Relation between Mothers' Practices and their Children Screen Time Spent during COVID-19 in Sohag City

Eman Sayed Masoed¹, Ola Hussein AboElmaaty², Ateya Megahed Ibrahim³ & Manal Mohamed Ahmed⁴

- ¹ Assistant professor of Pediatric Nursing Department, Faculty of Nursing, Minia University, Egypt.
- ² Lecturer of Community Health Nursing Department, Faculty of Nursing, Fayoum University, Egypt.
- ³. Lecturer of Family and Community Health Nursing Department, Faculty of Nursing, Port Said University, Egypt.
- ^{4.} Assistant professor of Pediatric Nursing Department, Faculty of Nursing, Sohag University, Egypt.

Abstract:

Corona virus (COVID-19) is associated with many risks which including the lockdown of schools, movie theaters, and screen time is increased by children with no physical activities at home. Aim of this study was to explore the relation between mothers 'practices and their children screen time spent during COVID-19 in Sohag City. Subjects: & Method: A cross-sectional study research design was used. A purposive sample of 370 mothers living in Sohag City, Egypt, from 15 June 2020 to 30 June 2020 was used to achieve the aim of the current study. Two tools were used to collect the data in the current study, tool (I): A self-administered questionnaire that consisted of two parts: part (1): Socio-demographic characteristics of parents of children, part (2): Socio-demographic characteristics of children, (II): the Parenting Practices Scale through Google form spreadsheet which presented in Facebook and Whats App groups. Results: it observed that mobile was the most type of screen used between children, and more than half of children were their screen time daily from 6-9 hours, majority of mothers reported that their children's screen time had increased during the COVID-19, and, more than half of mothers' mentioned that they apply rules for their children's screen time. A significant positive correlation was found between mothers' practices and their children's screen time. Conclusion: The majority of mothers' reported an increasing of screen time was spent by the children during the COVID-19. Recommendations: A well-planned health education programs about screen time spent should be introduced to the children at schools and their parents.

Keywords: Covid-19, Children, Mothers practices & Screen Time

Introduction:

Coronavirus disease (COVID-19) pandemic has become impacted both physical and mental health (Acter et al., 2020). All countries have used many measures to minimize the transmission of the disease, which include using place policies, staying at home, limiting access to nursing homes, preventing gatherings at places where people can potentially come to closer contacts and staying at home that leads to spending more time with family (Altmann, et al., 2020).

According to American Academy of Child and Adolescent Psychiatry (AACAP), children should spend most of their time engaged in such activities as educational and physical activities to maintain healthy growth and development, rather than they spending much time on-screen watching and play (AACAP, 2020).

Closure of schools, offices, and other organizations led to an increase in the use of digital media such as laptops, tablets, computers, and mobile phones (**Robbins et al., 2020**). Nonetheless, children staying at home spend more hours watching television or using media and mobiles (**Király et al., 2020**).

Janssen et al., (2020) reported that screen time was associated with many problems in children that may

negatively affect them and causes adverse health outcomes both physical and mental health consequences in the affected populations during COVID-19. As obesity, hypertension, type 2 diabetes, myopia, depression, sleeps disorders, and many other noncommunicable diseases. So, it is important to know the COVID-19 health crisis and develop strategies that may prevent the health hazards may associate with increased screen time (Cheng, & Wilkinson, 2020).

Parenting practices are very critical during this problem which meaning they must observe children' behaviors by the parents in order to support their children in their social activities and in reaching to what they want in their life (Kahraman et al., 2017). Key factors in identifying physical and psychological problems are healthy communication with the child and good parenting practices in the early childhood period in order to help child relax during isolation (National Health Commission of the People's Republic of China, 2020). and help children gain relationship during the lockdown in the home (Wang, et al., 2020).

Practices such as control limits for screen activities complemented by planned exercises that involve offline communications and activities can be useful for people staying at home and attending online sessions (Wiederhold, 2020). Because parenting approaches help in strengthening the family ties and satisfying the children's needs (Wang et al., 2020), if parents can limit the children's screen time and they are setting rules, and identifying the set of house rules for children and screen habits, that may be effective in screen time reduction among their children and support their psychological and physical well-being during the pandemic (American Academy of Child & Adolescent Psychiatry, 2020). Nurses can play an active role that has become more important during the COVID-19 disease. The nurse should advise parents to help their children to be busy at home and spend good time with them and help them to deal with other issues that arising from the pandemic. Advise parents to support their children by effective interaction and communication and parentassisted behavioral change, and try to help them to distract them from uncontrolled screen time. Explain for mothers the adverse consequences of screen time and enable them to engage in active lifestyles, improved dietary practices, and healthier behaviors that promote individual health and wellbeing (Duan & Zhu, 2020).

