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Original Article

# Impact of Home Confinement on the Mental Health of Children and Adolescents: A National Survey

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## Abstract

This study investigates the impact of home confinement on the mental health of Dominican children and adolescents during the COVID-19 pandemic. An analytical cross-sectional study was conducted with a convenience sample of 988 participants aged 3 to 17 years, whose parents or legal guardians completed a digital survey that included the Pediatric Symptoms Checklist-35 (PSC-35). Inclusion criteria required consent from guardians, while children with prior mental health diagnoses were excluded. Data analysis employed Pearson's Chi-Square test, Fisher's Exact Test, Cramer's V Coefficient, and multiple response analysis. The findings revealed that 17.5% of children were at risk for cognitive, emotional, and/or behavioral disorders, with specific risk percentages of 15.7% for attention issues, 13.2% for depression/anxiety, and 11% for behavioral problems. Statistically significant associations ( $p < 0.05$ ) were found between the global PSC-35 score and factors such as sleep difficulties, COVID-19-related dreams, and boredom during confinement. These results indicate a notable prevalence of mental health issues among minors in the Dominican Republic, highlighting excessive boredom, persistent fear, and sleep disturbances as critical indicators of potential mental deterioration.

**Keywords:** COVID-19; mental health; pediatric symptoms checklist

## 1. Introduction

The World Health Organization (WHO) has emphasized the profound psychological impacts of the Coronavirus Disease 2019 (COVID-19) pandemic on the pediatric population [1]. As the world faced this unprecedented crisis, children experienced a range of emotional disturbances, including increased anxiety, fear, depression, disrupted sleep patterns, anger, and post-traumatic stress. These mental health challenges not only affect emotional well-being but can also lead to physical manifestations, such as weakened immune systems and deterioration of cardiorespiratory health [2,3]. Reports from parents in countries severely affected by COVID-19 reveal alarming emotional and behavioral changes in their children and adolescents, highlighting the urgent need for attention to this vulnerable demographic [3,4].

In response to the pandemic, governments worldwide implemented home isolation as a primary control measure. Historical evidence from previous epidemics indicates that such measures can precipitate feelings of boredom, stress from separation from loved ones, and uncertainty about ongoing health crises. Therefore, assessing the psychological consequences of prolonged quarantine on children and adolescents is imperative [5]. Despite the critical nature of this issue, there is a notable gap in research investigating the effects of home confinement during COVID-19 on the mental health of children and adolescents in the Dominican Republic and the broader Caribbean region. This lack of localized data highlights the importance of the present study, which aims to elucidate the impact of home confinement on the mental health of the Dominican pediatric population during the COVID-19 pandemic. By addressing this gap, the study seeks to inform public health strategies and interventions that can better support the mental well-being of children in similar contexts, ultimately

contributing to the global discourse on pediatric mental health in times of crisis. The findings are expected to reveal significant insights into the mental health challenges faced by this population, guiding future research and policy efforts.

## 2. Materials and Methods

### 2.1. Study Design

This article is based on a cross-sectional analytical study utilizing primary sources, targeting children and adolescents aged 3 to 17 years residing in the Dominican Republic. Data collection commenced on April 27, 2020, and concluded on May 27, 2020, during a state of emergency and curfew declared by the President of the Dominican Republic, necessitating a non-probabilistic convenience sampling approach.

### 2.2. Participants

The study included participants who were fathers, mothers, or legal guardians of children and/or adolescents aged 3 to 17 years. Inclusion criteria required participants to consent to the study after reading the informed consent section. Exclusion criteria included children and/or adolescents already diagnosed with a mental disorder and/or cognitive deficit by a psychiatrist or psychologist. Out of 1,079 responses collected, 988 individuals met the inclusion criteria.

### 2.3. Data Collection

A digital survey was created using the Google Form application, beginning with an explanatory text outlining the study's key details and an informed consent section. The survey comprised three sections with a total of 61 mandatory questions, designed to be completed individually for each child in the household. The Google Form was disseminated through various social media platforms with the assistance of influential Dominican individuals and high-ranking Dominican committees and associations. The survey was closed once the country resumed normal labor activities.

The first section included demographic and general questions with multiple-choice responses. The second section utilized the original Spanish version of the Pediatric Symptoms Checklist-35 (PSC-35), a validated questionnaire with a reliability range of  $r = 0.84$  to  $0.91$  for identifying children with mental impairments. The third section organized questions related to specific mental health signs and symptoms identified as significant by the World Health Organization (WHO) and other organizations [6–8].

### 2.4. Ethical Considerations

Due to the COVID-19 pandemic, obtaining formal approval from an ethical committee was not feasible. However, the researchers engaged in oral discussions with representatives from the ethical committee of the Pontificia Universidad Católica Madre y Maestra (PUCMM) to ensure compliance with ethical standards and prioritize participant welfare. This limitation may affect the generalizability of the findings, as formal oversight was not established.

