

CHILDREN IN COVID-19
LOCKDOWN:
A STUDY ON IMPACT OF
SCHOOL CLOSURES ON
PHYSICAL ACTIVITY AND
LIFESTYLE OF CHILDREN AND
ADOLESCENTS IN INDIA.

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INTRODUCTION

- In response to Covid-19 outbreak, almost the entire world went into lockdown, given the time-period or occurrence being different or same.
- WHO declared SARS-CoV-19 as a pandemic and all the nations underwent restrictions considering stay-at-home order.
- Like any other nation, the first step India took to fight the pandemic was to announce a nationwide lockdown; shutting down of all commercial and non-commercial places immediately.
- People were asked to stay at home and movement outside was strictly restricted.

INTRODUCTION

- When people are suddenly taken out of their routine and asked to just stay at home for an indefinite period, their routine, habits, mind, and bodies are disturbed. Any sudden change is a shift from their comfort zone to a different dimension which eventually starts affecting the body and mind.
- As we talk about the influential property of lockdown on individuals, one of all immensely affected categories is school going children. A child adapts going to school at a very small age and realizes that going to school is part of his/her life.
- In the school age, a child has a broader vision, a perspective mind, and an astonishingly high energy level. **The Telegraph, UK published an article that states** “Children have energy levels greater than endurance athletes.” It was found that children not only have fatigue-resistant muscles but recover very quickly from high-intensity exercise - even faster than the well-trained adult endurance athletes.

INTRODUCTION



Schools being closed and implementation of stay-at-home order has restricted their physical activity and energy usage levels leading to sedentary lifestyle, mental boredom, reduced brain activity and, excessive use of internet, TV etc.



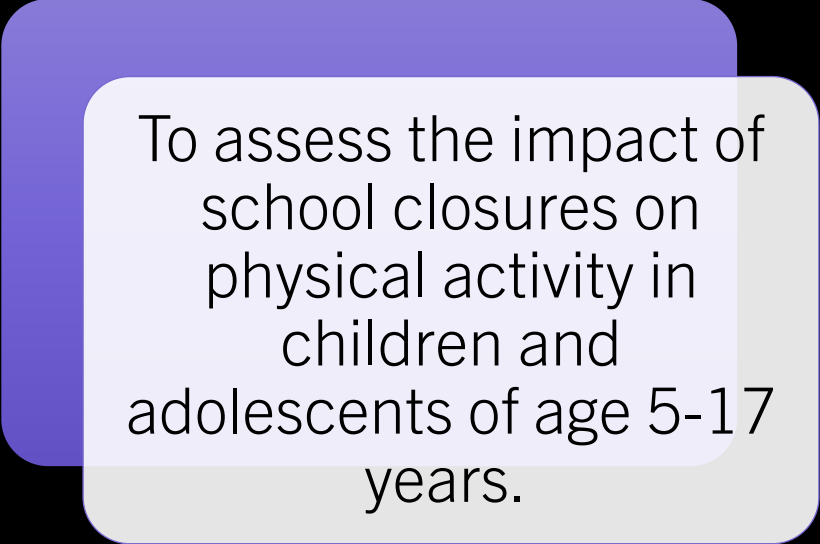
Although, the school closure is been implemented to help reduce spread of infection, specially to children who are one of the vulnerable populations to risk.



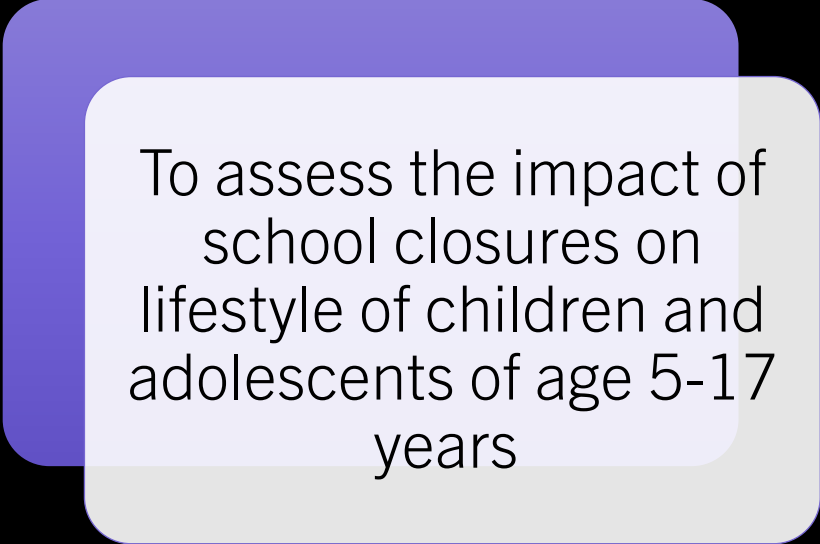
Not only the potential threat of infection in Children & Adolescents (5-17 years) is more, but also the vaccine availability for this age group is not foreseen.