Provide the parents with available guidelines and evidence-based interventions for preventing unhealthy screen time among the children. Help parents to promote active lifestyles that may improve health among their children during and after the corona virus disease. Encourage parents to involved their children in family activities and help them to develop their self-sufficiency skills. Help to create good environments at home or communities that may allow off-screen in-person physical and psychosocial activities that do not compromise safety measures related to COVID-19 while protecting children from Provide updates about an unhealthy lifestyle. evidence and recommendations that should be widely communicated for developing useful strategies that promote screen use choices for children (Wiederhold, 2020).

Significance of the study:

Nowadays incidence of screen time among children increases especially, during the COVID-19 disease that may cause noncommunicable diseases among the children (Carroll et al., 2020). Excessive screen time spent by the children leads to unhealthy outcomes such as sleep, myopia, change in health behavior, and decreased physical activity (Guan et al., 2020). So, the aim of this study was to explore the relation between mothers 'practices and their children screen time spent during COVID-19 in Sohag City.

Aim of the study:

The study was aimed to explore the relation between mothers' practices and their children's screen time spent during Covid -19 in Sohag City through:

- 1. Assessing mothers' practices regarding screen time spent during COVID-19 in Sohag City.
- 2. Assessing children' screen time spent during COVID-19 in Sohag City.
- 3. Identify the relation between mothers' practices and their children's screen time spent during corona virus disease.

Research questions:

- 1. What are mothers' practices regarding screen time spent during COVID-19 in Sohag City?
- 2. What are children screen time spent during COVID-19 in Sohag City?
- 3. What is the relation between parents' practices and screen time spent by their children during COVID-19 in Sohag City?

Subjects and Method:

Research design:

A cross-sectional design was adopted in the current study. It is often used to make inferences about possible relationships or to gather preliminary data to support further research and experimentation (**Kendra**, 2019).

Setting:

The study was conducted at Sohag City, Egypt.

Subjects:

A purposive sample of 370 mothers and their children aged from 6-12 years was used to achieve the aim of the current study in Sohag City, through a Google form spreadsheet which presented in Facebook and Whats App groups. All the studied mothers meet the following inclusion criteria as educated parents and agree to participate in this study.

Tools of data collection:-

Two tools were used in the current study as follows:

Tool (I): Self-administered questionnaire was developed by the researcher after reviewing related literature that consisted of three parts:

Part (1): Sociodemographic characteristics of mothers as age, educational level, residence, and working status.

Part (2): Sociodemographic characteristics of children as age, educational level, and gender.

Part (3): Knowledge of mothers about Covid -19 and screen time: This involved number of hours per day of children's screen time spent during the corona virus disease, effects of corona virus disease on the child's screen time, and applying the rules for screen time at home.

Tool (II): Parenting report Practices Scale:

The Parenting Practices Scale (PPS), it is included a 4-point Likert-type scale (never = 1, occasionally = 2, frequently = 3, always = 4) involving 52 items and sub-dimensions, which was developed by Kahraman et al. (2017) to assess the positive and negative attitude of the parents toward their children. The Positive problem-solving sub-dimension was assessed the communication style used by parents while talking with their children, and their effective problem-solving methods, which usually involve effective listening, warm and open communication, empathy, and adopting a behavior that meets their level while teaching them certain skills. The Negative problem-solving sub-dimension assesses ineffective problem-solving methods applied by parents, such as behaving aggressively, in a critical or accusing manner, or making things difficult for others. The Over-reactive sub-dimension includes items to assess the over-reactions of parents, such as physical violence toward children and preventing their autonomy. The items in the Inconsistent subdimension assess whether the rules defined for children are applied consistently. The Functional family sub-dimension assesses family members and the continuity of family functions, which include obeying family rules and maintaining a favorable atmosphere among family members. The Interactive sub-dimension involves questions evaluating parentchildren activities. The range of possible scores from this scale is 52-208, with higher sub-dimension and total scores indicating better parenting practices.

The Cronbach's Alpha value of the scale is 0.91, while the Cronbach's Alpha value of the present study was found to be 0.88.