### 2.5. Data Analysis

Data analysis was performed using the Statistical Package for the Social Sciences (SPSS) version 25. A descriptive analysis of the variables was conducted using frequencies and percentages. For qualitative variables, an inferential analysis was performed using Pearson's Chi-Square test, with a confidence level of 95%, an alpha error of 5%, and a statistical power of 80%. Fisher's Exact Test was employed for variables with five or fewer responses. Additionally, Cramer's V test was used to assess the level of association between variables that showed significant relationships according to the Pearson's Chi-Square test. Variables that allowed for multiple responses were analyzed using Multiple Response Analysis.

3. Results

3.1. Demographic and Contextual Factors

Prior to the onset of the pandemic, 4% of heads of households were unemployed. During the quarantine, 20% were suspended from work, and 10% were unemployed. Additionally, 7% of young people had to be separated from their parents or guardians as a protective measure. Notably, 45% of minors did not have access to a patio or terrace at home, and 34% did not have siblings living with them. At the time of the survey, 8% reported having a family member diagnosed with COVID-19, 2% indicated the death of a loved one due to COVID-19, and less than 1% of children and/or adolescents were diagnosed with the disease (see Table 1).

Table 1. Sociodemographic and Contextual Factors.

		Frequency (n)	Percentage (%)
Age range	3-5 years old	346	35
	6-9 years old	278	28.1
	10-13 years old	222	22.5
	14-17 years old	142	14.4
Sex	Female	468	47.4
	Male	518	52.4
	Prefer not to answer	2	0.2
Labor status of the head of the household, prior to the state of emergency	Self Employed / Independent	307	31.1
	Unemployed	35	3.5
	Formal employee	614	62.1
	Informal employee	32	3.2
Current employment status of the head of the household	Unemployed	95	9.6
	Employee	691	69.9
	Suspended	202	20.4
Presence of patio or terrace in the home	No	444	44.9
	I don't know	1	0.1
	Yes	543	55
Presence of siblings in the home	No	340	34.4
	Yes	648	65.6
Number of people living in the home	5 or more people	299	30.3
	4 people	354	35.8
	3 people	265	26.8
	2 people	70	7.1
Separation from mother, father, or legal guardian during the pandemic	No	916	92.7
	I don't know	1	0.1
	Yes	71	7.2
Close family member diagnosed with COVID-19	No	896	90.7
	I don't know	9	0.9

	<i>Prefer not to answer</i>	2	0.2
	<i>Yes</i>	81	8.2
Child or adolescent diagnosed with COVID-19	<i>No</i>	985	99.7
	<i>Prefer not to answer</i>	1	0.1
	<i>Yes</i>	2	0.2
Time without leaving home	<i>Less than 1 week</i>	103	10.4
	<i>1 week</i>	50	5.1
	<i>2 weeks</i>	33	3.3
	<i>3 weeks</i>	26	2.6
	<i>4 weeks</i>	32	3.2
	<i>More than 1 month</i>	744	75.3
Death of a close loved one	<i>No</i>	969	98.1
	<i>I don't know</i>	2	0.2
	<i>Yes</i>	17	1.7
Desire for information about COVID-19	<i>Talk or do enough investigation</i>	339	34.3
	<i>Talk or do a lot of investigation</i>	84	8.5
	<i>Try not to talk or do a lot of investigation</i>	565	57.2

3.2. Mental Health Outcomes

Regarding mental health, 28% of parents/guardians reported that their children experienced difficulty sleeping, while 10% expressed that their children had dreams related to COVID-19. Furthermore, 42% of children reported fears that a loved one would contract COVID-19, and 36% expressed concerns about developing the illness themselves. Parents observed that 57% of their children became more attached to them following the implementation of home confinement, and 74% of children reported feeling bored during this period (see Chart 1).

