	*t=-0.430 p=0.469*
Perception of their own competence regarding autism spectrum disorder						
I have sufficient knowledge about autism	Yes (29/35.40)	13.31±2.41	6.69±1.28	0.79±0.41	3.10±0.86	2.72±0.92
	No (53/64.60)	12.91±2.39	6.47±1.28	0.79±0.41	2.68±0.83	2.96±1.26

spectrum disorder.	Test statistics p value	*t=0.732 p=0.785*	*t=0.736 p=0.982*	*t=0.007 p=0.989*	*t=2.190 p=0.934*	*t=-0.897 p=0.147*
Experience about caring for a child diagnosed with autism spectrum disorder						
Have a experience	Yes (38/46.30)	13.21±2.09	6.55±1.18	0.84±0.37	2.86±0.84	2.98±0.98
	No (44/53.70)	12.91±2.63	6.55±1.37	0.75±0.44	2.80±0.88	2.82±1.28
	Test statistics p value	*t=0.568 p=0.238*	*t=0.025 p=0.277*	***t=1.020 p=0.039***	*t=0.382 p=0.266*	*t=0.506 p=0.093*
KCAHW: Knowledge about Childhood Autism among Health Workers Questionnaire						

The study found no correlation between the participant's age, number of children, years working as a nurse, years working as a paediatric nurse, mean TEIQue-SF and TSIS scores, and KCAHW total scores (Table 4).

Table 4. Correlation between pediatric nurses' age, number of children, working years as a nurse, working years as a paediatric nurse, total score of TEIQue-SF, total score of TSIS and total score of KCAHW (n=82).

Variables	KCAHW	
	r	p
Age	-0.030	0.788
Number of children	0.044	0.692
Working years as a nurse	-0.078	0.487
Working years as a paediatric nurse	-0.091	0.415
TEIQue-SF	-0.167	0.134
TSIS	0.154	0.167

DISCUSSION

Children are considered as priority, privileged, and at-risk individuals in the provision of health services at every moment of their lives. In this context, paediatric nurses are health professionals with essential roles and responsibilities in protecting and developing children's health. Aware of their professional roles and responsibilities, pediatric nurses are also involved in the early diagnosis, care, treatment, and rehabilitation of conditions that affect the child's neurodevelopmental process, including ASD [13, 21].

Autism spectrum disorder (ASD) is a neurodevelopmental disorder that begins in early childhood and can cause problems associated with a wide range of symptoms and skill levels [7]. ASD presents various signs and symptoms, such as interaction problems, communication problems, and stereotyped movement patterns [21]. It is emphasized in the literature that early diagnosis of ASD positively affects the child's growth, development, and adaptation processes. Furthermore, early intervention programs for ASD, diagnostic and treatment protocols that are planned according to the child and family's needs, and long-term approaches, such as multidisciplinary team understanding, etc., are essential in managing the process [1, 6, 7].

The literature has reported that nurses and other health professionals should take an active role in developmental surveillance, developmental screening, early diagnosis, and screening, depending on the nature of the symptoms and signs of ASD that may occur within the first year of life [7]. Many studies have been conducted to determine the current status of health professionals, including nurses, regarding ASD [21, 22]. In a study conducted with nurses on ASD, it was reported that 95.2% of nurses found the information given on ASD in undergraduate education to be inadequate. In the same study, the majority of nurses (88.1%) reported that they did not care for children

diagnosed with ASD in their professional practice and that there was no protocol (97.6%) in their wards to monitor the red alert lines related to ASD [21]. A study of pediatricians found that while the rate of correct answers to questions about the primary symptoms of autism (e.g., language and communication problems, social interaction, repetitive symptoms, and restricted areas of interest) was high, questions about neurodevelopmental disorders (causes of the condition or comorbidities) were mainly answered incorrectly [4]. In a study of primary care physicians, 34.4% of participants reported that they followed patients with autism, and 35.1% reported that they considered themselves experts [1]. Also, in one study found that nurses' mean level of knowledge about ASD was 12.29±3.19 [5]. In our study, this score was relatively high.

The literature suggests that nurses and other health professionals can use many professional roles to approach children with ASD and their families, such as observation, listening, and counseling [21]. In the literature, attempts have been made to identify the characteristics that may influence ASD awareness (age, education level, experience, profession of the health professional, etc.) [3, 5]. We assumed that this enduring social and emotional intelligence can also affect it. Being aware of the existence of emotional intelligence, being able to cope with temperatures, motivating oneself, empathising and managing relationships is a broad dimension that covers all of them. It includes generally positive characteristics such as "contentment" [23, 24]. In terms of social intelligence, individuals can understand the freedoms among themselves, their emotions, and changes and support them positively from a human perspective [10]. It is also essential that paediatric nurses and other health professionals who provide care services to children with ASD and their families must support children and families in different areas (such as social, psychological, diagnostic, and treatment) in the context of their professional roles and responsibilities [25-27]. In this context, the planning, implementation and evaluation phases may be influenced by the social and emotional intelligence of healthcare professionals. Although different studies have been conducted on emotional intelligence, social intelligence, and autism spectrum disorder specific to nursing [28-30], no study was found that addressed the emotional and social intelligence of children with autism spectrum disorder. In this context, our study addressed this topic for the first time in our field, and it aimed to determine the relationship between emotional intelligence, social intelligence and autism awareness in paediatric nurses.

It was found that the total score for the TEIQue-SF was 101.78 ± 14.71, for the TSIS it was 82.61 ± 4.24, and for the KCAHW it was 14.71 ± 4.24. The study revealed that the total and sub-dimension TEIQue-SF score was influenced by factors such as gender, education status, and Perception of competence regarding autism spectrum disorder ($p<0.05$). Worked years as a nurse, working areas with paediatric patients, and experience caring for a child diagnosed with autism spectrum disorder affected scale sub-dimension scores of TSIS. KCAHW sub-dimension was influenced by education status, and caring for a child diagnosed with autism spectrum disorder affected sub-dimension scores. ($p<0.05$). The study found no correlation between the participant's age, number of children, years working as a nurse, years working as a paediatric nurse, mean TEIQue-SF and TSIS scores, and KCAHW total scores. Even though the information obtained is supported by some study findings, it is a leader in the field because it is the first study on emotional intelligence, social intelligence, and nursing.

CONCLUSION

The study determined that different variables affected paediatric nurses' emotional intelligence, social intelligence, and autism awareness levels. In this context, the findings obtained on the subject are of great

importance for the field of study and emphasize the need for further research.

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