Evaluation of the Wellness of Children's and Affecting Factors during the COVID-19 Pandemic Process

COVİD-19 Pandemi Sürecinde Çocukların İyi Olma Hallerinin ve Etkileyen Faktörlerin Değerlendirilmesi

Dilek DEMİR KÖSEM[1], Murat BEKTAŞ[2]

[1]Department of Nursing, Faculty of Health Sciences, Hakkari University, Hakkari, Turkey
[2] Department of Nursing, Faculty of Nursing, Dokuz Eylul University, Inciraltı, Izmir, Turkey

ABSTRACT

Objective: This study was carried out to assess the well-being of children and adolescents under lockdown conditions during the COVID-19 pandemic and the factors affecting it.

Material and Methods: This descriptive and cross-sectional study was conducted with 282 parents of children aged between 3-14. "Socio-Demographic Data Collection Form" and "The Well-Being of Children in Lockdown Scale (WCLS)" were used in data collection. Descriptive statistics and multiple regression analysis were used to analyze the data.

Results: The majority of participants' (97.9%, n=276) total scores on the Well-being of Children in Lockdown Scale ranged between 45 and 66, and the level of their well-being was moderate. It was found that eleven variables explained 8.7% of the variance in the total score of the Well-being of Children in Lockdown Scale (R^2=0.087, p=0.009). The variables that had a significant effect on the scores of the sub-dimensions of the scale were the age of the mother (p=0.006), the financial status of the family (p=0.004) and the number of children (p=0.010) in the physical activity sub-dimension; the status of going to school (p<0.001), financial status of family (p=0.001) and the child's age (p=0.001) in the addiction sub-dimension; the age of the mother (p=0.004), the age of the father (p<0.001) and father's employment status (p=0.003) in the emotions sub-dimension; the child's age (p=0.048), the age of the father (p=0.046) and father's employment status (p=0.010) in the fun and creative activities sub-dimension.

Conclusion: In this study, the well-being level of children and adolescents was determined to be moderate. It is recommended to plan studies on other variables that can predict children and adolescents' well-being and to make timely interventions necessary for them.

Key Words: Child, COVID-19, Health, Lockdown, Well-being

ÖZ

Amaç: Bu çalışma, COVİD-19 pandemi sürecinde kapanma koşulları altında olan çocuk ve ergenlerin iyi olma hallerinin ve etkileyen faktörlerin değerlendirilmesi amacıyla gerçekleştirilmiştir.

Gereç ve Yöntemler: Bu tanımlayıcı ve kesitsel tipte çalışma, 3-14 yaş aralığında çocukları bulunan 282 ebeveyn ile yürütülmüştür. Veri toplamada "Sosyo-Demografik Veri Toplama Formu" ve "Kapanma Koşulları Altında Çocukların İyi Olma Halini Değerlendirme Ölçeği" kullanılmıştır. Verilerin analizinde tanımlayıcı istatistikler ve çoklu regresyon analizi kullanılmıştır.

Bulgular: Katılımcıların kapanma koşulları altında olan çocuk ve ergenlerin iyi olma halini değerlendirme ölçek toplamından aldıkları puan değerlendirildiğinde %97.9'nun (n=276) 45-66 arasında bir puan aldığı ve çocuk ve ergenlerin iyi olma

0000-0001-9914-8299 : DEMİR KÖSEM D
0000-0003-3327-8204 : BEKTAŞ M

Conflict of Interest / *Çıkar Çatışması*: On behalf of all authors, the corresponding author states that there is no conflict of interest.

Ethics Committee Approval / *Etik Kurul Onayı*: This study was conducted in accordance with the Helsinki Declaration Principles. Approval was obtained from Hakkari University Scientific Research and Publication Ethics Committee (Date: 09/11/2022, Decision No: 2022/96-1) for data collection.

Contribution of the Authors / Yazarların katkısı*: DEMİR KÖSEM D:** Constructing the hypothesis or idea of research and/or article, Planning methodology to reach the conclusions, Organizing, supervising the course of progress and taking the responsibility of the research/study, Taking responsibility in patient follow-up, collection of relevant biological materials, data management and reporting, execution of the experiments, Taking responsibility in logical interpretation and conclusion of the results, Taking responsibility in necessary literature review for the study, Taking responsibility in the writing of the whole or important parts of the study, Reviewing the article before submission scientifically besides spelling and grammar. ***BEKTAŞ: Constructing the hypothesis or idea of research and/or article, Planning methodology to reach the conclusions, Organizing, supervising the course of progress and taking the responsibility of the research/study, Taking responsibility in patient follow-up, collection of relevant biological materials, data management and reporting, execution of the experiments, Taking responsibility in logical interpretation and conclusion of the results, Taking responsibility in the writing of the whole or important parts of the study, Reviewing the article before submission scientifically besides spelling and grammar.