However, this doesn't deny the potential impact and threat to required mental and physical growth of the growing age population.



To assess the impact of
school closures on
physical activity in
children and
adolescents of age 5-17
years.



To assess the impact of
school closures on
lifestyle of children and
adolescents of age 5-17
years

AIMS & OBJECTIVE

REVIEW OF LITERATURE

RESEARCH METHODOLOGY

STUDY DESIGN: Non-Experimental Descriptive, cross-sectional study

STUDY POPULATION: School going Children & Adolescents (5-17 years of age)

TARGET RESPONDENTS: School going children & Adolescents (5-17 years of age) & Parents/Guardians of the Children & Adolescents (5-17 years of age)

STUDY DURATION: 1 month – 30th May 2021 to 30th June 2021.

SAMPLING TECHNIQUE: Non-Probability convenient sampling.

SAMPLE SIZE: 125, out of which 78 respondents were Parents and 47 responses were from Children & Adolescents

RESEARCH METHODOLOGY

The study is based on non-experimental descriptive survey approach using convenience sampling technique

An online survey, using a google form in Hindi and English, was conducted involving parents/guardians as the respondents of the survey, to fill the survey on behalf of their children or even children themselves.

Written consent was taken from respondents willing to participate in the survey and no information on identity was taken.

The form included simple Yes or No questions, Multiple Choice Questions, Check boxes, and open-ended question required to be filled for details timed before lockdown (regular offline school), & during lockdown (post shutdown of schools).

125 out of 139 responses were taken into consideration as the rest were excluded due to incomplete data.

The sample population was further grouped into two; 5-12 years & 13-17 years of age.

RESEARCH METHODOLOGY

INCLUSION CRITERIA:

- Parents of school going children & children willing to participate in the survey
- Children and Adolescents of age 6-18 years enrolled in a full-time school.

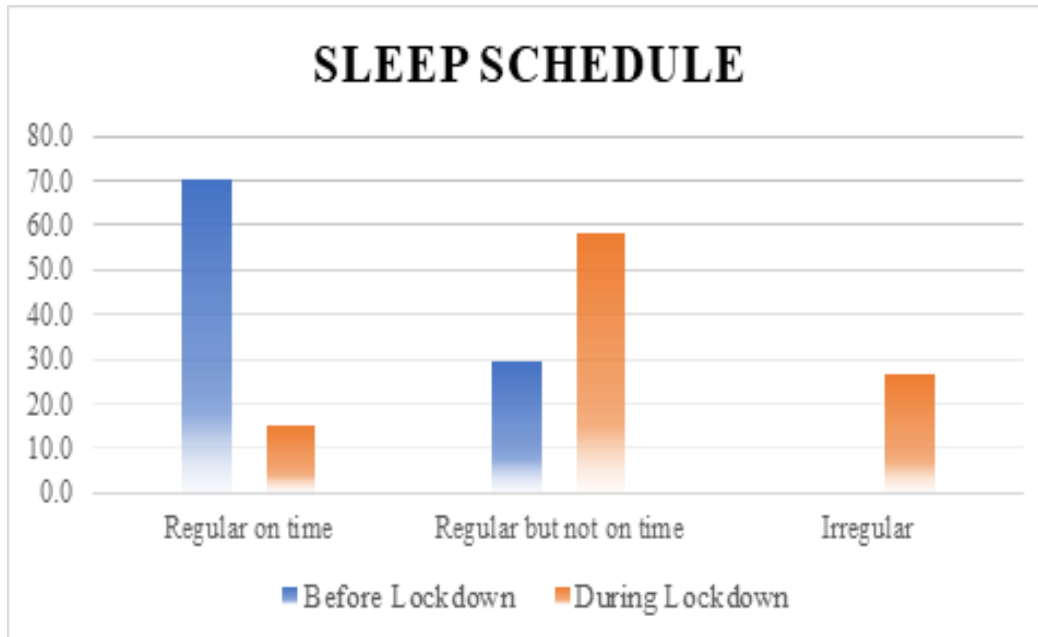
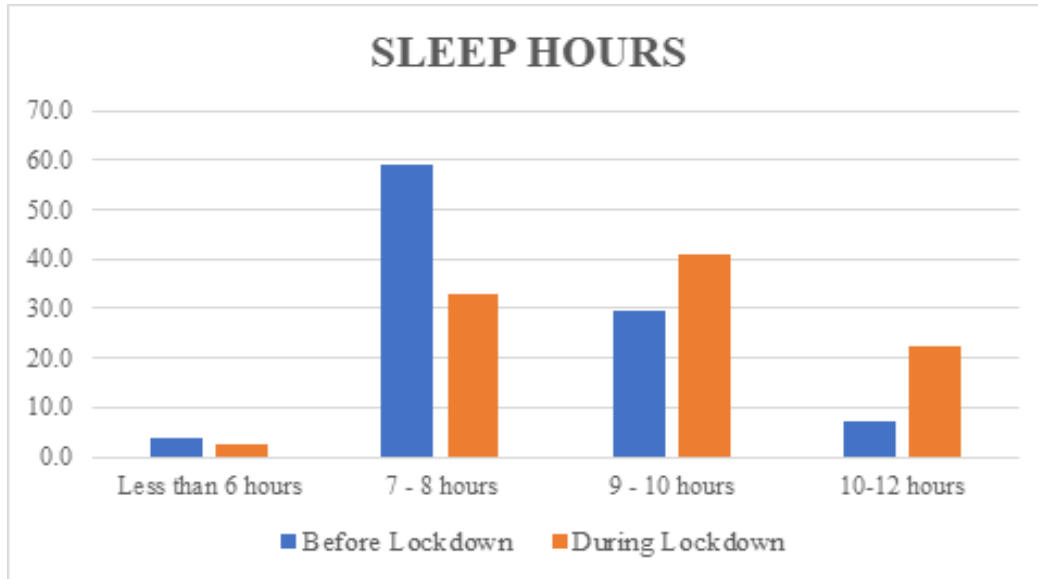
EXCLUSION CRITERIA:

