

# The Impact of COVID-19 on Rehabilitation Practice: A Clinician Perspective

**Raiya Feinberg, SPT**  
**Heather McGovern, SPT**



Cassidy Plasticity Lab

# Outline

1. COVID-19
2. Purpose
3. Methods
  - a. Interviews
  - b. Post Interviews
4. Data Analysis
5. Our Model
6. Q/A



Cassidy Plasticity Lab

# COVID-19: A Global Pandemic <sup>1</sup>

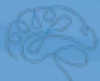
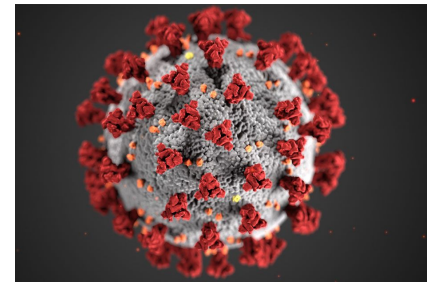
Respiratory disease caused by SARS-CoV-2, a new coronavirus.

Spreads person to person via respiratory droplets produced by infected persons (coughs, sneezes, talks).

Infected persons may/may not be symptomatic, with symptoms ranging from mild to severe.

Populations at highest risk include adults 65 years and older and anyone with underlying medical conditions.

[Centers for Disease Control and Prevention]



Cassidy Plasticity Lab

# COVID-19: A Global Pandemic <sup>1,2,3,4</sup>

- 01/09/20 — WHO announces discovery of COVID-19 in Wuhan, China
- 01/19/20 — 1st confirmed case of COVID-19 in the US
- 03/03/20 — 1st case of COVID in NC
- 03/11/20 — WHO Declares COVID-19 a Pandemic
- 03/27/20 — NC announces first stay at home order
- **09/03/20 - 11/17/20 — Interviews conducted for study**
- 12/15/20 — UNC health administers its 1st COVID-19 vaccine
- 01/01/21 —
  - US:
    - 20 million cases; 346,000 deaths
  - Globally:
    - 83,832,334 cases; 1,824,590 deaths



# Purpose of Study

Explore the impacts of the COVID-19 pandemic on rehabilitation therapists working within the hospital setting across various domains

Psychosocial

Patient Care Delivery

Burnout

Depression

Coping Strategies

Changes Within the Work Environment



Cassidy Plasticity Lab

# Mixed Methods Study Design

## Concurrent Triangulation Design, Convergence Model

### Qualitative:

- Semi-structured interviews

### Quantitative:

- Beck Depression Inventory -2
- Oldenburg Burnout Inventory



# Study Design: Data Collection and Analysis

Semi-structured interviews



Transcription



Coding



Analyzing/Interpretation



Model



# Participant Demographic

<b>Sex</b>	<b>Male</b>	3
	<b>Female</b>	10
<b>Work setting</b>	<b>Inpatient</b>	8
	<b>Acute Care</b>	5
<b>Years in practice</b>	<b>0-5</b>	5
	<b>5-10</b>	5
	<b>10+</b>	3
<b>Clinical Field</b>	<b>OT</b>	6
	<b>PT</b>	4
	<b>SLP</b>	3
<b>Age (y.o.)</b>	<b>20 - 30</b>	3
	<b>31 - 40</b>	7
	<b>41+</b>	3
<b>Total</b>		13



# Qualitative Interviewing

Zoom / WebEx, 30 - 45 minutes

## Example Questions

- What types of supports, if any, have you utilized to manage the changes you've experienced?
- Describe some of the challenges you've encountered.
- How has COVID-19 changed the way you communicate with patients and their families?



Cassidy Plasticity Lab

# Quantitative Measures

## Beck Depression Inventory (BDI)

21 items, 4 point scale (0-3) (63 total points)

Sadness

Fatigue

Guilt

Irritability

Pessimism

Sleeping Patterns

Loss of Pleasure

Self-Dislike

Agitation

Indecisiveness



Cassidy Plasticity Lab

# Quantitative Measures

## Oldenberg Burnout Inventory

16 items, scored 1 - 4 (strongly agree → disagree)

### Disengagement Items

- Interest, Positive challenges, Disconnect

### Exhaustion Items

- Energy Levels, Worn out, Drained



Cassidy Plasticity Lab

# Post-Data Collection

## Steps:

- Transcription of Interviews
- Scoring of Quantitative Measures
  
- Coding the interviews
  
- Categorizing the codes
- Finding key themes
  
- Model



# Post-Data Collection Example

“I think a major sense of taking care of ourselves [therapists] was taking care of each other, and thats been, thats been a huge blow.”