Validity and reliability:

Face and content validity of the tool for clarity, comprehensiveness, and relevance was assessed by a board of five experts in pediatric nursing and community health nursing with more than ten years of experience in the field.

The Reliability of the tool was assessed through Cronbach's alpha test α = 93%.

Ethical considerations:

Official permission was obtained through an issued letter from the Dean of Faculty of Nursing, Sohag University to conduct this study. An informed consent form was included on the first page of the online questionnaire. The parents filled out the questionnaire after reading the consent form and agreeing to participate in the study voluntarily. The objective of the study was explained to the parents in the first part before starting the administered questionnaire, the researcher informed the parents

that the study was voluntary, they were allowed to refuse to participate and they had the right to withdraw from the study at any time, without giving any reason. Moreover, they were assured that their information would be confidential and used for research purposes only.

A pilot study

A pilot study was conducted on 10% of the mothers (37 mothers) of children to test the clarity and the feasibility of the research process and needed time for data collection. No modifications were required in the pilot study. The sample of the pilot study was included in the total sample.

Fieldwork:

The Google form spreadsheet shared with mothers of their children aged from 6-12 years for a limited period of time from 15 June 2020 to 30 June 2020, after the lockdown. This link was represented in Facebook and Whats App groups. On the first page of the online questionnaire, the parents were informed about the objectives and expected outcomes of the study. The online administered questionnaire and the parenting practices scale were used to identify the relation between parents' practices and their children's screen time spent during the COVID-19 disease in Sohag city. Average time spent for parents' completion of the online administered questionnaire and the parenting practices scale was approximately 15 minutes. Each mother involved in the study was informed about the aim of the study, the contents of the tools, and how to answer the online questionnaire and the scale.

Statistical analysis:

Data analysis was performed using SPSS version 20. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables and mean and SDs for quantitative variables and mean values were compared using an independent t-test. Differences were considered significant at p-values of less than 0.05. Chi-square (x2) test of significance was used to compare proportions between qualitative parameters.

Results:

Table (1): Percentage distribution of the studied mothers regarding their socio-demographic characteristics (n=370)

Socio-demographic characteristics	No	0/0
Age(years):		
- < 30	281	76.0
- >30	89	24.0
Mean and SD(28.3±1.2)		
Educational level:		
- Postgraduate	22	6.00
- Bachelor's degree	133	36.00
- Technical Institute	104	28.00
 Secondary school diploma 	111	30.00
Residence		
- Urban	285	77.00
- Rural	85	23.00
Working status:		
- Working	263	71.00
- Not working	107	29.00

Table (2): Percentage distribution of the children regarding their sociodemographic characteristics (n=370)

Socio-demographic characteristics	No	%
Age(years)		
- 6 < 9	130	35.00
- 9≥12	240	65.00
Mean and SD (9±2.3)		
-Education level:-(Primary school)		
- First grade	37	10.00
- Second grade	37	10.00
- Third grade	111	30.00
- Fourth grade	92	25.00
- Fifth grade	74	20.00
- Sixth grade	19	5.00
-Gender		
- Female	203	55.0
- Male	167	45.0

Table (3): Percentage distribution of the children regarding type of screen used, screen time spent during COVID-19 pandemic, and mothers' rules toward screen time at home (N=370)

Topic	No	%	
Type of screen used:			
- Television	85	23	
- Computer	44	12	
- Play station	111	30	
- Mobile	130	35	
Screen time spent(hours)			
- 3-6	122	33	
- 6-9	211	57	
- 9-12	37	10	
Mothers' rules toward screen time at home			
- Yes	196	53	
- No	174	47	

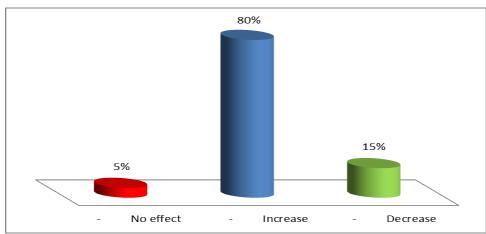


Figure (1): Frequency and percentage distribution of the children regarding the effects of COVID-19 on screen time (n=370)

Table (4): Parents practices mean scores among the studied mothers regarding screen time spent during the COVID-19 pandemic (n=370)

The topic of the Parenting Practices Scale	Mean ± SD	Min	Mix
Positive Problem Solving	38.54 ± 6.03	18	48
Negative Problem Solving	31.61 ± 1.71	18	36
Functional Family	32.48 ± 2.43	16	36
Over-reactive	41.58 ± 2.41	27	48
Inconsistent	16.92 ± 1.05	6	20
Interactive	15.35 ± 1.63	7	20
Total mean scores of Parenting Practices Scale	182.35±12.45	124	204

Table (5): Relation between mothers' report practices and their children's screen time (n = 370).