- Parents or children unwilling to participate in the survey.
- Parents of children of age <5 years & >17 years of age
- Incomplete data given by respondents

**RESULTS
&
DISCUSSION**

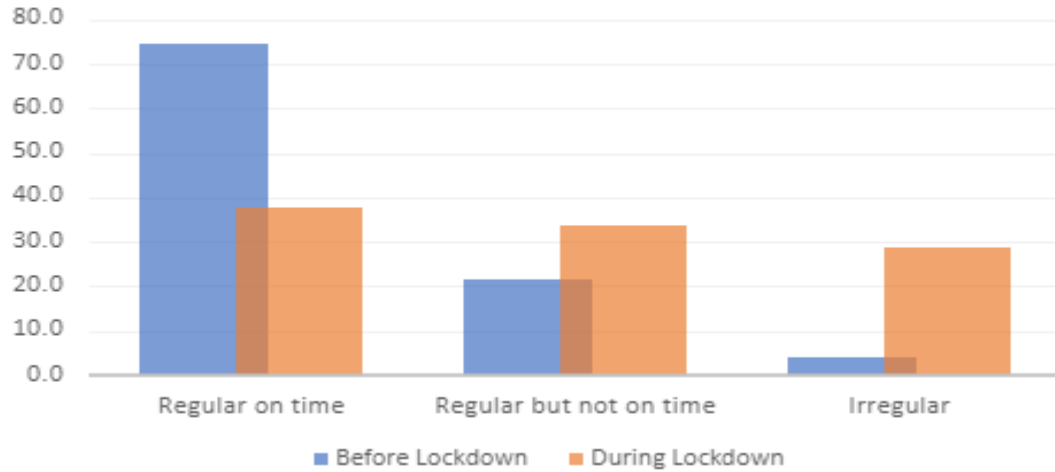
DEMOGRAPHICS		
Characteristics	Frequency	Percentage
Age		
13-17 years	48	38.4
5-12 years	77	61.6
Gender		
Female	67	53.6
Male	56	44.8
Prefer not to say	2	1.6
Environment		
Rural	12	9.6
Sub-urban	19	15.2
Urban	94	75.2

DEMOGRAPHICS		
Characteristics	Frequency	Percentage
Siblings		
Yes	83	66.4
No	42	33.6
Family Composition		
Lives alone/in hostel/away from home	1	.8
Lives with both parents	51	40.8
Lives with joint family (cousins, relatives etc)	17	13.6
Lives with parents and grandparents	54	43.2
Lives with single/separated parent	2	1.6
Long term Illness		
Yes	3	2.4
No	122	97.6