How to cite / *Atıf yazım şekli* : Demir Kösem D and Bektaş M. Evaluation of the Wellness of Children and Adolescents and Affecting Factors during the COVID-19 Pandemic Process. Turkish J Pediatr Dis 202X;

Correspondence Address / Yazışma Adresi:
Dilek DEMİR KÖSEM
Department of Nursing,
Hakkari University Faculty of Health Sciences,
Hakkari, Turkey
E-posta: dilekdemir624@gmail.com

Received / Geliş tarihi : 03.05.2024
Accepted / Kabul tarihi : 23.07.2024
Online published : 20.09.2024
Elektronik yayın tarihi
DOI: 10.12956/tchd.1478138

hallerinin orta düzeyde olduğu belirlenmiştir. On bir değişkenin kapanma koşulları altında çocukların iyi olma halini değerlendirme ölçeği toplam puanına ait değişimi %8.7 oranında açıkladığı görülmüştür (R^2=0.087, p=0.009). Ölçeğin alt boyutlarından alınan puanları yordayan değişkenler fiziksel aktivite alt boyutunda anne yaşı (p=0.006), ailenin maddi durumu (p=0,004) ve çocuk sayısı (p=0.010); bağımlılık alt boyutunda okula gitme durumu (p<0.001), ailenin maddi durumu (p=0.001) ve çocuğun yaşı (p=0.001); duygular alt boyutunda anne yaşı (p=0.004), baba yaşı (p<0.001) ve babanın çalışma durumu (p=0.003); eğlenceli ve yaratıcı aktiviteler alt boyutunda çocuğun yaşı (p=0.048), babanın yaşı (p=0.046) ve babanın çalışma durumu (p=0.010) olarak belirlendi.

Sonuç: Bu çalışmada, çocuk ve ergenlerin iyi olma hallerinin orta düzeyde olduğu bulunmuştur. Bu sonuçlar doğrultusunda çocuk ve ergenlerin iyi olma hallerini yordayabilecek diğer değişkenlere yönelik çalışmalar planlanması ve çocuk ve ergenlere yönelik gerekli müdahalelerinin zamanında yapılması önerilmektedir.

Anahtar Sözcükler: Çocuk, COVİD-19, Sağlık ,Kapanma, İyi Olma Hali

INTRODUCTION

The quarantine imposed to control the COVID-19 pandemic has greatly affected the lives of children and adolescents (1). The closure of schools, where children and adolescents spend a considerable amount of time, and the increase in time spent at home led to significant changes in their lives (1,2). Their daily routines changed drastically, and they had more free time. However, lockdowns and fear of contracting the virus forced children to spend most of their time at home (2,3). The isolation of children and adolescents in their homes adversely affected their physical, emotional, social, and academic well-being and caused significant deterioration in their quality of life (1-3). From a holistic perspective, well-being has been defined as a multidimensional structure that includes mental/psychological, physical, and social aspects (3,4). The World Health Organization defines health as a multidimensional state of physical, mental, and social well-being and draws attention to well-being (5). In fact, the concept of well-being focuses on healthy lifestyle behaviors (6-8).

The COVID-19 pandemic has caused significant deterioration in the healthy lifestyle behaviors and well-being (in terms of physical, emotional, social, and academic aspects) of children and adolescents (1,2). From a physical point of view, some studies indicated that the confinement of children and adolescents at home caused unhealthy diet, weight gain, decrease in physical activity, increase in sedentary behavior, deterioration in sleep patterns, and inadequate exposure to sunlight (9-13). In studies conducted from an emotional and psychological point of view, it was determined that lockdowns caused negative emotional states, such as fear, anxiety, and unhappiness among children and adolescents (10-12). From a social and academic perspective, children and adolescents were prevented from going to school due to lockdown and social distancing measures (2,10,11). For this reason, their social interactions were limited and they were deprived of opportunities to socialize with their peers and play games (10,11).

There are cross-sectional studies in the literature on the assessment of the physical, emotional, social, and academic well-being of children and adolescents under lockdown conditions during the COVID-19 pandemic, but there are very few studies on the evaluation of these dimensions from a holistic perspective (9,11,13).

This study was carried out to evaluate the well-being of children and adolescents under lockdown conditions during the COVID-19 pandemic and the factors affecting it and to contribute to the literature on this topic.

