

Outline

- +Introduction
- +Language and Speech Impairment
- +Behavioral Challenges
- +Child Abuse and Neglect
- +Conclusion

Introduction

- *Pandemic first reported in Wuhan, China in December 2019
- *Virus is an enveloped single-stranded RNA
- **+**Transmissions
 - + Droplets
 - +Contact
 - +Aerosol
- +By March 2020 most of the world was shutdown.
- +January 17th, 2021: over 93 million people infected, and 2 million lives claimed

(Adhikari et al., 2020) (Ochani et. al., 2021)

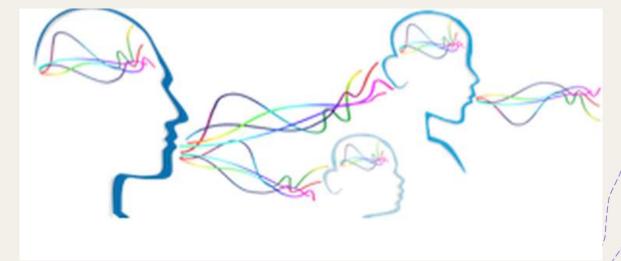
Research Question

+What affects did quarantine and isolation due to the COVID-19 pandemic have on child and adolescent lives?

Language and Speech Impairment

Effect on Verbal Communication

- +2 ends of speech communication:
 - +Intelligibility
 - +Vocal Effort



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+Wearing masks = decrease in intelligibility and increase in vocal effort

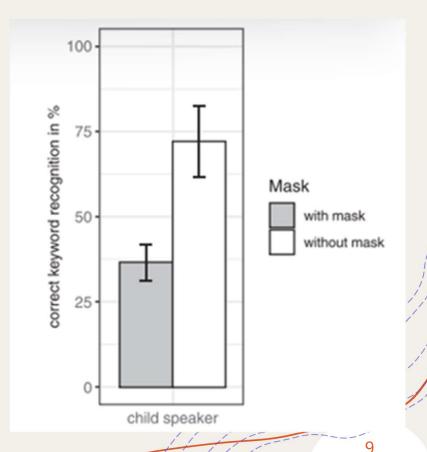
(Ford Baldner et al., 2015) (Bing.com)



How do Masks affect Speech?

- +Reduced speech intelligibility ->
 misunderstanding, frustration, and loss of interest
- +Talker wearing a mask:
 - + Few keywords recognized accurately (37% correct)
- +Talker not wearing a mask:
 - + Recognized 72% correctly

Figure 1. Average intelligibility scores for child talkers in conditions with and without a face mask. (Truong & Weber, 2021)

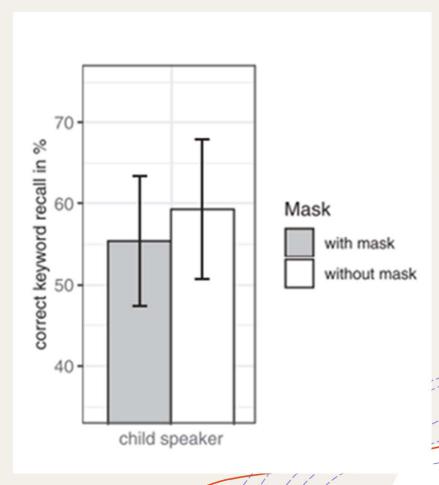


(Truong & Weber, 2021)

Affect on Recall

- *Talker wearing a mask:
 - +Listener recalled 55.4% correctly
- +Talker not wearing a mask:
 - + Listener recalled 59.3% correctly
- +p=0.0003
- +Results: listener performance was worse when talker was wearing a mask

Figure 2. Average keyword recall scores in child speaker in conditions with and without a face mask. (Truong & Weber, 2021)



(Truong & Weber, 2021)

Which Mask is Best?