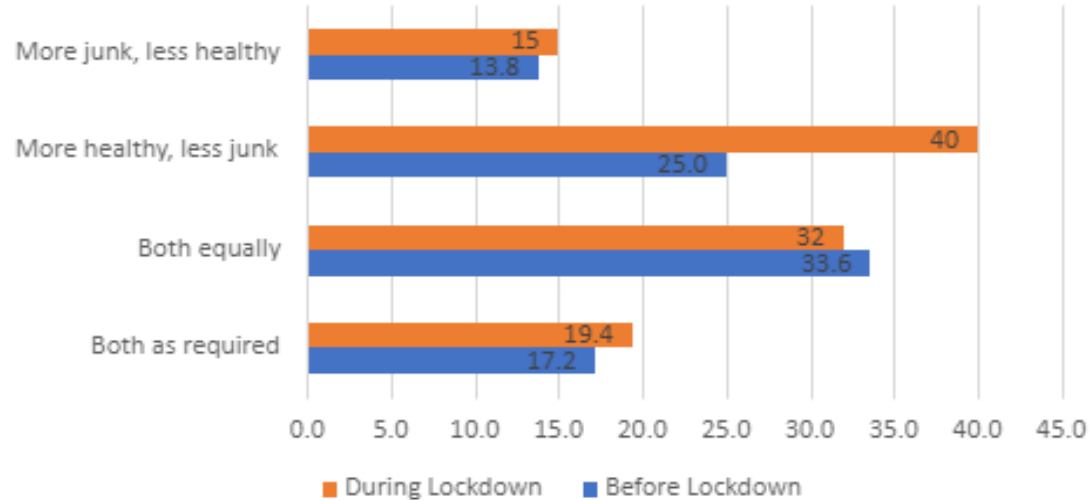


- As the data suggests not even a single child had regular sleep pattern ever since lockdown, which means all the sample children had been sleeping on random, off beat time.
- Almost 85% of children had disrupted sleep pattern, which means untimely sleeping for longer hours during lockdown time which in turn resulted into 45% of the sample population sleeping for 9-10 hours whereas
- Before lockdown 70% of the sample were regular in their sleep schedule.
- Studies suggest that irregular sleep pattern as a lifestyle in growing age has effects on mental and physical growth of children; irritation, lower energy levels, gastrointestinal issues etc can be seen.

Eating Pattern

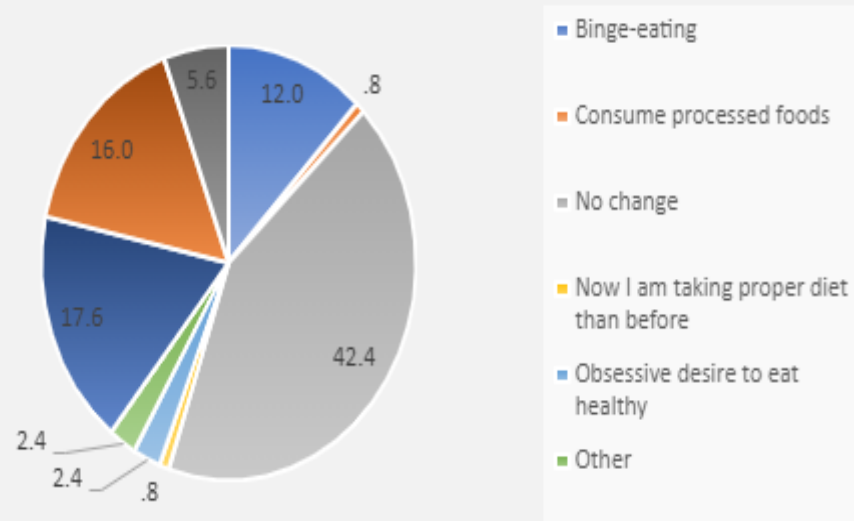


Food Preferences

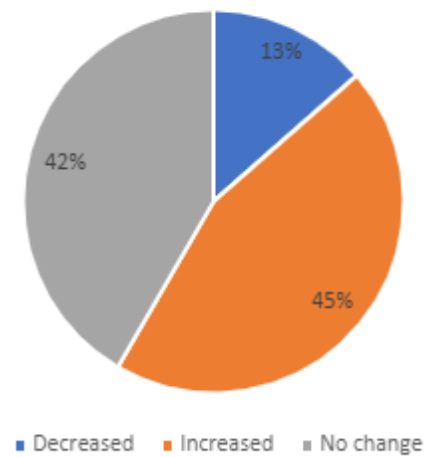


- The data shows 74.4% of the sample population had regular; fixed meal schedule, eating pattern before lockdown which decreased by approx. 37% during lockdown.
- It also shows that before lockdown, a bare minimum of 4% population were irregular which increased to almost 30% during lockdown.
- On the other hand, children were more likely to prefer healthy food over junk when asked about food preferences during lockdown.
- The preference of healthy food increased from 25% before lockdown to 40% during lockdown, possible side benefit of living in home confinement