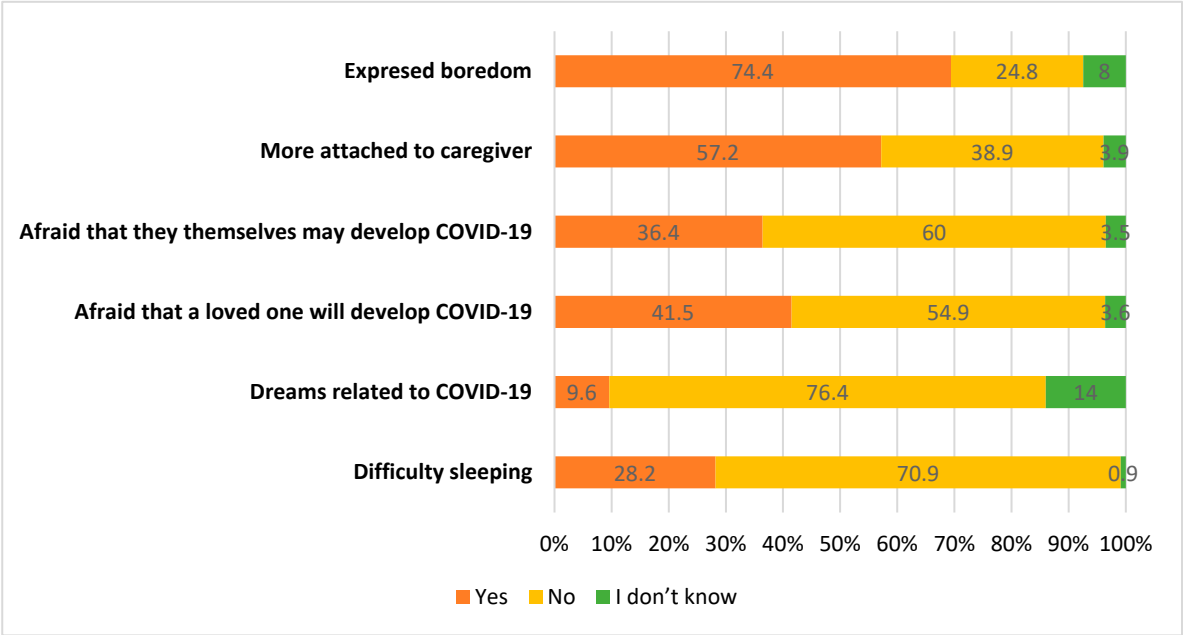


Chart 1. Specific Pediatrics Symptoms.

3.3. Behavioral Changes

Since the onset of home confinement, 44% of children exhibited tantrums and rebellious behaviors, 32% showed difficulties with attention and concentration, 31% developed unhealthy sleep habits, and 27% reported poor eating habits. Conversely, 23% of children did not exhibit any behavioral changes. The most common recreational activities among children and adolescents included using a cell phone or tablet (85%), watching television (77%), dancing or singing (54%), and listening to music (50%) (see Table 2).

Table 2. Change in Behavior and Recreational Activities.

		Frequency (n)	Percentage (%)
Behavioral changes	<i>Excessive crying or constant irritation</i>	248	25.1
	<i>Returning to behaviors that had been overcome (for example, bathroom accidents or bed-wetting)</i>	83	8.4
	<i>Excessive worry or sadness</i>	85	8.6
	<i>Unhealthy eating habits</i>	267	27.0
	<i>Unhealthy sleeping habits</i>	302	30.6
	<i>Tantrums and rebellious behavior</i>	436	44.1
	<i>Difficulty in attention and concentration</i>	319	32.3
	<i>Avoid activities you enjoyed in the past</i>	69	7.0
	<i>Unexplained headaches or body pain</i>	151	15.3
	<i>Use of drugs and / or alcohol</i>	1	0.1
	<i>None of the above</i>	224	22.7
Recreation activities	<i>Read a book</i>	263	26.6
	<i>Dance or sing</i>	535	54.1
	<i>Make crafts</i>	432	43.7
	<i>Watch TV</i>	765	77.4
	<i>Use social networks</i>	301	30.5
	<i>Listen to music</i>	492	49.8
	<i>Exercise or yoga</i>	261	26.4
	<i>Cook</i>	313	31.7
	<i>Play an instrument</i>	92	9.3
	<i>Playing video games</i>	413	41.8
	<i>Using the cell phone or tablet</i>	840	85.0
	<i>Play (alone or accompanied)</i>	90	9.1
	<i>Paint and / or draw</i>	20	2.0
	<i>Use the pool</i>	15	1.5
	<i>Others</i>	41	4.1

3.4. Pediatric Symptoms Checklist-35 Results

The Pediatric Symptoms Checklist-35 (PSC-35) indicated a 17.5% prevalence of children with an overall risk score for cognitive, emotional, and/or behavioral disorders. Specifically, 15.7%, 13.2%, and 11% of children showed risk scores for attention disorders, depression/anxiety disorders, and behavioral disorders, respectively (see Chart 2).



