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## PERCEIVED STRESS LEVEL DUE TO VIRTUAL CLASSES AMONG THE MOTHER'S OF PRE-SCHOOLERS

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### ABSTRACT

Pre-schooler is the period to explore and to take initiative. Due to COVID-19, the schools are shut down and the children are restricted to online classes. This study examines the level of perceived stress of the mothers of pre-schoolers (3- 6 years) in assisting packed online classes amidst the household chores. The objective of the study is to assess the perceived stress level due to virtual classes among the mothers of pre-schoolers. A descriptive study with Survey method and perceived stress scale was used to conduct the study. The samples were selected using convenient sampling technique. After getting consent, a self-administered questionnaires' for demographic variables and modified form of Sheldon Cohen's Perceived stress scale was used to assess the perceived stress level due to virtual classes among 60 mothers' of pre-schoolers. Descriptive statistics and inferential statistics were used for data analysis. Data interpretation revealed that most of the mother's of pre-schoolers were perceived moderate to severe stress level due to virtual classes. And there is a significant association between income and the perceived stress level at  $p < 0.011$  level and working status of the mother at  $p < 0.047$ . This study concludes that the perceived stress level of the mother is exemplified due to the burden of virtual classes amidst the household chores, office work and financial constraints during this pandemic.

### KEYWORDS

Pandemic, Perceived Stress Scale (PSS), Stress, Preschoolers and Virtual classes.

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### INTRODUCTION

The COVID-19 pandemic has become a norm and in order to adapt, schools across the world have switched to distant learning. Children are loaded to stay on track with their syllabus through online classes at home. This transition from the formal classroom teaching to online teaching is quite stressful for both children and the parents. Online

classes are a combination of video recording and live lectures with course reading and test<sup>1</sup>. Stress is the feeling of being overwhelmed or unable to cope with the emotional and mental pressure<sup>2</sup>. Mothers are exhausted with household activities amidst the online classes and behave violently and show negative reinforcement on their children for their shortcomings which may worsen the situation. Due to this imposed stress, parents might notice behavioral changes in their children such as excessive arguments, refusals, opposition, defiance, or withdrawal.

### **Need for the study**

Pre-schoolers are still in need of love, affection and dependency for their self-care activities. Mothers have to fulfil the needs of their children and also help their kid to cope up with the online classes. The pre-schoolers have the attention span of less than 15 minutes, and early pre-schoolers like 3-4 years have only 5 minutes of attention span, it is calculated as 2-3 minutes per age of year<sup>3</sup>. The ministry of human resource development (MHRD)<sup>7</sup> recommended just 30 minutes of screen time for pre-primary students, two classes of 45 minutes each for classes 1 to 8 and four classes of 45 minutes each for classes 9 to 12, but reversely proportional in reality. Rajanbir Singh, (2020)<sup>4</sup> in Hindustan Times, Chandigarh says that too much of exposure to screen time leads to feeling isolation and anxiety and increases the neurotic symptoms like nail biting, thumb sucking, and hair pulling in children. This is the concern, the current study is essential to identify the perceived stress level due to virtual (online) classes among the mothers of pre-schoolers (3-6 years).

### **Statement of the problem**

A study to explore the perceived stress level due to virtual classes among the mothers of pre-schoolers (3-6 years) at selected area in Madurai

### **Objective**

To explore the perceived stress level due to virtual classes among the mothers of pre-schoolers (3-6 years)

To associate the perceived stress level due to virtual classes among the mothers of pre-schoolers (3-6 years) with selected demographic variables

## **METHODOLOGY**

60 mothers of pre-schoolers were selected as the samples using convenient sampling method. The setting of the study was the selected area at Madurai. After obtaining permission from the ethical committee Panchayat leader, informed consent was obtained from the samples and they were asked to complete the questionnaire and respond to the tool. After getting the content validity from the experts a Modified Sheldon Cohen's Perceived Stress scale was used that specifically included the statements of the perceived stress level due to virtual classes.

### **Data Analysis**

Descriptive analysis for demographic variables was performed and results were reported as numbers with percentages for quantitative variables. Chi square was used to assess the association of perceived stress level due to virtual classes with the selected demographic variables.

### **Section A: Demographic profile**

Table No.1 shows that 35(58.3%) of the mother's had male child, 34(56.6%) had one child and it was first order child, 33(55%) were in nuclear family, 26(43.3%) of the participants were between the age group 26 years to 30 years and 24(40%) of them had their high school education, 48(80%) of the participants were working mothers. 35(58.3%) of participants were with a monthly income of Rs.10,001/- to Rs.15,000/-. Among which 48(80%) of them got sources of health information from relatives, friends, neighbours. 37(61.67%) of the participants were opted Matriculation Board of education for their child. 54(90%) of the children attended classes in smart phones, 58(96.67%) of the child were using mobile data for internet connection. 37(61.67%) of the child had 3 hours of online classes a day. 32(53.3%) were undergoing monthly based evaluation conducted by the school. 29(48.3%) of the child had 2 home task on daily basis. 48(80%) of the child had 45 minutes class per subject and 45(75%) of the child had 5 minutes break time in between the class.