Eating Habits During Lockdown

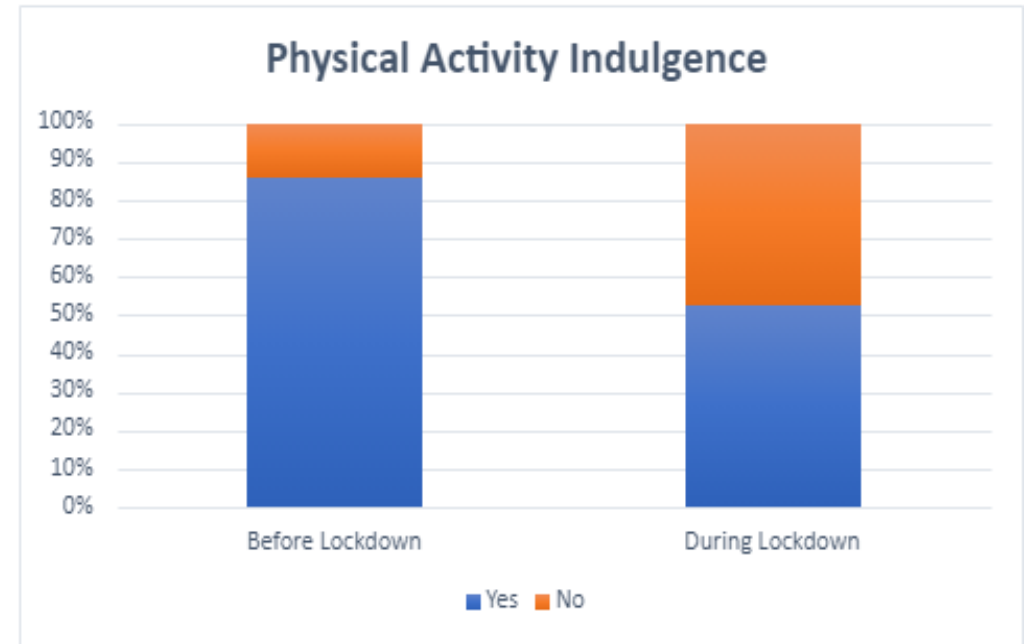


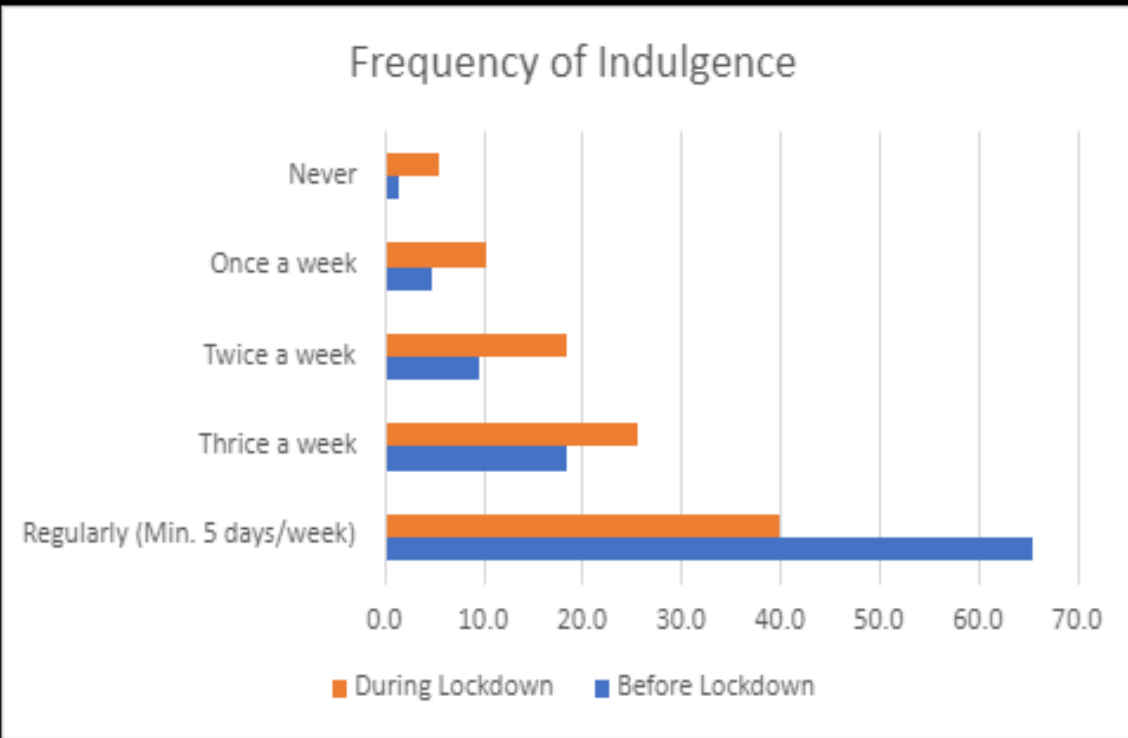
Appetite Change



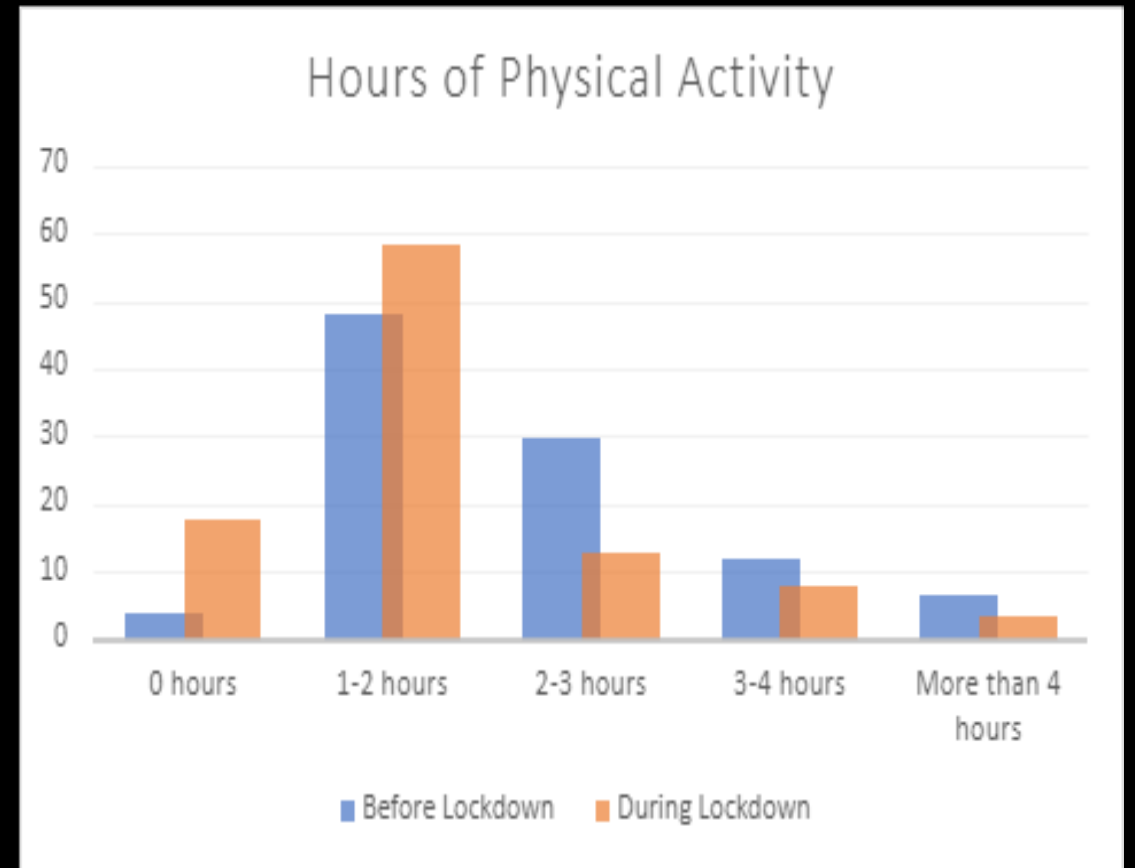
- The data shows no effect in 42.4% of children when asked about experiencing any eating disorders during lockdown. Although a significant population showed over-eating and snacking at night as a newly acquired habit in lockdown.
- Possible reason of an increase in appetite of 45% of the children of sample population during lockdown could be the disrupted sleeping pattern, snacking on junk, kuchisabishi; a Japanese word for boredom eating, influence of pampering of grandparents etc.

- When asked about indulgence of children in physical activity before and during lockdown, 85.6% of children were indulged in daily physical activity before lockdown which decreased to 52% during lockdown.
- Possible reason could be the change of not having a companion or siblings to perform physical activity (or play) with during lockdown