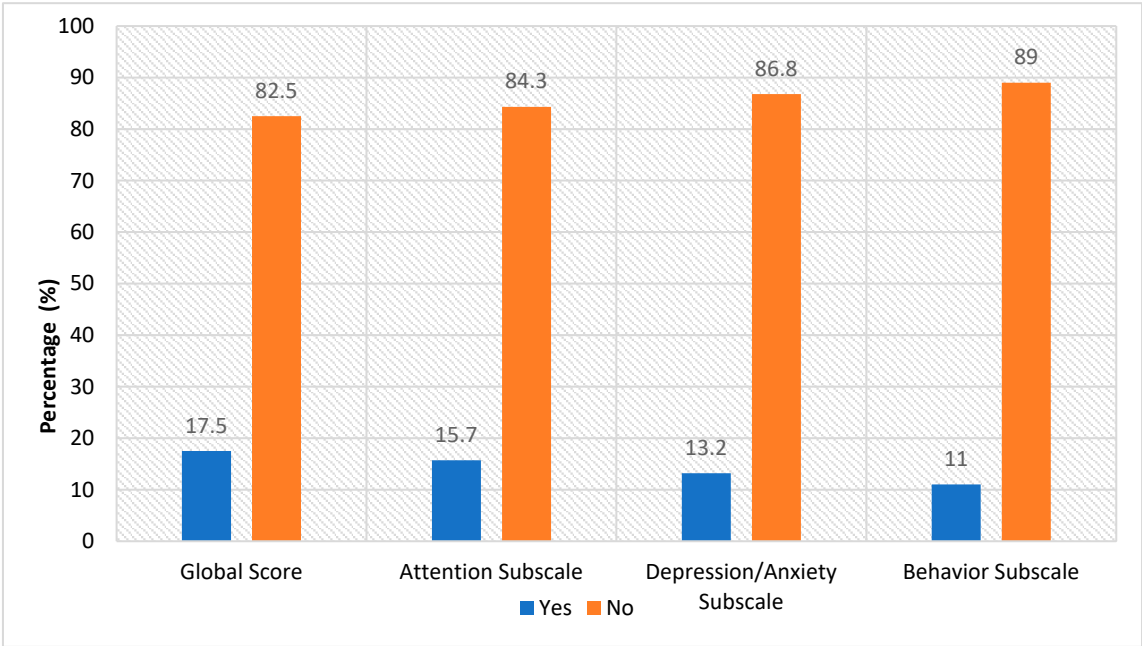


Chart 2. Pediatric Symptoms Checklist-35 Scores.

Among children expressing excessive worry or sadness, 54% obtained a global risk score for mental disorders. Notably, the only adolescent (100%) who began using drugs and/or alcohol during isolation also received a global risk score. In contrast, 100% of minors who did not exhibit any behavioral changes obtained a final score indicating the absence of global risk for cognitive, emotional, and/or behavioral disorders. Additionally, 34% of those who resumed previously overcome behaviors, 60% of those expressing excessive worry or sadness, and 35% of those with unhealthy eating habits reached risk scores for the subscales of attention, depression/anxiety, and behavior, respectively (see Table 3).

Table 3. Association Between Behavioral Changes, Recreational Activities, and PSC-35 Scores.

		Global score		Attention subscale		Depression/anxiety subscale		Behavior subscale	
		No Risk	Risk	No Risk	Risk	No Risk	Risk	No Risk	Risk
		(n)(%)	(n)(%)	(n)(%)	(n)(%)	(n)(%)	(n)(%)	(n)(%)	(n)(%)
Behavioral changes	Excessive crying or constant irritation	153(61.7)	95(38.3)	172(69.4)	76(30.6)	192(77.4)	56(22.6)	188(75.8)	60(24.2)
	Returning to behaviors that had been overcome (for example, bathroom accidents or bed-wetting)	53(63.9)	30(36.1)	55(66.3)	28(33.7)	73(88.0)	10(12.0)	67(80.7)	16(19.3)
	Excessive worry or sadness	39(45.9)	46(54.1)	61(71.8)	24 (28.2)	34(40.0)	51(60.0)	70(82.4)	15(17.6)

	<i>Unhealthy eating habits</i>	194(72.7)	73(27.3)	210(78.7)	57 (21.3)	210(78.7)	57(21.3)	229(26.1)	38(34.9)
	<i>Unhealthy sleeping habits</i>	222(73.5)	80(26.5)	244(80.8)	58(19.2)	233(77.2)	69(22.8)	264(85.8)	38(14.2)
	<i>Tantrums and rebellious behavior</i>	305(70.0)	131(30.0)	319(73.2)	117(26.8)	371(85.1)	65(14.9)	352(80.7)	84(19.3)
	<i>Difficulty in attention and concentration</i>	220(69.0)	99(31.0)	217(68.0)	102(32.0)	256(80.3)	63(19.7)	261(81.8)	58(18.2)
	<i>Avoid activities that you enjoyed in the past</i>	47(68.1)	22(31.9)	55(79.7)	14(20.3)	47(68.1)	22(31.9)	59(85.5)	10(14.5)
	<i>Unexplained headaches or body pain</i>	91(60.3)	60(39.7)	114(75.5)	37(24.5)	102(67.5)	49(32.5)	126(83.4)	23(16.6)
	<i>Use of drugs and/or alcohol</i>	0(0.0)	1(100.0)	1(100.0)	0(0.0)	0(0.0)	1(100)	1(100.0)	0(0.0)
	<i>None of the above</i>	224(100)	0(0.0)	217(96.9)	7(3.1)	219(97.8)	5(2.2)	216(96.4)	8(3.6)
<b>Recreational activities</b>	<i>Read a book</i>	228(86.7)	35(13.3)	229(87.1)	34(12.9)	231(87.8)	32(12.2)	239(90.9)	24(9.1)
	<i>Dance or sing</i>	445(83.2)	90(16.8)	442(82.6)	93(17.4)	475(88.8)	60(11.2)	477(89.2)	58(10.8)
	<i>Make crafts</i>	370(85.6)	62(35.8)	340(78.7)	92(21.3)	390(90.3)	42(9.7)	391(90.5)	41(9.5)
	<i>Watch TV</i>	627(76.9)	138(14.4)	639(83.5)	126(16.5)	671(87.7)	94(12.3)	681(89.0)	84(11.0)
	<i>Use social networks</i>	252(83.7)	49(16.3)	266(88.4)	35(11.6)	245(81.4)	56(18.6)	270(89.7)	31(10.3)
	<i>Listen to music</i>	413(83.9)	79(16.1)	426(86.6)	66(13.4)	421(85.6)	71(14.4)	444(90.2)	48(9.8)
	<i>Exercise or yoga</i>	227(87.0)	34(13.0)	225(86.2)	36(13.8)	238(91.2)	23(8.8)	238(91.2)	23(8.8)
	<i>Cook</i>	262(83.7)	51(16.3)	267(85.3)	46(14.7)	265(84.7)	48(15.3)	281(89.8)	32(10.2)
	<i>Play an instrument</i>	73(79.3)	19(20.7)	71(77.2)	21(22.8)	79(85.9)	13(14.1)	78(84.8)	14(15.2)
	<i>Playing video games</i>	333(80.6)	80(19.4)	344(83.3)	69(16.7)	348(84.3)	65(15.7)	364(88.1)	49(11.9)
	<i>Using the cell phone or tablet</i>	691(82.3)	149(17.7)	710(84.5)	130(15.5)	731(87.0)	109(13.0)	744(86.6)	96(11.4)
	<i>Play (alone or accompanied)</i>	82(91.1)	8(8.9)	76(84.4)	14(16.6)	88(97.8)	2(2.2)	82(91.1)	8(8.9)
	<i>Paint and/or draw</i>	15(75.0)	5(25.0)	17(85.0)	3(15.0)	19(95.0)	1(5.0)	17(85.5)	3(15.0)
	<i>Use the pool</i>	11(73.3)	4(26.7)	10(66.7)	5(33.3)	13(86.7)	2(13.3)	12(80.0)	3(20.0)