**Code:** Therapist Coping - Social Support  
Therapist Appreciation for Coworkers

**Code Category:** Therapist Coping  
(social support, mental health, PA)

**Theme:** Therapist Experience



Cassidy Plasticity Lab

# Key Themes

## 1. Socio-political Climate

- a. Public perception of healthcare workers, COVID-19 state and national policies and attitudes

## 2. Institutional Climate

- a. Hospital policies, larger changes made at the institutional level

## 3. Hospital Unit Climate

- a. Differences between inpatient rehab, acute care, non-COVID, and COVID unit floors

## 4. Therapist Experience

- a. Everyday experiences and challenges faced by therapists



Cassidy Plasticity Lab

# Key Themes

Socio-political Climate	Institutional Climate	Hospital Unit Climate	Therapist Experience
Public Perception  Anticipated Clinical Changes  Positive Changes Due to COVID	Hospital Policies  COVID Testing  Interprofessional Interactions	Discharge Planning  Interpreter Use  Patient Isolation	Coping Mechanisms  Constant Changes  Therapist Appreciation for Co-Workers

# Quantitative Data Norms

## Beck Depression Inventory:

- 0-13: minimal depression
- 14-19: mild depression
- 20-28: moderate depression
- 29-63: severe depression

## Oldenberg Burnout Inventory:

- Range: 16-64
- Higher numbers indicate greater burnout

*\*Disclaimer: We are currently still reviewing the quantitative data to determine its relationship to the qualitative interviews.*



Cassidy Plasticity Lab



# Quantitative Data Outcomes

## Averages

11/13 Therapists scores indicated higher levels of exhaustion vs. disengagement on the Oldenburg Burnout Inventory.

OBI	Total	Exhaustion	Disengagement
Avg	38.6	21.2	17.38

BDI	
Avg	9.5

Higher scores (16 → 64) indicate increased burnout.

0-13: minimal depression



Cassidy Plasticity Lab

# Quantitative Data Outcomes

## Analysis by Clinical Field

Clinical Field	BDI	OBI
PT	9	37
OT	11.67	41.3
SLP	6	35.3

## Analysis by Area of Care

Setting	BDI	OBI
Inpatient Rehab	8	38.3
Acute Care	12	39.2



Cassidy Plasticity Lab

# Quantitative Data Outcomes

## Analysis by Clinician Age

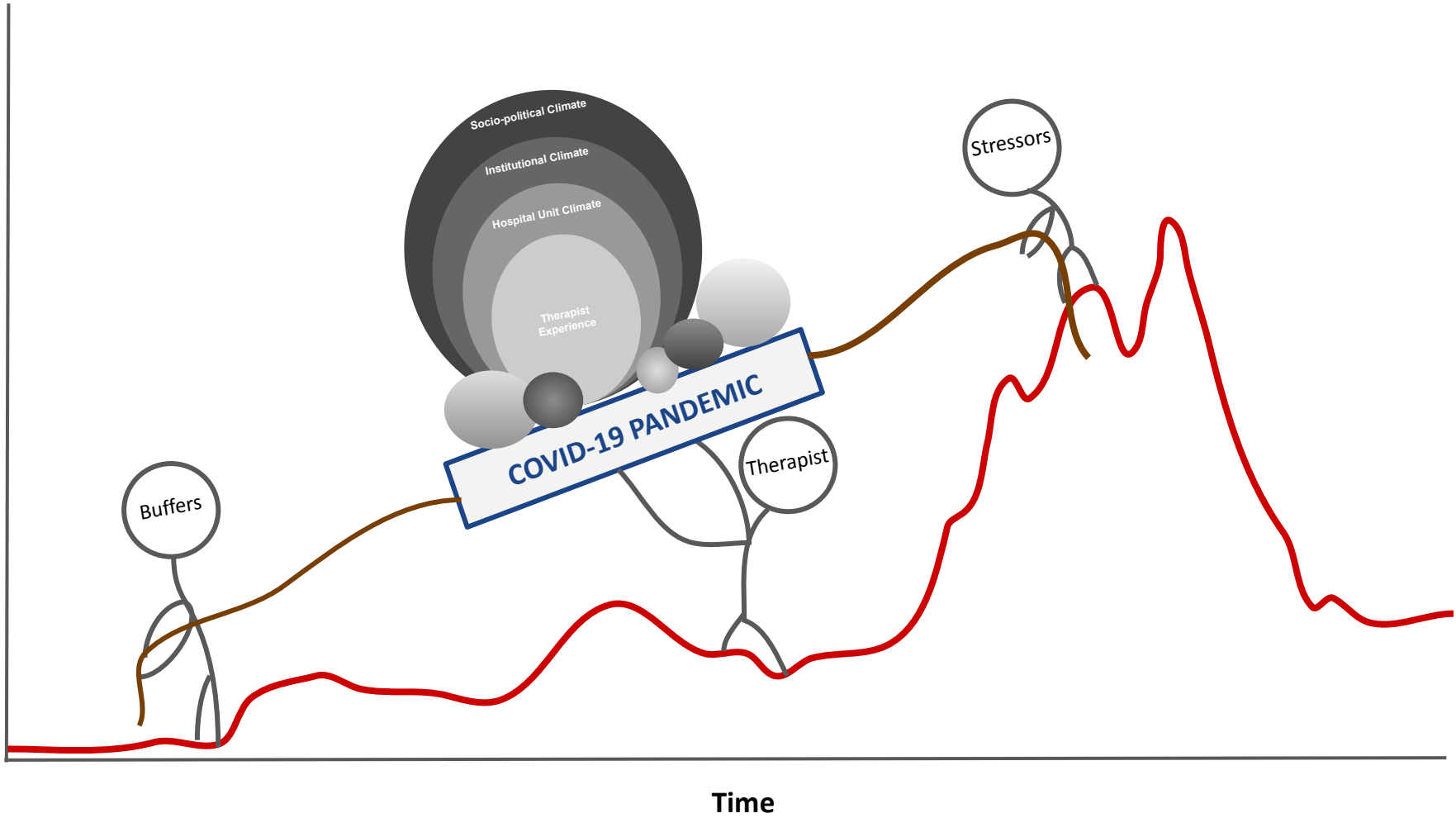
Birth Year	BDI	OBI
1970 - 1979	12.67	36.3
1980 - 1989	9.1	40.2
1990 - 1999	7.3	37