The topic of the Parenting Practices Scale	Children's screen time (n = 370)			
The topic of the Latenting Fractices Scale	Mean ± SD	t-test	p-value	
Positive Problem Solving	38.54 ± 6.03	-0.004	N.S	
Negative Problem Solving	31.61 ± 1.71	0.105	< 0.01	
Functional Family	32.48 ± 2.43	-0.069	< 0.05	
Over-reactive	41.58 ± 2.41	0.115	< 0.01	
Inconsistent	16.92 ± 1.05	0.166	< 0.01	
Interactive	15.35 ± 1.63	-0.130	< 0.01	

Table (6): A multiple regression model analysis regarding predicting screen time (n=370)

Model	Items	В	SE	Stand	P-	F	Adjust
				ard β	value		ed R2
Screen	Constant	7.805	1.317		≤.001	16.402	0.133
time	Age(years) of the child	0.393	0.045	0.249	≤0.001		
during	Education level of the child	-0.290	0.088	-0.104	≤0.001		
COVId-19	Gender of the child	0.413	0.172	0.067	≤0.05		
pandemic	Educational level of mother	-0.290	0.088	-0.104	≤0.001		
	Residence of mother	0.486	0.150	0.101	≤0.001		
	Working status of mother	-0.015	0.115	0.004	≤0.001		
	Mothers' rules toward screen time at home	-1.429	0.296	-0.142	≤0.001		
	Negative Problem Solving	-0.005	0.040	-0.005			
	Functional Family	0.051	0.029	0.059			
	Over-reactive	-0.018	0.032	-0.019			
	Inconsistent	-0.234	0.048	-0.157	≤0.001		

Table (1): Was noticed that 76% of the studied mothers were their age < 30 years with the mean age of 28.3 ± 1.2 years. Concerning educational level, 36.0% of them had bachelor's degree, 77% of them were living in urban areas and 71% of mothers were working.

Table (2): Regarding sociodemographic characteristics of the studied children, it was observed from the that, 65% of children were aged 9 to less than 12 years, with the mean age of 9 ± 2.3 years. Regarding their educational level, 30.0% of them were in the third grade in education, also, 55% of them were females.

Table (3): Regarding the type of screen used by children, it was observed that mobile was the most type of screen used between 35% of them followed by play station, television, and computer during the COVID-19 pandemic, and 57% of children were their screen time daily from 6-9 hours, and, 53 % of the mothers said that they apply control rules for screen time

Figure (1): Showed the frequency and percentage distribution of the children regarding the effects of COVID-19 on screen time and illustrated that 80% reported that screen time spent by their children had increased during corona virus, and only 5% not affected

Table (4): As shown in parents' practices mean standard deviation (SD) distribution among the studied mothers regarding screen time spent during COVID-19 pandemic, positive problem solving mean standard deviation was 38.54 ± 6.03 , negative problem solving mean was 31.61 ± 1.71 , functional family means was 32.48 ± 2.43 , over-reactive mean was 41.58 ± 2.41 , inconsistent mean was 16.92 ± 1.05 , and the interactive mean was 15.35 ± 1.63 , that all topics of practices had been increased in applying rules by mothers regarding screen time during COVID-19 disease.

Table (5): A significant positive correlation was found between mothers' practices and their children's screen time. The functional family (p < 0.05) and interactive (p < 0.01) negative correlation was detected between sub-dimensions of parenting scale and the screen time of children. No relation was found between positive problem solving and mothers' practices (p > .05)

Table (6): Multiple regressions were conducted for the children's screen time spent, as a dependent variable. The model explaining the screen time of children during the corona virus disease at home isolation ($R^2 = 0.133$, $p = p \le .001$) found significant relation. For this model, child's age ($p \le .001$), child education ($p \le .001$), the child's gender ($p \le .05$), mothers education ($p \le .001$), mother's residence

(p \leq .001), mother's work(p \leq .001), mothers' rules toward screen time at home (p \leq .001) and inconsistent mothers' practices were significant predictors, explaining 14% of the variance at (p \leq .001).