MATERIALS and METHODS

Study Design and Participants

A descriptive and cross-sectional study design was used. The study was carried out with parents who had children aged 3-14 years and lived in the western and eastern provinces of Turkey between November and December 2022. The sample size was calculated as 118 parents by doing a regression analysis on G*Power 3.0 statistics software, based on a Type I error of 0.05, a Type II error of 0.20 (80% power), and a medium effect size. In case the parametric test assumptions were not met, the sample size was increased by 10% and the study was planned to include 130 parents. However, all parents who voluntarily agreed to participate in the study during the data collection phase were included in the study. The convenience sample method was used to recruit samples from the research population. In the study, the data were collected online via a questionnaire created on Google Forms by sharing the link to the form on the social media of the researchers (Twitter, Facebook, Instagram, WhatsApp, or e-mail). In addition, the parents participating in the study were asked to send the link to the data collection form to their acquaintances that had children aged 3-14. The inclusion criteria of the study were volunteering to participate in the research, having Turkish reading and writing skills, and having children aged 3-14 years. In this process, the number of parents who accepted to participate in the research and completed the online questionnaire was 282. Parents were requested to complete the scale questions by considering the period of the pandemic and the effects of the children during that period. Furthermore, as the lockdown concluded during this period and the effects of the lockdown persisted, the scale was employed to ascertain the impact of events that transpired during that period on the children. Before the study was initiated, approval of the Scientific Research and Publication

Ethics Committee of a university (Date: 09/11/2022, Decision No: 2022/96-1) and the permission of the owner of the scale used in the study were obtained. The study was carried out in accordance with the principles of the Declaration of Helsinki, information about the research and data collection tools was provided on the first page of the online data collection form, and consent of the parents of the children was obtained through an informed consent form.

Data Collection Tools

Demographics form was planned to be filled out by the parents. It consists of a total of 12 questions about the child's age, gender, status of going to school, mother's and father's age, education, job, and financial status, number of children, and the person filling out the questionnaire. The Well-Being of Children in Lockdown Scale (WCLS) was developed by Berasategi et al. (14) to assess the well-being of children under lockdown conditions. It consists of 22 items and all of the items are in a four-point likert type. The factor loading values ranged from 0.701 to 0.825. Cronbach's alpha was determined as 0.80 for the total scale. Scores on the scale range between 22 and 88, and as the score obtained from the scale increases, the well-being of children increases, as well. Scores are interpreted as follows: 0-22, a very low level of well-being; 23-44, a low level of well-being; 45-66, moderate well-being; 67-88, a high level of well-being (14). The Turkish validity and reliability study of the scale was performed by Demir et al. (15). Cronbach's alpha of the scale was found to be 0.89. Factor loads ranged between 0.42 and 0.95, and the scale explained 61.02% of the total variance. The scale was found to be valid and reliable for the Turkish sample (15).

Statistical Analysis

The study data were analyzed with IBM Statistical Package for the Social Sciences, version 24.0 (SPSS Inc., Armonk, NY, IBM Corp., USA). Data were evaluated using descriptive statistics (mean, standard deviation, minimum, maximum, frequency, and percentage). The normality of the data was evaluated with the Skewness-Kurtsosis tests. The predictive power of independent variables on the mean scores of the WCLS and its sub-dimensions was evaluated with multiple regression analysis. The existence of multicollinearity was examined with Variance Inflation Factor (VIF) and tolerance values in the regression analysis. The statistical significance was taken as $p<0.050$.

RESULTS

The mean age was 37.06±5.50 years for mothers, 39.30±6.22 years for fathers, and 9.21±3.68 years for children. The mean number of children was 1.64±0.73 (min=1 and max=4), 59.9% (n=169) were girls, and 40.1% (n=113) were boys. Of the children, 46.5% (n=131) were high school students, 30.1% (n=85) were primary and secondary school students, 18.4% (n=52) were kindergarten students, and 5.0% (n=14) did not go to school. Also, 67.1% (n=189) of the mothers and 71.9% (n=203) of the fathers were university graduates, 72.3% of the mothers (n=204) and 94.3% of the fathers (n=266) had a job. Regarding the financial status, 60.6% (n=171) of the parents had equal income and expenses and 10.3% (n=29) had less income than their expenses (Table I).

Table I: Descriptive characteristics of the participants

Sociodemographic characteristics	
Children's age*	9.21±3.68 (3-14)
Mother's age	37.06±5.50 (22-61)
Father's age	39.30±6.22 (25-63)
Number of children	1.64±0.73 (1-4)
Children's gender†	
Female	169 (59.9)
Male	113 (40.1)
Children's school attendance†	
Not going to school	14 (5.0)
Pre school	52 (18.4)
Primary and middle school	85 (30.1)
High school	131 (46.5)
Mother's education level†	
Illitarete	4 (1.4)
Primary and secondary education	17 (6.1)
High school	72 (25.5)
University	189 (67.1)
Father's education level†	
Illitarete	4 (1.4)
Primary and secondary education	11 (3.9)
High school	64 (22.7)
University	203 (71.9)
Mother's employment status†	
Working	204 (72.3)
Not working	78 (27.7)
Father's employment status†	
Working	266 (94.3)
Not working	16 (5.7)
Economical situation†	
Income equals expenses	171 (60.6)
Income is higher than expenses	82 (29.1)
Income is less than expenses	29 (10.3)

***:** *mean±SD (Min-Max),* **†:** *n(%),* ***SD:** Standard Deviation, **Min.-Max:** Minimum and Maximum Values*

When the scores of the participants on the total WCLS were evaluated, it was found that the scores of 97.9% (n=276) were between 45 and 66, 1.4% (n=4) between 67 and 88, and 0.7% (n=2) between 23 and 44. Accordingly, it was found that the well-being of children and adolescents under lockdown conditions was moderate.