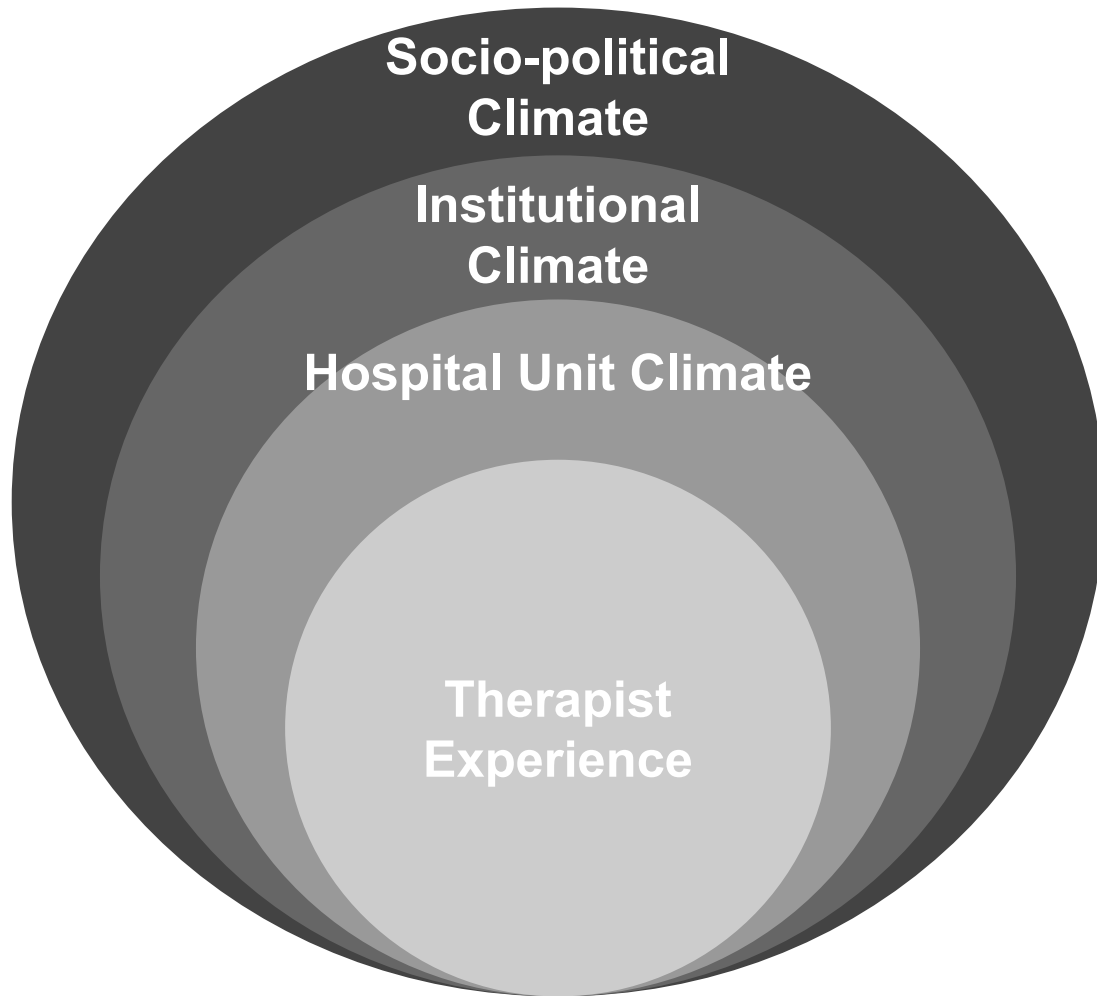
## Analysis by Sex

Setting	BDI	OBI
Male	12.3	36
Female	8.7	39.4



Daily COVID-19 Cases





# Socio-political Climate



Socio-political  
Climate

## Stressors:

- Stay at home orders/ social distancing
- Mask mandates
- Public fear
- Public misunderstanding
- “New normal”

## Buffers:

- New found appreciation for healthcare and other essential workers
- Future research & vaccines
- “New normal”

*“There’s also this sort of this kind of strange disconnect that I feel sometimes with people who don’t work in health care that, um, their day to day experience is just so different than mine is right now.”*



Cassidy Plasticity Lab

# Institutional Climate



Institutional  
Climate

## Stressors:

- Visitor restrictions
- Constant changes in policy
- Lack of testing
- Caseload changes
- PPE requirements and availability

## Buffers:

- The creation of a new “rehab best practice protocol”
- Interprofessional relationships

*“I think at this point everyone is feeling kind of resigned to this is where we are, this is what we’re doing, we’re all just kind of doing the best we can with it... And I think that’s kind of where the patients are too at this point”*



Cassidy Plasticity Lab

# Hospital Unit Climate

Hospital Unit  
Climate

## Stressors:

- COVID unit training
- PPE requirements
- Discharge planning
- Interpreter use
- Patient frustration/fear
- Lack of family training

## Buffers:

- Technology use
- Establishing patient/therapist rapport
- Feeling safe on COVID units

*“I do hope and wish that everyone who has never been on the COVID unit can respect what everyone, what people do there.”*



Cassidy Plasticity Lab



# Therapist Experience



Therapist  
Experience

## Stressors:

- Burnout
- Stress/anxiety
- Constant change
- Frustration with higher level administration
- PPE requirements