3.5. Associations



Statistical analysis revealed significant associations between age range and risk for the attention and depression/anxiety subscales. The presence of siblings in the household was significantly related to the global score of the PSC-35, as well as the depression/anxiety and behavior subscales. Additionally, fears regarding a loved one developing the disease were significantly associated with the overall PSC-35 results and the depression/anxiety subscale. Similarly, the child's fear of contracting the disease was significantly associated with the global score of the PSC-35, the depression/anxiety subscale, and the behavior subscale. Finally, variables such as difficulty sleeping, dreaming about COVID-19, and feelings of boredom during home confinement showed statistical significance with the overall PSC-35 scores (global score and subscales) (see Table 4).

		Global score		Attention subscale		Depression/anxiety subscale		Behavior subscale	
		No Risk	Risk	No Risk	Risk	No Risk	Risk	No Risk	Risk
		(n)(%)	(n)(%)	(n)(%)	(n)(%)	(n)(%)	(n)(%)	(n)(%)	(n)(%)
Relationship with the child or adolescent	Legal guardian	32(76.2)	10(23.8)	31(73.8)	11(26.2)	36(85.7)	6(14.3)	37(88.1)	5(11.9)
	Father	41(91.1)	4(8.9)	42(93.3)	3(6.7)	43(95.6)	2(4.4)	42(93.3)	3(6.7)
	Mother	742(82.4)	159(17.6)	760(84.4)	141(15.6)	779(86.5)	122(13.5)	800(88.8)	101(11.2)
	Chi-Squared	0.175		0.043*		0.207		0.626	
	Cramer's V	-		0.080		-		-	
Age range	3-5 years old	282(81.5)	64(18.5)	278(80.3)	68(19.7)	333(96.2)	13(3.8)	302(87.3)	44(12.7)
	6-9 years old	229(82.4)	49(17.6)	220(79.1)	58(20.9)	235(84.5)	43(15.5)	248(89.2)	30(10.8)
	10-13 years old	183(82.4)	39(17.6)	198(89.2)	24(10.8)	184(82.9)	38(17.1)	200(90.1)	22(9.9)
	14-17 years old	121(85.2)	21(14.8)	137(96.5)	5(3.5)	106(74.6)	36(25.4)	129(90.8)	13(9.2)
	Chi-Squared	0.810		0.000*		0.000*		0.612	
	Cramer's V	-		0.173		0.224		-	
Labor status of the head of the household, prior to the state of	Informal employee	25(78.1)	7(21.9)	30(93.8)	2(6.3)	26(81.3)	6(18.8)	27(84.4)	5(15.6)
	Formal employee	514(83.7)	100(16.3)	517(84.2)	97(15.8)	539(87.8)	75(12.2)	560(91.2)	54(8.8)
	Unemployed	23(65.7)	12(34.3)	25(71.4)	10(28.6)	27(77.1)	8(22.9)	28(80.0)	7(20.0)
	Self Employed	253(82.4)	54(17.6)	261(85.0)	46(15.0)	266(86.6)	41(13.4)	264(86.0)	43(14.0)
	/								