The multiple regression analysis conducted to evaluate the co-effect of eleven independent variables. The result of the analysis indicated that all variables explained 8.7% of the variance in the total WCLS score (R^2=0.087, p=0.009). The decline in the child's age (β=-0.178) and status of going to school (β=-0.198) had a positive impact on the overall WCLS score (Table II). All variables explained 9.1% of the variance in the physical

Table II: The effect of independent variables on the Well-Being of Children in Lockdown Scale and its sub-dimensions: results of the multiple regression analysis (n=282)

Dependent variable	Independent variables	Beta	Standard Error	β	t	p	95% Confidence interval Lower limit	Upper limit	Model statistics
WCLS (Total)	Constant	58.082	2.569		22.610	<0.001	53.024	63.140	r=0.295 r^2=0.087 F=2.348 p=0.009 DW=1.831
	Child's age	-0.169	0.075	-0.178	-2.260	0.025	-0.316	-0.022	
	Gender	0.201	0.420	0.028	0.477	0.634	-0.627	1.028	
	Status of going to school	-0.538	0.178	-0.198	-3.024	0.003	-0.888	-0.188	
	Number of children	0.350	0.323	0.074	1.083	0.280	-0.286	0.985	
	Mother's age	0.051	0.083	0.081	0.616	0.538	-0.112	0.215	
	Mother's Level of education	0.212	0.359	0.056	0.591	0.555	-0.494	0.918	
	Mother's Employment status	-0.623	0.525	-0.086	-1.187	0.236	-1.658	0.411	
	Father's age	-0.008	0.076	-0.014	-0.102	0.919	-0.157	0.142	
	Father's Level of education	-0.162	0.339	-0.041	-0.478	0.633	-0.830	0.506	
	Father's Employment status	-0.869	1.051	-0.058	-0.827	0.409	-2.938	1.200	
	Financial status of the family	0.162	0.398	0.028	0.406	0.685	-0.623	0.946	
Academic	Constant	8.763	0.765		11.456	<0.001	7.257	10.269	r=0.180 r^2=0.032 F= 0.822 p=0.618 DW=1.856
	Child's age	0.008	0.022	0.030	0.372	0.710	-0.035	0.052	
	Gender	0.067	0.125	0.032	0.532	0.595	-0.180	0.313	
	Status of going to school	0.025	0.053	0.032	0.471	0.638	-0.079	0.129	
	Number of children	-0.011	0.096	-0.008	-0.119	0.906	-0.201	0.178	
	Mother's age	-0.024	0.025	-0.128	-0.951	0.342	-0.072	0.025	
	Mother's Level of education	0.054	0.107	0.050	0.509	0.611	-0.156	0.265	
	Mother's Employment status	-0.107	0.156	-0.051	-0.683	0.495	-0.415	0.201	
	Father's age	0.010	0.023	0.063	0.449	0.654	-0.034	0.055	
	Father's Level of education	-0.051	0.101	-0.045	-0.504	0.615	-0.250	0.148	
	Father's Employment status	0.130.	0.313	0.024	0.331	0.741	-0.513	0.720	
	Financial status of the family	0.270	0.119	0.161	2.280	0.023	0.037	0.504	
Physical activity	Constant	5.937	0.528		11.233	<0.001	4.896	6.977	r=0.301 r^2=0.091 F= 2.454 p=0.006 DW=2.081
	Child's age	-0.018	0.015	-0.093	-1.185	0.237	-0.048	0.012	
	Gender	0.010	0.086	0.007	0.117	0.907	-0.160	0.180	
	Status of going to school	-0.051	0.037	-0.090	-1.381	0.168	-0.123	0.022	
	Number of children	-0.173	0.066	-0.178	-2.604	0.010	-0.304	-0.042	
	Mother's age	0.047	0.017	0.362	2.768	0.006	0.014	0.081	
	Mother's Level of education	-0.072	0.074	-0.093	-0.979	0.329	-0.217	0.073	
	Mother's Employment status	-0.113	0.108	-0.076	-1.050	0.295	-0.326	0.099	
	Father's age	-0.021	0.016	-0.185	-1.366	0.173	-0.052	0.009	
	Father's Level of education	-0.063	0.070	-0.078	-0.908	0.365	-0.201	0.074	
	Father's Employment status	0.079	0.216	0.026	0.367	0.714	-0.346	0.505	
	Financial status of the family	0.236	0.082	0.197	2.885	0.004	0.075	0.398	
Addiction	Constant	5.515	1.397		3.949	<0.001	2.765	8.265	r=0.428 r^2=0.184 F= 5.517 p<0.001 DW=1.381
	Child's age	-0.143	0.041	-0.263	-3.520	0.001	-0.223	-0.063	
	Gender	0.258	0.229	0.063	1.128	0.260	-0.192	0.708	
	Status of going to school	-0.358	0.097	-0.229	-3.698	<0.001	-0.548	-0.167	
	Number of children	0.338	0.176	0.124	1.925	0.055	-0.008	0.683	
	Mother's age	-0.020	0.045	-0.056	-0.448	0.654	-0.109	0.069	
	Level of education	0.350	0.195	0.161	1.797	0.073	-0.034	0.734	
	Employment status	-0.344	0.286	-0.083	-1.206	0.229	-0.907	0.218	
	Father's age	0.085	0.041	0.265	2.067	0.040	0.004	0.167	
	Level of education	0.005	0.185	0.002	0.025	0.980	-0.359	0.368	
	Employment status	-0.193	0.571	-0.022	-0.338	0.736	-1.318	0.932	
	Financial status of the family	-0.716	0.217	-0.214	-3.306	0.001	-1.143	-0.290	
Emotions	Constant	14.789	0.892		16.576	<0.001	13.033	16.546	r=0.384 r^2=0.148 F= 4.254
	Child's age	0.010	0.026	0.031	0.404	0.686	-0.041	0.062	
	Gender	-0.205	0.146	-0.080	-1.405	0.161	-0.493	0.082	
	Status of going to school	-0.113	0.062	-0.116	-1.827	0.069	-0.235	0.009	
	Number of children	0.214	0.112	0.126	1.908	0.057	-0.007	0.435	
	Mother's age	0.083	0.029	0.365	2.883	0.004	0.026	0.140	
	Mother's Level of education	-0.151	0.125	-0.111	-1.209	0.228	-0.396	0.095	
	Mother's Employment status	-0.055	0.182	-0.021	-0.304	0.761	-0.415	0.304	