### **Section B: Perceived Level of stress due to virtual classes**

Table No.2 represents the overall score of perceived level of stress with a mean  $25.81 \pm 6.15$ . The mean

score of Moderate and high level of perceived stress score were 23.3±1.95 and 31.07± 2.12 respectively. All the preschool mother' of a child was experiencing stress due to virtual classes.

**Section C: Association of demographic variables with the perceived level of stress**

Table No.3 shows that there is a significant association between income and the perceived stress level at  $p < 0.011$  level and working status of the mother at  $p < 0.047$ .

**DISCUSSION**

The investigator found that 28(46.66%) of the preschool mother's had perceived moderate stress level and 27(45%) of preschool mother's had severe perceived stress level, whereas only 5(8.33 %) of the participants had perceived low stress level. And there is a significant association between income and the perceived stress level at  $p < 0.011$  level and working status of the mother at  $p < 0.047$ . So, it means the impact of virtual classes among the mothers are so high that the mothers are overwhelmed with household chores, midst their professional balance and also has to spent much more time to assist the child to attend the virtual classes and help to finish the home task, which causes unrevealed stress among the mothers, which is expressed as shouting, yelling and beating the child which may affect the emotional development of the child also.

**Section A: Demographic profile**

**Table No.1: Frequency and percentage distribution of demographic profile (N=60)**

S.No	Demographic Profile	Frequency	Percentage
<b>Sex of the child</b>			
1	Male	35	58.33
2	Female	25	41.67
<b>Number of children in the family</b>			
3	One	34	56.67
4	Two children	26	43.33
5	Three children	0	0
<b>Order of the birth</b>			
6	First	34	56.67
7	Second	26	43.33
8	Third	0	0
<b>Type of family</b>			
10	Nuclear	33	55

The study results is consistent with conclusion of Franziska (2021)<sup>5</sup> to assess mother's daily perceived stress influences their children's mental health during SARS-CoV-2-pandemic- online survey, through a longitudinal survey, stated that a positive and significant effect of the maternal perceived everyday stress on children's emotional problems during the pandemic.

The study results is substantiated with Emma G Duerden *et al* (2021)<sup>6</sup> among as millions of children abruptly moved to online schooling, which required high levels of parental involvement. Family routines were disrupted, potentially increasing parental stress, and may be reflected in greater media screen time use in children.

**Implication of the study**

Further studies can be done in relation to:

Role of primary care in identifying and preventing stress at population level in urban and rural area.

Experimental study to identify the level of stress and the behavioural interventions for the mothers and the children.

11	Joint	27	45
<b>Age of the mother</b>			
12	<25 years	24	40
13	26-30 years	26	43.33
14	≥31 years and above	10	16.67
<b>Mother's education</b>			
15	No formal education	0	0
16	Primary school	16	26.67
17	High school	24	40
18	Higher secondary	13	21.67
19	Graduate and above	7	11.67
<b>Working status of mother</b>			
20	Working	48	80
21	Non working	12	20
<b>Family income</b>			
22	5000-10000	22	36.67
23	10001-15000	35	58.33
24	>15001	3	5
<b>Source of health information</b>			
25	Newspaper, books, posters	2	3.33
26	Relatives, friends, neighbours	48	80
27	Health care professionals	10	16.67
<b>Board of school of the child</b>			
28	State board	7	11.67
29	Matriculation	37	61.67
30	CBSE	15	25.0
31	ICSE	0	0
32	IGSE	1	1.67
<b>Mode of online class attained</b>			
33	Smart phone	54	90
34	Laptop	5	8.33
35	Tablet	1	1.67
<b>Source of internet connection</b>			
36	Mobile data	58	96.67
37	Broad band	2	3.33
<b>Number of hours of classes per day</b>			
38	1 hour	0	0
39	2 hours	23	38.33
40	3 hours	37	61.67
<b>Frequency of evaluation conducted by the school</b>			
41	Daily	2	3.33
42	Weekly	14	23.33
43	Monthly	32	53.33
44	Termly	12	20
<b>Number of home task given daily</b>			
45	One	12	20

46	Two	29	48.33
47	Three	19	31.67
<b>Duration of online class per subjects</b>			
48	30 Min/subjects	12	20
49	45 min/subjects	48	80
50	60 min/subjects	0	0
<b>Breaktime in between the classes</b>			
51	5 Minutes	45	75
52	10 Minutes	12	20
53	15 Minutes	3	5

**Section B: Perceived Level of stress due to virtual classes**

**Table No.2: Descriptive statistics of overall Perceived Level of stress due to virtual classes (N=60)**

S.No	Level of perceived stress	f	%	Mean	SD
1	Low	5	8.33	11	1.22
2	Moderate	28	46.67	23.3	1.95
3	High	27	45.00	31.07	.12
4	Overall	60	100	25.81	6.15