emerge ncy	<i>Independe nt</i>								
	<u>Chi-Squared</u>	0.049*		0.083*		0.236		0.024*	
	<u>Cramer's V</u>	0.089		0.082		-		0.098	
Current employ ment status of the head of the househo ld	<i>Suspende d</i>	164(81.2)	38(18.8)	167(82.7)	35(17.3)	176(87.1)	26(12.9 )	174(86.1 )	28(13.9 )
	<i>Employee</i>	581(84.1)	110(15.9)	593(85.8)	98(14.2)	606(87.7)	85(12.3 )	626(90.6 )	65(9.4 )
	<i>Unemplo yed</i>	70(73.7)	25(26.3)	73(76.8)	22(23.2)	76(80.0)	19(20.0 )	79(83.2 )	16(16.8 )
	<u>Chi-Squared</u>	0.038*		0.061		0.114		0.034*	
	<u>Cramer's V</u>	0.081		-		-		0.083	
	<i>Yes</i>	467(86.0)	76(14.0)	474(87.3)	69(12.7)	474(87.3)	68(12.7 )	490(90.2 )	53(9.8 )
Presenc e of patio or terrace in the home	<i>I don't know</i>	1(100.0)	0(0)	1(100.0)	0(0)	1(100.0)	0(0)	1(100.0)	0(0)
	<i>No</i>	347(78.2)	97(21.8)	358(80.6)	86(19.4)	383(86.3)	61(13.7 )	388(89.0 )	56(11.0 )
	<u>Chi-Squared</u>	0.005*		0.015*		0.827		0.342	
	<u>Cramer's V</u>	0.104		0.092		-		-	
	<i>Yes</i>	520(80.2)	128(19.8)	548(84.6)	100(15.4)	546(84.3)	102(15. 7)	563(86.9 )	85(13.1 )
Presenc e of siblings in the home	<i>No</i>	295(86.8)	45(13.2)	285(83.8)	55(16.2)	312(91.8)	28(8.2)	316(92.9)	24(7.1)
	<u>Chi-Squared</u>	0.010*		0.760		0.001*		0.004*	
	<u>Cramer's V</u>	0.081		-		0.105		0.092	
	<i>5 or more people</i>	236(78.9)	63(21.1)	253(84.6)	46(15.4)	253(84.6)	46(15.4 )	252(84.3 )	47(15.7 )
Number of people living in the home	<i>4 people</i>	299(84.5)	55(15.5)	296(83.6)	58(16.4)	308(87.0)	46(13.0 )	321(90.7 )	33(9.3 )
	<i>3 people</i>	219(82.6)	46(17.4)	225(84.9)	40(15.1)	233(87.9)	32(12.1 )	241(90.9 )	24(9.1 )
	<i>2 people</i>	61(87.1)	9(12.9)	59(84.3)	11(15.7)	64(91.4)	6(8.6)	65(92.9)	5(7.1)
	<u>Chi-Squared</u>	0.201		0.974		0.413		0.020*	
	<u>Cramer's V</u>								

	<u>Cramer's</u>	-	-	-				0.100	
	<u>V</u>								
Difficult ty sleeping	Yes	194(69.5)	85(30.5)	209(74.9)	70(25.1)	213(76.3)	66(23.7)	235(84.2)	44(15.8)
							)		)
	<i>I don't</i>	8(88.9)	1(11.1)	9(100.0)	0(0)	7(77.8)	2(22.2)	8(88.9)	1(11.1)
	<i>know</i>								
	No	613(87.6)	87(12.4)	615(87.9)	85(12.1)	638(91.1)	62(8.9)	636(90.9)	64(9.1)
	<u>Chi-Squared</u>	0.000*		0.000*		0.000*		0.012*	
	<u>Cramer's</u>	0.214		0.165		0.198		0.950	
	<u>V</u>								
Dreams related to COVID- 19	Yes	61(64.2)	34(35.8)	73(76.8)	22(23.2)	64(67.4)	31(32.6)	84(88.4)	11(11.6)
							)		)
	<i>I don't</i>	98(71.0)	40(29.0)	108(78.3)	30(21.7)	111(80.4)	27(19.6)	109(79.0)	29(21.0)
	<i>know</i>						)		)
	No	656(86.9)	99(13.1)	652(86.4)	103(13.6)	683(90.5)	72(9.5)	686(90.9)	69(9.1)
	<u>Chi-Squared</u>	0.000*		0.006*		0.000*		0.000*	
	<u>Cramer's</u>	0.213		0.102		0.214		0.130	
	<u>V</u>								
Afraid that a loved one will develop COVID- 19	Yes	319(77.8)	91(22.2)	337(82.2)	73(17.8)	326(79.5)	84(20.5)	366(89.3)	44(10.7)
							)		)
	<i>I don't</i>	28(77.8)	8(22.2)	30(83.3)	6(16.7)	29(80.6)	7(19.4)	30(83.3)	6(16.7)
	<i>know</i>								
	No	468(86.3)	74(13.7)	466(86.6)	76(14.0)	503(92.8)	39(7.2)	483(89.1)	59(10.9)
	<u>Chi-Squared</u>	0.002*		0.279		0.000*		0.545	
	<u>Cramer's</u>	0.112		-		0.195		-	
	<u>V</u>								
Afraid that they themselves will develop COVID- 19	Yes	282(78.3)	78(21.7)	298(82.8)	62(17.2)	289(80.3)	71(19.7)	326(90.6)	34(9.4)
							)		)
	<i>I don't</i>	24(68.6)	11(31.4)	30(85.7)	5(14.3)	25(71.4)	10(28.6)	26(74.3)	9(25.7)
	<i>know</i>						)		)
	No	509(85.8)	84(14.2)	505(85.2)	88(14.8)	544(91.7)	49(8.3)	527(88.9)	66(11.1)
	<u>Chi-Squared</u>	0.001*		0.602		0.000*		0.013*	
	<u>Cramer's</u>	0.117		-		0.184		0.093	
	<u>V</u>								
More attached	Yes	437(77.3)	128(22.7)	450(79.6)	115(20.4)	483(85.5)	82(14.5)	493(87.3)	72(12.7)
							)		)