Dependent variable	Independent variables	Beta	Standard Error	β	t	p	95% Confidence interval Lower limit	Upper limit	Model statistics
Emotions	Father's age	-0.101	0.026	-0.502	-3.825	<0.001	-0.153	-0.049	p<0.001 DW=1.577
	Father's Level of education	-0.184	0.118	-0.130	-1.565	0.119	-0.417	0.048	
	Father's Employment status	-1.110	0.365	-0.205	-3.042	0.003	-1.829	-0.392	
	Financial status of the family	0.134	0.138	0.064	0.971	0.332	-0.138	0.407	
Playful and creative activities	Constant	10.627	0.696		15.273	<0.001	9.257	11.997	r=0.337 r^2=0.114 F= 3.145 p=0.001 DW=1.858
	Child's age	-0.040	0.020	-0.154	-1.986	0.048	-0.080	0.000	
	Gender	0.012	0.114	0.006	0.110	0.913	-0.212	0.237	
	Status of going to school	-0.072	0.048	-0.097	-1.499	0.135	-0.167	0.023	
	Number of children	-0.040	0.087	-0.031	-0.459	0.647	-0.212	0.132	
	Mother's age	-0.024	0.023	-0.140	-1.085	0.279	-0.069	0.020	
	Mother's Level of education	0.002	0.097	0.002	0.020	0.984	-0.189	0.193	
	Mother's Employment status	0.228	0.142	0.115	1.599	0.111	-0.053	0.508	
	Father's age	0.041	0.021	0.268	2.003	0.046	0.001	0.082	
	Father's Level of education	0.002	0.092	0.002	0.027	0.978	-0.178	0.183	
	Father's Employment status	0.743	0.285	0.180	2.608	0.010	0.182	1.303	
	Financial status of the family	0.179	0.108	0.112	1.654	0.099	-0.034	0.391	
Routine	Constant	12.451	0.614		20.263	<0.001	11.241	13.660	r=0.247 r^2=0.061 F= 1.596 p=0.100 DW=1.638
	Child's age	0.014	0.018	0.062	0.772	0.441	-0.021	0.049	
	Gender	0.059	0.101	0.035	0.583	0.560	-0.139	0.257	
	Status of going to school	0.030	0.043	0.048	0.715	0.475	-0.053	0.114	
	Number of children	0.022	0.077	0.020	0.289	0.773	-0.130	0.174	
	Mother's age	-0.011	0.020	-0.074	-0.558	0.577	-0.050	0.028	
	Mother's Level of education	0.028	0.086	0.032	0.328	0.743	-0.141	0.197	
	Mother's Employment status	-0.231	0.126	-0.136	-1.837	0.067	-0.478	0.017	
	Father's age	-0.022	0.018	-0.168	-1.222	0.223	-0.058	0.014	
	Father's Level of education	0.130	0.081	0.140	1.597	0.112	-0.030	0.289	
	Father's Employment status	-0.490	0.251	-0.138	-1.951	0.052	-0.985	0.004	
	Financial status of the family	0.058	0.095	0.042	0.608	0.544	-0.130	0.246	