**Section C: Association of demographic variables with the perceived level of stress**

**Table No.3: Association of demographic variables with the perceived level of stress**

S.No	Demographic variables	Low		Moderate		High		$\chi^2$ -value	p-value
		f	%	F	%	f	%		
<b>Sex of the child</b>									
1	Male	2	3.33	17	28.33	16	26.67	0.77 (df=2)	0.682 NS
2	Female	3	5	11	18.33	11	18.33		
<b>Number of children in the family</b>									
3	One	2	3.33	17	28.33	15	25	0.77 (df=2)	0.682 NS
4	Two children	3	5	11	18.33	12	20		
5	Three children	0	0	0	0	0	0		
<b>Order of the birth</b>									
6	First	2	3.33	17	28.33	15	25	0.77 (df=2)	0.682 NS
7	Second	3	5	11	18.33	12	20		
8	Third	0	0	0	0	0	0		
<b>Type of family</b>									
9	Nuclear	2	3.33	16	26.67	15	25	0.509 (df=2)	0.775 NS
10	Joint	3	5	12	20	12	20		
<b>Age of the mother</b>									
11	<25 years	2	3.33	13	21.67	9	15	1.03 (df=4)	0.904 NS
12	26-30 years	2	3.33	11	18.33	13	21.67		
13	≥31 years and above	1	1.67	4	6.67	5	8.33		
<b>Mother's education</b>									
14	No formal education	0	0	0	0	0	0	11.34 (df=6)	0.078 NS
15	Primary school	2	3.33	9	15	5	8.33		
16	High school	2	3.33	11	18.33	11	18.33		
17	Higher secondary	1	1.67	2	3.33	10	16.67		
18	Graduate and above	0	0	6	10	1	1.67		

<b>Working status of mother</b>									
19	Working	5	8.33	26	43.33	17	28.33	9.04 (df=2)	0.011* S
20	Non working	0	0	2	3.33	10	16.67		
<b>Family income</b>									
21	5000-10000	4	6.67	12	20	6	10	9.64 (df=4)	0.047* S
22	10001-15000	1	3.3	16	26.67	18	30		
23	>15001	0	0	0	0	3	5		
<b>Source of health information</b>									
24	Newspaper, books, posters	0	0	2	3.33	0	0	2.48 (df=4)	0.647 NS
25	Relatives, friends Neighbours	4	6.67	22	36.67	22	36.67		
26	Health care professionals	1	1.67	4	6.67	5	8.33		
<b>Board of school of the child</b>									
27	State board	1	1.67	3	5	3	5	1.67 (df=6)	0.948 NS
28	Matriculation	3	5	18	30	16	26.67		
29	CBSE	1	1.67	7	11.67	7	11.67		
30	ICSE	0	0	0	0	0	0		
31	IGSE	0	0	0	0	1	1.67		
<b>Mode of online class attained</b>									
32	Smart phone	4	6.67	24	40	26	43.33	5.71 (df=4)	0.222 NS
33	Laptop	1	1.67	4	6.67	0	0		
34	Tablet	0	0	0	0	1	1.67		
<b>Source of internet connection</b>									
35	Mobile data	5	8.33	27	45	26	43.33	0.18 (df=2)	0.910 NS
36	Broad band	0	0	1	1.67	1	1.67		
<b>Number of hours of classes per day</b>									
37	1 hour	0	0	0	0	0	0	1.77 (df=2)	0.412 NS
38	2 hours	1	1.67	13	21.67	9	15		
39	3 hours	4	6.67	15	25	18	30		
<b>Frequency of evaluation conducted by the school</b>									
40	Daily	0	0	0	0	2	3.33	5.85 (df=6)	0.440 NS
41	Weekly	1	1.67	7	11.67	6	10		
42	Monthly	4	6.67	13	21.67	15	25		
43	Termly	0	0	8	13.33	4	6.67		
<b>Number of home task given daily</b>									
44	One	0	0	7	11.67	5	8.33	9.18 (df=4)	0.057 NS
45	Two	1	1.67	11	18.33	17	28.33		
46	Three	4	6.67	10	16.7	5	8.33		
<b>Duration of online class per subjects</b>									
47	30 Min/subjects	1	1.67	7	11.67	4	6.67	0.819 (df=2)	0.640 NS
48	45 min/subjects	4	6.67	21	35.0	23	38.33		
49	60 min/subjects	0	0	0	0	0	0		
<b>Break time in between the classes</b>									
50	5 Minutes	4	6.67	20	33.33	21	35	0.748 (df=4)	0.945 NS
51	10 Minutes	1	1.67	6	10	5	8.33		
52	15 Minutes	0	0	2	3.33	1	1.67		

\*p<0.05 significant, \*\* p<0.01 and \*\*\*p<0.001 highly significant.

## CONCLUSION

Most of the health problems are preventable or controllable if it is anticipated or recognized. Prevention and control of health problems needs education and protection from stressors. The screen time nearly doubled during the pandemic. The pre-schoolers are the age group who are in need of care for all their self-care activities, despite of the complete dependence for attending the online classes. So the mothers stress is also exemplified. Parental stress and parenting styles may be modifiable risk factors to promote children's wellbeing during the ongoing pandemic.

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## CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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