- Lack of testing

## Buffers:

- New found coping mechanism
- Appreciation for coworkers

*“I am acutely aware that I’m burnt out but there’s no other, it’s like everybody’s burnt out, it’s not like a novel thing and there’s just no way to avoid it because you can’t go home and not be burnt out from COVID because you go home and that’s also COVID.”*



Cassidy Plasticity Lab

# Summary

Rehabilitation therapists have dealt with constant changes, regularly adapting to new normals of patient care and standard practice during COVID-19.

Despite these major changes, therapists have adopted coping mechanisms to diminish the impacts of burnout and depression, demonstrating continued resilience of these essential workers during COVID-19 and beyond.



Cassidy Plasticity Lab

# Special Thanks

## Research Team:

Dr. Jessica Cassidy, PhD, DPT, PT

Dr. Nancy Bagatell, PhD, OTR/L, FAOTA

Susan Gisler, PT, Assistant Director of Therapy Services at UNC Hospital

Kelly Fletcher, Rehab Services Manager at UNC Hospital

Katherine Hendry, undergraduate research assistant

Ramis Chowdhury, undergraduate research assistant



Cassidy Plasticity Lab

# Q/A and Survey

Please feel free to take this time to ask any questions you may have.

Please take a few moments to answer this anonymous survey, we would greatly appreciate your feedback to guide our research moving forward.

<https://forms.gle/AZTbGkXtiAEmbj287>



Cassidy Plasticity Lab

# References

1. COVID-19 definition - <https://www.cdc.gov/dotw/covid-19/index.html>
2. us/global cases/ deaths - <https://www.ajmc.com/view/a-timeline-of-covid19-developments-in-2020>
3. NC stay at home orders- <https://governor.nc.gov/news/governor-cooper-announces-statewide-stay-home-order-until-april-29>
4. UNC covid vaccines - <https://www.unc.edu/posts/2020/12/16/unc-health-covid19-vaccines/>



Cassidy Plasticity Lab