β:*Standardized Beta,* ***t:*** *t-test value,* ***R:*** *Correlation co-efficient,* ***R²:*** *R Square,* ***F:*** *ANOVA Value,* ***DW:*** *Durbin-Watson*

activity sub-dimension score (R^2=0.091, p=0.006). The results indicated that an increase in the mother's age (β=0.362) and the economic status of the family (β=0.197) had a positive effect on the physical activity sub-dimension score, while in the number of children (β=-0.178) had a negative effect (Table II). It was determined that all variables explained 18.4% of the variance in the addiction sub-dimension score of the WCLS (R^2=0.184, p<0.001). A decrease in the child's age (β=-0.263) and their status of going to school (β=-0.229) was found to have a positive effect on the addiction sub-dimension score (Table II). It was determined that all variables explained 14.8% of the variance in the emotions sub-dimension score of the WCLS (R^2=0.148, p<0.001). The increase in the mother's age (β=0.365) and the decrease in the father's age (β=-0.502) and father's employment status (β=-0.205) had a significant positive effect on the emotions sub-dimension score of the WCLS (Table II). All variables explained 11.4% of the variance in the playful and creative activities sub-dimension score (R^2=0.114, p=0.001). The decrease in the child's age (β=-0.154), the increase in the father's age (β=0.268) and father's employment status (β=0.180) had a positive effect on the playful and creative activities sub-dimension score (Table II).

The evaluation of the co-effect of the eleven independent variables on the academic and routine sub-dimension scores of the WCLS with multiple regression analysis indicated that the variables of the child's age, gender, status of going to school, the number of children, parents' age, education level, employment status, and the economic status of the family did not significantly explain the scores (p=0.618 and p=0.100 respectivily) (Table II).

DISCUSSION

The results of the study demonstrated that the majority of participants exhibited moderate levels of scores on the WCLS, with a range of 45 to 66 points. High scores on the total WCLS indicate that the well-being of children under lockdown conditions is at a good level. In accordance with the findings of Berasategi Sancho et al. (16), the well-being of children under lockdown conditions was determined to be moderate. The result of this research is similar to that of our study.

In a study conducted in the literature, it was determined that the well-being of younger children (2-6 years old) under lockdown conditions was higher than other age groups, and that the well-being of girls was higher than boys (16). In our study, it was determined that the child's age and the child's school attendance affected the well-being of children under lockdown

conditions. It has been determined that the decrease in scores in these variables has an effect on increasing the total well-being scores of children and adolescents under confinement conditions. It was found that other variables did not significantly explain the well-being of children and adolescents under lockdown conditions. This study is similar to a study in the literature, especially in terms of age group. It is thought that the reason for the different results may be due to intercultural differences (17-20).

In a study conducted in the literature, it was determined that the well-being assessment scale physical activity sub-dimension score of younger children (2-6 years old) was higher than other age groups, and the well-being assessment scale physical activity sub-dimension score of girls was higher than that of boys (16). In another study, it was found that children with poor economic conditions under lockdown conditions had a decrease in their physical activity levels and an increase in their sedentary behavior, especially that they spent more time in front of the screen (21). It has been determined that girls under lockdown conditions do less physical activity than boys, and children whose parents are working and whose parents have a high level of education do more physical activity, play games, and socialize online (21). In our study, the age of the mother and the economic status of the family positively affect the physical activity sub-dimension score of the well-being assessment scale of children and adolescents under lockdown conditions, while the number of children negatively affects the physical activity sub-dimension score of the well-being assessment scale of children and adolescents under lockdown conditions. This study is similar to a study done in the literature, especially in terms of economic situation. No study could be found in the literature explaining this relationship between the physical activity sub-dimension and the number of children and the age of the mother. The results of this study may be related to the fact that parents tend to provide better care for children as the number of children in the family decreases and the mother gains experience and expertise with age (22,23).

In a study conducted in the literature, it was determined that the addiction sub-scale score of younger children (2-6 years old) was higher than other age groups (16). In our study, the child's age and the child's school attendance negatively affect the addiction subscale score of the well-being assessment scale of children and adolescents under lockdown conditions. Additionally, the addiction sub-dimension includes questions about children's technology use and overeating. This study found that young children frequently use technology and overeat. In the literature determined that the addiction sub-dimension score of younger children (2-6 years old) under lockdown conditions was higher than that of other age groups (16). This research is similar to our study. There is no study in the literature on the comparison of the addiction sub-dimension and the child's status of going to school. Such a result in this study may be related to the use of technology and the control of children's eating by their parents or caregivers at home as the children's status of going to school (not going to school, kindergarten, primary school, middle school, and high school) decreased (19,20,24).