Discussion:

Screen time may have negative effects on children affected by corona virus, which is associated with health outcomes and lead to many complications (Hossain et al., 2020). The aim of the study was significantly achieved because there is a significant positive correlation was found between mothers' report practices and their children's screen time. The findings of the current study revealed that more than half of children were their screen time reaching daily from 6-9 hours, It is indicated the importance of the current study to be done and this result may be related to that children away from their schools and free time to be engaged in other activates because of lockdown. This result may be attributed to the children's inability to control their preference for technology. These results were in the same line with Ting, et al., (2020) who found in their study that the screen time per day spent by children had increased with starting the pandemic for 6 hours. Also, Hawi & Rupert (2015) observed that the children' screen time was 2.66 hours per day. A survey of over 3000 parents found that 49% reported that children are spending more than 6 hours per day online and 26% are spending more than 8 hours online, compared to 8% and 4%, respectively, before the pandemic (Parents Together, 2020).

The findings of the current study found that the majority of mothers reported that the children's screen time had increased during the COVID-19. This may be attributed to Long-term social isolation during the COVID-19 disease. This is in agreement with Samaha & Hawi (2017) who conduct a study and found an increase in the daily screen times among the children. A study of 254 Canadian families with young children reported an increase of screen time in mothers, and children during COVID-19 (Carroll et al., 2020). Moreover, study 3 conducted in China found that about 70% of 1033 participants spent more time looking at screens after the corona virus outbreak (Hu et al., 2018). Another study used a longitudinal design to evaluate health behavior changes during COVID-19 and found a perceived increase in screen time among the participants (Keel et al., 2020). Furthermore, a study conducted in Poland reported that 49% of the participants experienced an elevated screen time during the COVID-19 pandemic (Górnicka et al., 2020). Another study recruited 4108 participants from nine European countries and found that about two thirds of participants their screen time increased during this pandemic (**Pišot et al., 2020**).

The findings of the current study reflected that more than half of the studied mothers apply control rules for their children's screen time. This meaning that the mothers know the negative effects of long screen time and try to avoid them by applying rules to minimize their children's screen time spent. This study agrees with conducted by **Barr-Anderson et al.** (2011) which involved children aged 6 years and noticed a relation between the parents rules to control the time spent watching TV and minimized screen times among children. The result of the present study is supported by **Birken et al.** (2011) who found the same result.

The findings of the current study revealed that there was a significant positive correlation between mothers' practices and their children's screen time. It is indicated the importance of these rules on controlling children's screen time that may be lead to unhealthy lifestyle.

The present study found relation between screen time during the COVID-19 disease and negative problem solving, family functioning, and over-reactive, inconsistent, and interactive mothers' practices. A regression model was created to identify the multifactorial effect of the studied independent variables on children's screen time. Multiple regressions were conducted for the children's screen time spent, as a dependent variable.

The model explaining the screen time of children during the corona virus disease at home isolation found significant relation. The child's age, child education and gender, mother's education, mother's residence, mother's work, mothers' rules toward screen time at home, and inconsistent mothers' practices were significant predictors.

Concerning mothers' education, it may be attributed to that educated mothers know more about the uses and types of new technologies like mobile phones, computers, and tablets that give more opportunities to their children to use them. Regarding mother's residence, especially the urban areas are associated with time screen. This may explain that urban areas are different in culture, values, and believes, and mothers in these areas are more in freedom and opening, increase of awareness. Also, time screen was associated with working mothers. This result may be because working mothers left their young children for a long time when they were in their work without observation which increases their time screen spent by their children who are staying alone at home.

The results of the current study are consistent with the findings conducted by **Hu et al.** (2018) and found a relation between screen time and the child's age, and the presence of control rules regarding screen time. On the other hand, **Bleakley**, et al., (2013) reported that there was a correlation between the gender and age of the children, and working status, and the children's screen time. Similar to the present study, **Lloyd et al.**, (2014) found that the age and gender of the child were strong predictors of screen exposure.

Conclusion:

The majority of the mothers reported that there was an increasing in the screen time spent by their children during COVID-19. More than half of children were their screen time spent daily from 6-9 hours. More than half of the mothers apply rules for the child's screen time. A significant positive relation was found between mothers' report practices and the child's screen time. Such predictors as the age and gender, working status of the mother and residence, screen time rules implementation, and inconsistent mothers' practices were affected on screen time.