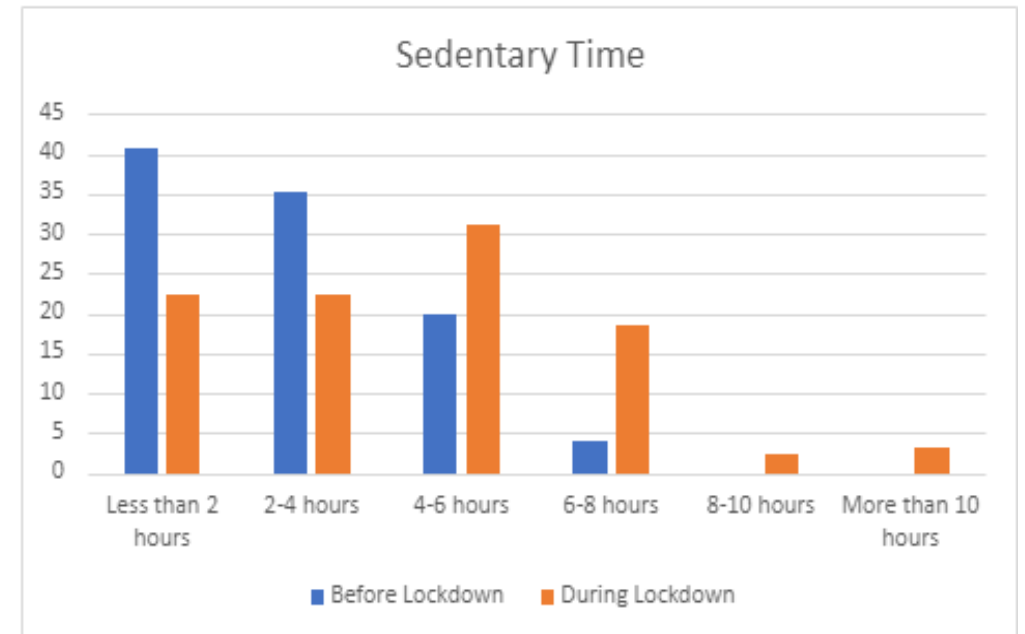
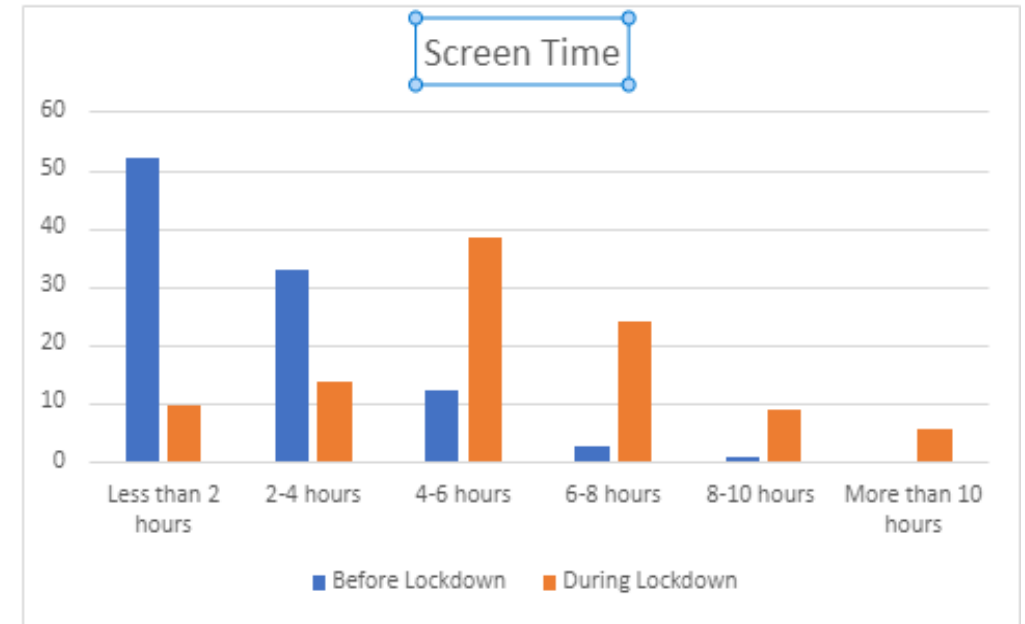


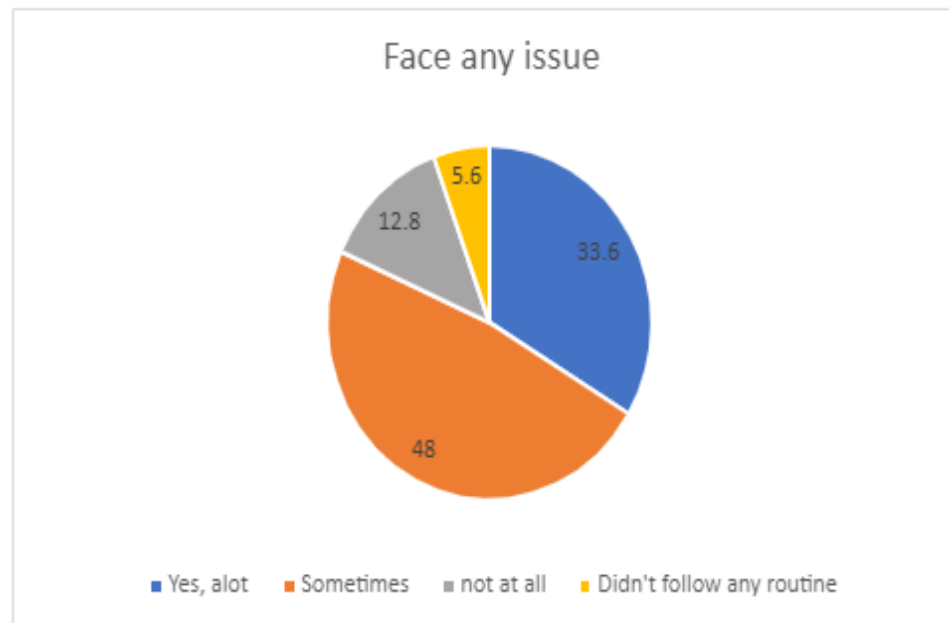
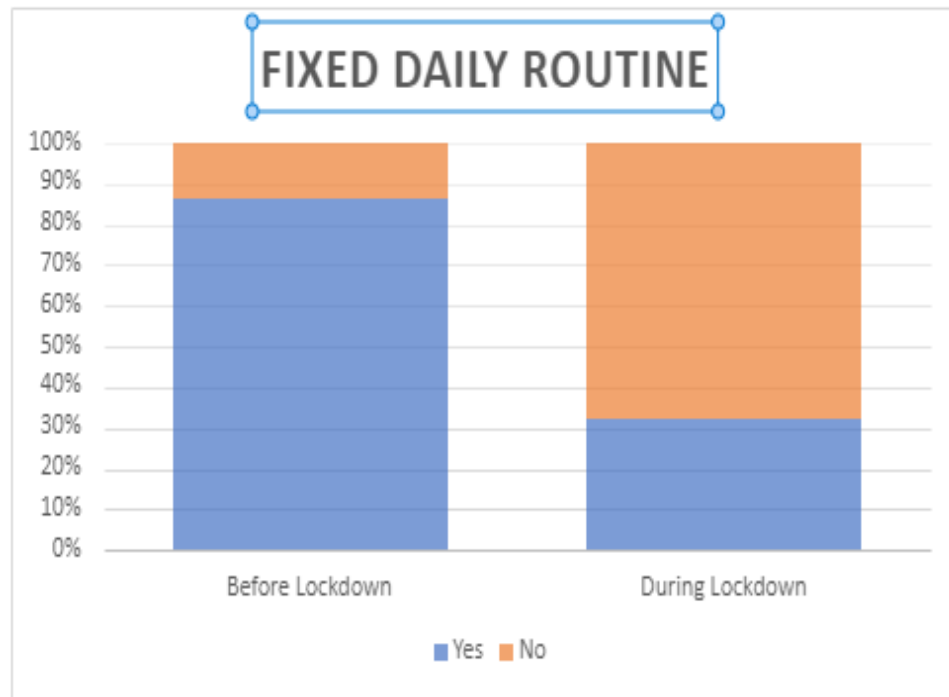