In a study conducted in the literature, it was determined that the emotions sub-scale score of girls was higher than that of boys (16). In our study, the mother's age positively affects the emotions sub-dimension score of the well-being assessment scale of children and adolescents under confinement conditions, while the father's job status and the father's age negatively affect the emotions sub-dimension score of the well-being assessment scale of children and adolescents under confinement conditions. No study could be found in the literature explaining this relationship between the emotions sub-dimension and the mother's age, father's job status and father's age. In this study, as the age of mothers increases, sad, tense and irritable situations increase in children and adolescents under confinement conditions. This may be due to the mother not knowing the techniques to cope with stress. The reason for this may be that the father's lack of knowledge and experience in coping with stress techniques and the father's poor work situation reflect on the family and the child (19,21,25).

In a study conducted in the literature, it was determined that the playful and creative activities subscale score of younger children (2-6 years old) was higher than other age groups (16). Oliveira et al. (21) found that children who were under lockdown conditions and whose economic situation was not good, engaged in less leisure and play activities. The findings of our study indicate that the age of the father and the father's employment status exert a positive influence on the score for the playful and creative activities sub-dimension. Conversely, the child's age exerts a negative influence on this same sub-dimension. In a study conducted in the literature, it was determined that the playful and creative activities scores of children's under lockdown conditions increased as the age of the father and the father's job status increased (16). This study is similar to our research. In the study conducted by Oliveira et al. (21) similar to our study, it was found that the father's employment status may be related with score of the playful and creative activities sub-dimension. In other words, it has been determined that when the father's employment status, – that is, the economic situation – increases, children and adolescents under lockdown conditions are more inclined towards playful and creative activities. It was determined that girls under confinement conditions were more engaged in games and social activities than boys, and children whose parents had a higher level of education did more activities with their parents (21). A review of the literature revealed no studies that have investigated the relationship between playful and creative activities and paternal age. It was established that as paternal age increases, children and adolescents in lockdown conditions can engage in more creative activities, including theatre and music, playing various games, engaging in leisure and play activities with the family.

This may be attributed to the influence of paternal knowledge and experience (19,21).

In a study conducted in the literature, it was determined that the academic sub-dimension score of the well-being assessment scale was higher in children in the middle (7-9 years) and older (10-12 years) age groups who were under lockdown conditions (16). In another study, it was found that children who were under lockdown conditions, whose economic situation was not good, and whose daily routine changed, spent less time sleeping. Again, in this study, it was determined that children whose parents had a higher education level slept more than children whose parents had a lower education level (21). In our study, when the effect of children and adolescents under lockdown conditions on the academic and routine sub-dimensions scores of the well-being assessment scale was evaluated, it was determined that the variables did not explain it significantly. In our study and other similar investigations, the factors that influence the well-being of children and adolescents in isolation conditions vary, and some factors are either absent or have no effect. The differing isolation regulations (either full or partial) and varying cultural norms across countries may contribute to this variability (17-20). More research into this subject is needed to reveal the factors affecting physical activity, addiction, emotions, playful and creative activities, academic, and routine sub-dimensions and the well-being of children and adolescents.

CONCLUSION

It was determined that the well-being of children and adolescents under lockdown conditions was moderate. The variables that had a significant effect on the physical activity, addiction, emotions, and playful and creative activities sub-dimension scores of the WCLS were determined as the child's age, status of going to school, the number of children, the mother's age, the father's age, the father's employment status, and the financial status of the family. The COVID-19 pandemic has affected children, who are in a very critical developmental period, in many ways and seems to continue to affect them in the following periods. Pediatric nurses have a critical importance in detecting the physical, emotional, social and cognitive effects that may occur in children during this process at an early stage and in meeting the care needs of this sensitive group. Pediatric nurses should continue to use their consultancy role effectively during the pandemic process, provide the necessary information to the child and their family, and take more initiatives to improve and protect children's health by being aware of the effects of the pandemic. For this reason, it is recommended to carry out studies with larger samples to reveal the correlation between research variables more clearly and to carry out the necessary interventions and education programs, that is, the relevant support structures that may be needed after the quarantine is lifted, for children and adolescents promptly, by considering how children and adolescents cope with the pandemic. In addition, it is recommended to prepare interventions to protect children's well-being in the home environment and to evaluate applications and activities for future pandemics.

Limitations of the Research

This study has certain limitations. The first limitation may be that the questionnaire is filled only by the parents and the questions are filled in biased and properly. The use of convenience sampling is another limitation. This may affect the generalizability of the research results.