Recommendations:

- 1- Health education program about screen time spent should be introduced to the children at schools and their mothers.
- 2- Improve awareness of the mothers regarding the screen time spent by children, its negative effects, and how to control.
- 3- Future researches about preventive strategies of unhealthy effects from screen time spent by the children and health outcomes from different types and amounts of screen time among children.

References:

- Acter, T., Uddin, N., Das, J., Akhter, A., Choudhury, T., & Kim, S. (2020): Evolution of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) as coronavirus disease, 2019 (COVID-19) pandemic: A global health emergency. Science of the Total Environment, Elsevier B.V. https://doi.org/10.1016/j.scitotenv.2020.138996
- Altmann, D., Douek, D., Boyton, R. (2020): What policy makers need to know about COVID-19 protective immunity? The Lancet, Lancet Publishing Group, Available at https://doi.org/10.1016/S0140-6736 (20)30985-5
- American Academy of Child and Adolescent Psychiatry

(2020): https://www.aacap.org/App_Themes/AAC

- AP/Docs/resource libraries/covid-19/Screen-Time-During-COVID.pdf Accessed 25 June 2020.
- Barr-Anderson D., Fulkerson J., Smyth M., Himes J., Hannan P., Rock B., & Story M. (2011): Associations of American Indian children's screen-time behavior with parental television behavior, parental perceptions of children's screen and media-related resources in the home. Preventing Chronic Disease;8(5) [PMC free article] [PubMed] [Google Scholar]
- Birken, C., Maguire, J., Mekky, M., Manlhiot, C., Beck, C., Jacobson, S., & Parkin P. (2011): Parental factors associated with screen time in preschool children in primary-care practice: A TARGet Kids! Study. Public Health Nutrition; 14(12):2134-2138. Doi: 10.1017/S1368980011000516. [PubMed]
 - [CrossRef] [Google Scholar]
- Bleakley, A., Jordan, A., & Hennessy M. (2013): The relationship between parents' and children's television viewing. Pediatrics; 132(2):e364-e371. Doi: 10.1542/peds.2012-3415. [PubMed] [CrossRef] [Google Scholar]
- Carroll, N., Adam, S., Amar, L., Valerie, H., Madeline, N., David, W. Ma, & Jess H. (2020): The Impact of COVID-19 on Health Behavior, Stress, Financial and Food Security among Middle to High Income Canadian Families with Young Children Nutrients, 12, 2352; doi:1 0.3390/nu12082352.
- Cheng, E., & Wilkinson, T. (2020): Agonizing over screen time? Follow the three C's. The New York Times. Retrieved from https://www.nytimes.com/2020/0 4/13/parenting/manage-screen-timecoronavirus.html.
- Duan, L., & Zhu, G. (2020): Psychological interventions for people affected by the COVID-19 epidemic. The Lancet Psychiatry, Elsevier Ltd, https://doi.org/10.1016/S2215-0366 (20)30073-0
- Górnicka, M., Drywień, M., Zielinska, M., & Hamułka, J. (2020): Dietary and Lifestyle Changes during COVID-19 and the Subsequent Lockdowns among Polish Adults: A Cross-Sectional Online Survey PLifeCOVID-19 Study, Nutrients. 12 2324. https://doi.org/10.3390/nu12082324.
- Guan, X., Peng, W., Xiaoye, W., Lei Z., Yeqing, T., Ruigi R., & Kathy, S., (2020): Early Transmission Dynamics in Wuhan, China, of Novel Coronavirus-Infected Pneumonia, N Engl J Med 382:1199-1207 DOI: 10.1056/NEJMoa2001316.
- Hawi N., & Rupert M. (2015): Impact of ediscipline children's screen