- + Speech Intelligibility compared to unmasked condition:
 - + Surgical/medical = 12% less
 - +N95 = 13% less
 - + Fabric = 16% less
- Listening Effort compared to unmasked condition:
 - +Surgical/medical = 11% more difficult
 - Fabric = 12% more difficult
 - N95 = 13% more difficult
- Best mask = Medical/Surgical or N95

Behavioral Challenges

Overview

- +Children became less physically active and had fewer social interactions
- +Lifestyle changes and psychosocial stress → emergence of behavior problems
- +Focuses:
 - + Parenting Style
 - +Sleep Disturbance
 - +Gaming Behavior

(Oliveira et al., 2021)

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Parenting Style

Variable	Low Stress	High Stress	Statistics
	Mean Range	Mean Range	р
Is Sad	186.94	261.49	0.000
Disobeys	184.14	263.84	0.000
Fights with Siblings	192.42	256.90	0.000
Is anxious/nervous	178.50	268.56	0.000
Screams	178.49	268.57	0.000
Wants to sleep in my/our bed	196.54	253.45	0.000
Shows dependent behavior	193.44	256.04	0.000
Shows defiant behavior	176.43	270.30	0.000
Once asleep, he/she wakes up confused in the middle of the night	207.01	244.67	0.001
Has nightmares	206.18	245.37	0.001

+2 Types:

- + Authoritarian Parenting Style
- + Authoritative Parenting Style

(Vargas Rubilar et al. 2022)

Sleep Disturbance

+Measured using the Sleep Disturbance Scale for Children (SDSC)

,	Variable	Authoritative (n=109)	Authoritarian (n=107)	Control (n=113)	р
	Disorders of initiating and maintaining sleep	15.01	18.26	15.46	<0.000
	Sleep breathing disorders	4.14	5.20	4.48	<0.000
	Disorders of arousal/nightmare	4.08	4.51	4.02	0.0037
	Sleep wake transition disorders	10.21	12.95	10.26	<0.000
	Disorders of excessive somnolence	6.94	8.17	7.86	0.018
	Sleep hyperhidrosis	3.42	4.63	3.36	<0.000

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Gaming Behavior

+Measured using the Game Addiction Scale

/				
Variable	Authoritative (n=109)	Authoritarian (n=107)	Control (n=113)	р
Salience	2.88	3.16	2.55	0.006
Tolerance	2.58	2.97	2.35	0.004
Mood modification	1.91	2.18	1.91	0.323
Relapse	1.89	2.27	1.80	0.006
Withdrawal	2.08	2.50	1.84	0.002
Conflict	1.88	2.32	1.65	0.001
Problems	1.54	1.86	1.54	0.021

(Oliveira et al., 2021)

Productive Interventions

- **+**Educating Parents
 - +Parenting styles
 - +Parental stress coping
- +Reintroducing routines

Child Abuse and Neglect

4 Main Types of Child Abuse

- 4Physical -> using physical force that can/does result in harm to the child
- +Sexual → involvement of child in sexual activity that he/she does not fully comprehend and cannot give informed consent to
- +Emotional/Psychological → isolated or patterns of failure of parent/caregiver to provide an appropriate and supportive environment
- +Neglect → failure of parent/family members to provide for development and well-being of the child

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Pathways

- +3 pathways linking pandemics to violence:
 - +Economic Insecurity and Poverty-Related Stress
 - +Quarantines and Isolation
 - +Disaster and Conflict-Related Unrest and Instability

(Peterman et al., 2020)

Economic Insecurity and Poverty-Related Stress

- +Poor coping strategies -> triggers conflict and abuse
- +Parental unemployment
 - +Inc. in female unemployment = dec. in abusive behaviors
 - +"Male Backlash"
- +Unemployment and reduced levels of income → increases in incidences and frequency of abuse

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Quarantines and Isolation

- +Stressful for parenting with existing vulnerabilities
- +Abuse magnified because of school closures, stress, fear and uncertainty
- +Increased day-to-day contact
- +Types of isolation:
 - +Social Isolation
 - + Functional Isolation
 - + Physical/Geographical Isolation

(Peterman et al., 2020)

Disaster and Conflict-Related Unrest and Instability

- +Increases in child abuse during natural disasters
- +Lessons from abuse during natural disasters can be applied to pandemics
- +Both result in breakdown of societal infrastructure
- +Forms of abuse detection are lost
- +Management: retraining educators and healthcare workers; more support services post-pandemic

Conclusion

+Importance:

- *Support for those disadvantaged postpandemic
- +Productive interventions in place for future pandemics
- +Future Research:
 - +Long-term studies on the effects of the pandemic

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Questions?

Full Thesis Topics

- +Language and Speech Impairment
- +Social Development
- +Behavioral Challenges
- +Academic Performance
- +Mental Health
- +Child Abuse and Neglect
- +Student-Athlete Experiences