REFERENCES

1. World Health Organization. COVID-19 and children. Copenhagen: WHO Regional Office for Europe. 2021. https://www.euro.who.int/en/health-topics/Life-stages/child-and-adolescent-health/covid-19-and-children. Accessed February 2, 2023.
2. Jiao WY, Wang LN, Liu J, Fang SF, Jiao FY, Pettoello-Mantovani M, et al. Behavioral and emotional disorders in children during the COVID-19 Epidemic. J Pediatr 2020;221:264-6.e1.
3. Dodge R, Daly A, Huyton J, Sanders L.The challenge of defining wellbeing. Int J Wellbeing 2012;2: 222-35.
4. Miller GD, Foster LT. Critical synthesis of wellness literature. 2010. http://www.geog.uvic.ca/wellness/Critical_Synthesis%20of%20Wellness%20Update.pdf. Accessed January 15, 2023.
5. World Health Organization. Health and well-being. 2022. https://www.who.int/data/gho/data/major-themes/health-and-well-being. Accessed March 3, 2023.
6. Rachele JN, Washington TL, Cuddihy TF, Barwais FA, McPhail SM. Valid and reliable assessment of wellness among adolescents: Do you know what you're measuring? Int J Wellbeing 2013;3:162-72.
7. Loef M, Walach H. The combined effects of healthy lifestyle behaviors on all cause mortality: A systematic review and meta-Analysis. Prev Med 2012;55:163-70.
8. Ng R, Sutradhar R, Yao Z, Wodchis WP, Rosella LC. Smoking, drinking, diet and physical activity-modifiable lifestyle risk factors and their associations with age to first chronic disease. Int J Epidemiol 2020;49:113-30.
9. Dunton GF, Do B, Wang SD. Early effects of the COVID-19 pandemic on physical activity and sedentary behavior in children living in the U.S. BMC Public Health 2020;20:1351.
10. Panchal U, Salazar de Pablo G, Franco M, Moreno C, Parellada M, Arango C, et al. The impact of COVID-19 lockdown on child and adolescent mental health: Systematic review. Eur Child Adolesc Psychiatry 2023;32:1151-77.
11. Malik S, Mihm B, von Suchodoletz A. COVID-19 lockdowns and children's health and well-being. J Econ Psychol 2022;93:102549.
12. Nogueira-de-Almeida CA, Del Ciampo LA, Ferraz IS, Del Ciampo IRL, Contini AA, Ued FDV. COVID-19 and obesity in childhood and adolescence: A clinical review. J Pediatr 2020;96:546-58.
13. Pietrobelli A, Pecoraro L, Ferruzzi A, Heo M, Faith M, Zoller T, et al. Effects of COVID-19 lockdown on lifestyle behaviors in children with obesity living in Verona, Italy: A longitudinal study. Obesity (Silver Spring) 2020;28:1382-5.
14. Berasategi N, Idoiaga N, Dosil M, Eiguren A. Design and validation of a scale for measuring Well-Being of Children in Lockdown (WCL). Front Psychol 2020;11:2225.

15. Demir Kösem D, Bektaş M, Demir Ş, Bektaş İ, Berasategi N. Validity and reliability of the Turkish version of the scale for measuring Well-Being of Children in Lockdown (WCL). J Educ Res Nurs 2024;21:20-8.
16. Berasategi Sancho N, Idoiaga Mondragon N, Dosil Santamaria M, Eiguren Munitis A. The well-being of children in lock-down: Physical, emotional, social and academic impact. Child Youth Serv Rev 2021;127:106085.
17. Irwin M, Lazarevic B, Soled D, Adesman A. The COVID-19 pandemic and its potential enduring ımpact on children. Curr Opin Pediatr 2022;34:107-15.
18. Allen J, Homel R, McGee T, Freiberg, K. Child well-being before and after the 2020 COVID-19 lockdowns in three Australian states. Aust J Soc 2023;58:41-69.
19. Wang G, Zhang Y, Zhao J, Zhang J, Jiang F. Mitigate the effects of home confinement on children during the COVID-19 outbreak. Lancet 2020;395:945-7.
20. Viner R, Russell S, Saulle R, Croker H, Stansfield C, Packer J, et al. School closures during social lockdown and mental health, health behaviors, and well-being among children and adolescents during the first COVID-19 wave: A systematic review. JAMA Pediatr 2022;176:400-9.
21. Oliveira VH, Martins PC, Carvalho GS. Children's daily activities and well-being during the COVID-19 lockdown: Associations with child and family characteristics. Curr Psychol 2024;43:8346-57.
22. Kovacs VA, Starc G, Brandes M, Kaj M, Blagus R, Leskošek B, et al. Physical activity, screen time and the COVID-19 school closures in Europe-an observational study in 10 countries. Eur J Sport Sci 2022;22:1094-103.
23. Idoiaga Mondragon N, Berasategi Sancho N, Ozamiz-Echevarria N, Dosil Santamaria M. The well-being of children in a full lockdown and partial lockdown situation: A comparative perspective. Child Geogr 2022;21:708-20.
24. Rajmil L, Hjern A, Boran P, Gunnlaugsson G, Kraus de Camargo O, Raman S, et al. Impact of lockdown and school closure on children's health and well-being during the first wave of COVID-19: A narrative review. BMJ Paediatr Open 2021;5:e001043.
25. Rodríguez-Pose A, Sandu A, Taylor C, Hampton, JM. Children's subjective well-being during the coronavirus pandemic. Child Ind Res 2024;17:309-47.