to caregiver	<i>I don't know</i>	32(82.1)	7(17.9)	31(79.5)	8(20.5)	34(87.2)	5(12.8)	33(84.6)	6(15.4)
	<i>No</i>	346(90.1)	38(9.9)	352(91.7)	32(8.3)	341(88.8)	43(11.2)	353(91.9)	31(8.1)
							)		
	<u>Chi-Squared</u>	0.000*		0.000*		0.332		0.053	
	<u>Cramer's V</u>	0.162		0.161		-		-	
Expressed boredom	<i>Yes</i>	578(78.6)	157(21.4)	601(81.8)	134(18.2)	612(83.3)	123(16.7)	638(86.8)	97(13.2)
	<i>I don't know</i>	8(100.0)	0(0)	7(87.5)	1(12.5)	7(87.5)	1(12.5)	7(87.5)	1(12.5)
	<i>No</i>	229(93.5)	16(6.5)	225(91.8)	20(8.2)	239(97.6)	6(2.4)	234(95.5)	11(4.5)
	<u>Chi-Squared</u>	0.000*		0.001*		0.000*		0.001*	
	<u>Cramer's V</u>	0.173		0.120		0.182		0.120	
Desire for information about COVID-19	<i>Try not to talk or do a lot of investigation</i>	475(84.1)	90(15.9)	477(84.4)	88(15.6)	502(88.8)	63(11.2)	501(88.7)	64(11.3)
							)		)
	<i>Talk or do a lot of investigation</i>	57(67.9)	27(32.1)	69(82.1)	15(17.9)	65(77.4)	19(22.6)	70(83.3)	14(16.7)
							)		)
	<i>Talk or do enough investigation</i>	283(83.5)	56(16.5)	287(84.7)	52(15.3)	291(85.8)	48(14.2)	308(90.9)	31(9.1)
							)		
	<u>Chi-Squared</u>	0.001*		0.846		0.012*		0.135	
	<u>Cramer's V</u>	0.118		-		0.095		-	

\*Indicates statistical significance at p < 0.05 (Chi-square test).

4. Discussion

In this study, 7% of the sample experienced separation from their parents or guardians during the pandemic as a protective measure. However, the literature suggests that remaining with caregivers can mitigate the development of negative psychological effects. Research indicates that children who experience separation from their parents during quarantine are at a greater risk of developing emotional disorders and suicidal tendencies in adulthood [9,10].

The current research found that 74% of children reported feeling bored, 28% had trouble sleeping, and 57% became more attached to their caregivers. These findings align with studies conducted in Spain and Italy, where 52% of parents perceived that their children felt more bored than usual, 39% reported increased fatigue, and 28% noted greater dependency on them [4]. In contrast, a lower percentage was observed in China, where only 25% of caregivers reported changes in their children's sleep patterns, and 37% of children expressed fears of contracting SARS-CoV-2 [11]. In the present study, 31%, 36%, and 42% of children exhibited unhealthy sleep habits, fears of developing the disease, and fears of a loved one being infected, respectively.

Several behavioral changes reported by parents were noteworthy, including tantrums and rebellious behavior (44%), difficulties with attention and concentration (32%), unhealthy sleep habits (31%), poor eating habits (27%), and excessive crying or irritability (25%). Similar findings were reported in China, where attention difficulties and irritability were the most common behavioral and emotional symptoms across all age groups evaluated [12]. Even higher percentages were observed in children from the Basque Country, where 55% cried more during confinement, 75% exhibited increased anger, and only 52% maintained healthy sleep habits, with more than half showing an increase in daily food consumption [13].

The most common recreational activities among Dominican children and adolescents included using a cell phone or tablet (85%), watching television (77%), dancing or singing (54%), listening to music (50%), and engaging in crafts (44%). In the Basque Country, 90% of parents reported increased use of electronic devices among their children [13]. Previous research has shown that when children are out of school (during weekends or vacations), they tend to decrease physical activity, increase screen time, and develop irregular sleep habits, all of which can lead to weight gain and negatively impact physical health, thereby increasing susceptibility to mental health issues [2]. Despite these concerns, it is possible that the mindful use of smart devices can positively contribute to the mental health of young individuals. A preliminary study conducted in China by Jiao et al. [12] indicated that digital entertainment helped mitigate the negative experiences associated with home confinement.