- time. Cyberpsychology, Behavior and Social Networking: 18(6):337-342. Doi: 10.1089/cyber.2014.0608. [PMC free article] [PubMed] [CrossRef] [Google Scholar]
- Hossain, M., Tasnim, S., Faizah, F., Sultana, A., Mazumder, H., Zou, L., & Cox's Bazar, B. (2020): Epidemiology of mental health problems in COVID-19: a review Rajasthan Priorities-Adolescent Health View project Interventions addressing overweight and obesity among children and adolescents in South Asia: A systematic review View project Epidemiology of. PsyArXiv, (July). https://doi.org/10.31234/osf.io/q8e5u.
- Hu B., Johnson G., & Wu H. (2018): Screen time relationship of Chinese parents and children. Children and Youth Services Review; 94:659-669. Doi: 10.1016/j.childyouth.2018.09.008. [CrossRef] [Goo gle Scholar]
- Janssen, X., Martin, A., Hughes, A., Hill, C., Kotronoulas, G., & Hesketh, K. (2020): Associations of screen time, sedentary time and physical activity with sleep in fewer than 5s: A systematic review and meta-analysis. Sleep Medicine Reviews. 49. 101226. https://doi.org/10.1016/j.smrv.2019.101226
- Kahraman, H., Yilmaz Irmak, T., & Basokcu, T. (2017): Parenting Practices Scale, Its validity and reliability for parents of school-aged children. Educational Sciences: Theory & Practice, 17, 745-769. http://dx.doi.org/10.12738/ est.3.0312
- Keel, P., Gomez, M., Harris, L., Kennedy, G., Ribeiro, J., & Joiner, T. (2020): Gaining "The Quarantine 15:" Perceived versus observed weight changes in college 12 students in the wake of COVID-19. The International Journal of Eating Disorders, https://doi.org/10.1002/eat.23375.
- Kendra, C. (2019): How Does the Cross-Sectional Research Method Work? Inc. Dotdash, Updated on October 10, 2019.
- King, D., Delfabbro, P., Billieux, J., Potenza M. (2020): Problematic online gaming and the COVID-19 pandemic. Journal of Behavioral Addictions, DOI: 10.1556/2006.2020.00016. [PubMed] [CrossRef] [Google Scholar]
- Király, O., Potenza, M., Stein, D., King, D., Hodgins, D., Saunders, J., & Demetrovics, Z. (2020): Preventing problematic internet use during the COVID-19 pandemic: Consensus guidance. Comprehensive Psychiatry, 100, 152180, https://doi.org/10.1016/j.comppsych.2020.152180
- Llovd A., Lubans D., Plotnikoff R., Collins C., & Morgan P. (2014): Maternal and paternal parenting practices and their influence on children's adiposity, screen-time, diet, and physical activity. Appetite;

79:149–157. 10.1016/j.appet.2014.04.010. [PubMed] [CrossRef] [Google Scholar]

■ National Health Commission of the People's Republic of China (2020): Guideline for psychological crisis intervention during 2019-nCoV. http://www.nhc.gov.cn/jkj/s3577/202001/6a dc08b966594253b2b791be5c3b9467.

Doi:

- Parents Together (2020): Survey shows parents alarmed as kids' screen time skyrockets during COVID-19 crisis [Press release, Retrieved from: https://parentstogether.org/survey-shows-parents-alarmed-as-kidsscreen-time-skyrockets-during-covid-19-crisis/.
- Pišot, S., Milovanović, I., Šimunič, B., Gentile, A., Bosnar, K., Prot, F., & Drid, P. (2020): Maintaining everyday life praxis in the time of COVID-19 pandemic measures (ELP-COVID-19 survey). European Journal of Public Health, https://doi.org/10.1093/eurpub/ckaa157
- Robbins, T., Hudson, S., Ray, P., Sankar, S., Patel, K., Randeva, H., & Arvanitis, T. (2020): COVID-19: A new digital dawn? Digital Health, SAGE Publications Inc. https://doi.org/10.1177/2055207620920083
- Samaha M., & Hawi N. (2017): Associations between screen media parenting practices and children's screen time in Lebanon. Telematics and Informatics, 2017; 34(1):351–358. Doi: 10.1016/j.tele.06.002. [CrossRef] [Google Scholar].
- Ting, D., Carin L., Dzau V., & Wong, T. (2020): Digital technology and COVID-19. Nature Medicine, Nature Research. https://doi.org/10.1038/s41591-020-0824-5
- Wang G., Zhang Y., Zhao J., & Zhang J., Jiang F. (2020): Mitigate the effects of home confinement on children during the COVID-19 outbreak. The Lancet; 395(10228):945–947. doi: 10.1016/S0140-6736(20)30547-X. [PMC free article] [PubMed] [CrossRef] [Google Scholar].
- Wiederhold, B. (2020): Children's Screen Time during the COVID-19 Pandemic: Boundaries and Etiquette. Cyberpsychology, Behavior, and Social Networking,

https://doi.org/10.1089/cyber.2020.29185.bkw