Children participating in regular physical activity that is Min 5 days/week, reduced to 40% from 66%, Earlier before lockdown children spent more time playing or doing other physical activities.



- Before lockdown, 41% of the children spent less than 2 hours of their day sitting or lying, not including screen time whereas during lockdown 31% of the population spent 4-6 hours doing the same.
- Other than the time spent sitting/lying down, the screen time of 62% of children varied between 4-8 hours a day.
- This shows that at an average a major amount of sample population has sedentary time of at-least 8 hours a day.
- Researches have proven the effects of sedentary lifestyle on physical health and mental well-being from time and again.
- Studies have shown direct association of sedentarism with obesity and diabetes, not to mention Cardiovascular diseases especially in women. Sedentary lifestyle has been a part of general population in India for more than a decade now, and it has been developing ever since





- Before lockdown, a pre-pandemic era is what they say, 86% children had a fixed daily routine; sleep schedule, meal schedule, going to school, playing, studying, etc.
- However, during lockdown it decreased to 36%.
- Children had trouble following routine almost always and are struggling every day like a see-saw between missing school and attending online classes.

DISCUSSION (CONT..)

- In the open remarks section, 46 responses were received and the most common things the respondents complained about were :
 - ✓ Mood swings and irritation &
 - ✓ Mobile addiction
- One of the response from a parent : "Disobedience, mobile addiction though trying to control screen time.. Due to schedule of working parents , gives screen time to keep her happy, sad about not playing with friends and lack of outdoor activities, unable to be with grandparents for a year or more affected her development - confidence level, though five years she was a confident child with leadership qualities as per her school Principal and teachers, due to lockdown her energy levels, confidence, mingling nature , childish nature affected, talks more like adults Now being with parents listening to parents all the time...hope these inputs help your dissertation, something productive comes out this survey to the society as well, all the very best."

RESPONSES - OPEN REMARKS

Some of the responses when asked about sharing any good or bad changes experienced in lockdown.

*"Now I can prepare my own snacks, happy about it
Though get bore many time as it's long time being at home"*

*"Lost interest in study, started playing online games.
Good part was we could spend more time with each other, and
talk about various things, play together in all had a good family
time."*

*"Acquired interest in playing chess. He is watching
chess learning videos and improved the game a
lot."*

*"Over all a depressive behaviour due to not able to meet
friends go out chill and only stay indoors .Sometimes a
rebellious behaviour due to not being able to move out
and around."*

*"My kido started asking for food all the time...
And he started talking a lot.."*

*"Increase in household
activities"*

*"Became cranky
and stubborn"*

CONCLUSION

- There is no doubt that pandemic led school closures & home confinement disrupted routines and have come in the way an individual function. From waking up in the morning to going to sleep at night, every activity has been turned upside down.
- In these tough times, the growing age population has been affected on a large scale. Their vulnerability and level of understanding is different from adults, making them feel disoriented & more susceptible to damage.
- In such times, there is a pressing need to give attention to school going children. Parents, being the first point of contact for their children not only need to help keep up their child's daily routine and physical activity but also help develop their child's understanding of the situation by maintaining conversations and addressing their issues.

THANK YOU



Have a nice day!