Regarding the Pediatric Symptoms Checklist-35 (PSC-35), the global score indicated an 18% prevalence of symptoms related to emotional, cognitive, and/or behavioral disorders, with 16%, 13%, and 11% of children showing positive risk results for attention, depression/anxiety, and behavioral subscales, respectively. Xie et al. [11] reported even higher prevalence rates, with 23% of their sample exhibiting symptoms of depression and 19% showing symptoms of anxiety. Similarly, Jiao et al. [12] observed increased anxiety among children living in areas with high contagion rates.

In a study conducted in China during the early stages of the COVID-19 pandemic, children aged 6 to 18 years were more likely to exhibit attention problems and a heightened interest in researching the disease [12]. In the present investigation, children who were more curious about COVID-19 were at a significantly greater risk of developing global behavioral, cognitive, and/or emotional problems, particularly depression/anxiety, with higher prevalence among those who discussed or researched the disease excessively. Comparably, a study on school students in China concluded that those less concerned about COVID-19 had significantly lower anxiety and depression scores than those who were more concerned [11].

The Co-SPACE project, which collects mental health data from individuals aged 4 to 16 during the COVID-19 crisis, reported no differences in mental symptoms based on parents' employment status [14]. However, the current research revealed a significant association between parents' employment status and the global PSC-35 score, with higher prevalence rates of behavioral problems among children whose parents were unemployed during the pandemic. Additionally, the employment status of the head of the household prior to the state of emergency was significantly related to the global results, attention subscale, and behavioral subscale, with the highest prevalence observed in children with unemployed parents. Children are adept at interpreting adult emotions; thus, when a parent expresses negative emotions related to economic stress, it can adversely affect the mental health of their children in the short term [5].

According to the data analyzed in this study, having access to a patio or terrace at home was associated with fewer mental health problems overall and in the behavior subscale. Children without such outdoor spaces exhibited the highest prevalence of the dependent variables studied. This finding aligns with recommendations made during the pandemic, which encouraged finding safe spaces for fresh air and sunlight [13]. Furthermore, a study comparing the situations of children in Italy and Spain found that households in Italy were more likely to have patios, resulting in a significant decrease in behavioral problems compared to those in Spain [4].

Children in this study who reported increased attachment to their parents after home confinement were significantly associated with higher risk scores for behavioral, cognitive, and/or emotional disorders, particularly in the attention subscale. Similarly, children aged 3 to 6 years in China exhibited symptoms of attachment to their parents and fears regarding the potential contraction of COVID-19 [12].

Children who had trouble sleeping, dreamed of COVID-19, or expressed boredom during home confinement were significantly more likely to exhibit emotional, cognitive, and/or behavioral disorders, particularly related to attention, depression/anxiety, and behavior. While boredom can sometimes lead to positive outcomes such as creativity and social behavior, it is well-established that it is also associated with negative consequences, including attention problems, feelings of depression, counterproductive behaviors, and poor dietary habits [15,16]. Additionally, sleep disturbances have been linked to psychiatric disorders in the pediatric population, including attention, anxiety, depressive, and behavioral disorders across various age groups [17].

The strengths of this research include its low-cost implementation during the peak of home isolation in the country, the use of a digital platform that ensured reproducibility of data collection while minimizing contagion risk for researchers and respondents, and the involvement of expert advisors in mental health and research methodology. Furthermore, the study utilized a standardized questionnaire commonly employed in pediatric research, specifically the Pediatric Symptoms Checklist-35 (PSC-35), which adds credibility to the findings and allows for meaningful comparisons with other studies. The engagement of influential Dominican individuals and health associations in disseminating the survey likely increased participation rates and ensured that the study reached a broader audience, enhancing its ecological validity. Additionally, the research addresses a critical and timely issue—the mental health impact of home confinement during the COVID-19 pandemic on children and adolescents—filling a significant gap in the literature regarding this demographic and geographic context. However, limitations include the fact that responses were primarily obtained from a specific geographical area, which may reduce the variability of participants. Additionally, the researchers faced challenges in reaching individuals considered illiterate and those lacking access to adequate internet connectivity. Furthermore, due to the COVID-19 pandemic, formal approval from an ethical committee was not obtained, which may limit the generalizability of the findings.

## 5. Conclusions

The results of this study indicate that the Pediatric Symptoms Checklist-35 (PSC-35) is an effective screening tool for identifying mental health issues in children and adolescents. Given the observed prevalence of emotional, cognitive, and behavioral disorders during the COVID-19 pandemic, early identification and intervention are essential to mitigate long-term adverse effects on mental health.

This publication encourages researchers and healthcare professionals to assess the long-term consequences of home confinement on children's mental health. Understanding these effects is crucial for developing targeted interventions and support systems. Additionally, the findings underscore the importance of considering environmental factors, such as access to outdoor spaces and parental employment status, in mental health assessments.

Ultimately, this study provides valuable insights that can inform future research, guide clinical practice, and shape public health policies aimed at promoting the mental health of children and adolescents during and after public health emergencies. By prioritizing mental health in pediatric



care and policymaking, we can better support the well-being of our youngest populations in times of crisis and beyond.

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**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The data supporting the findings of this study are available from the corresponding author, Christy Capestany, upon reasonable request.

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**Conflicts of Interest:** The authors declare no conflicts of interest.

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