



## INTRODUCTION

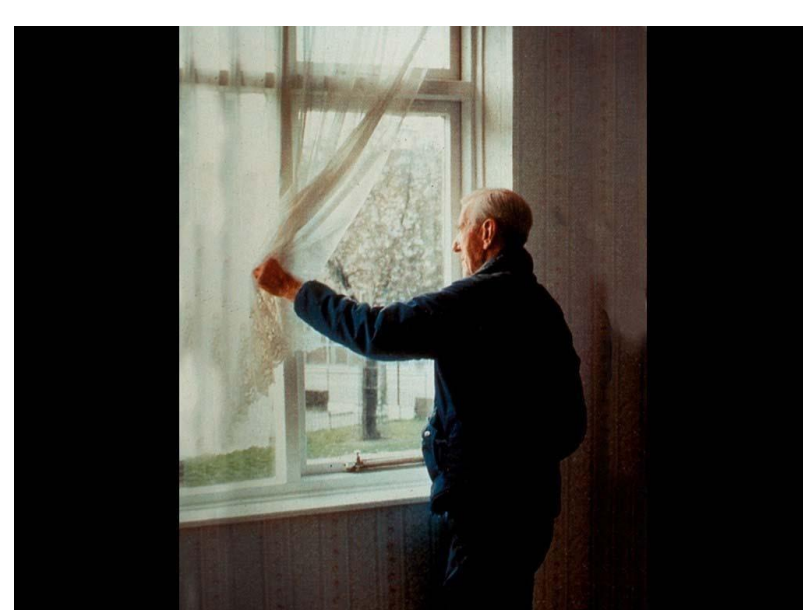
- The COVID-19 pandemic has caused many people around the world to suffer from unprecedented stress and hardships.
- Previous studies have reported that people are suffering from depression, anxiety, and stress symptoms caused by the pandemic (Kar et al., 2021).
- Emotion regulation training shows promise in helping people decrease their stress levels by way of cognitive reappraisal (Denny & Ochsner, 2014).
- Cognitive reappraisal has been shown to decrease negative affect in groups who reported using distancing strategies (Denny et al. 2014; Dicker et al., under review).

## COGNITIVE REAPPRAISAL

- Psychological distancing refers to a strategy in which you examine a particular stimulus objectively with an impartial mindset.
- Reinterpretation refers to a strategy in which you tell yourself a story to reframe the meaning of the stimulus.

### DISTANCING

"An older gentleman is pulling a curtain aside to look out his window towards a yard. The lights in his house are turned off."



### REINTERPRETATION

"This gentleman is looking outside because his wife is picking up the mail and he is excited about receiving a letter that he is expecting."

## RESEARCH OBJECTIVES AND HYPOTHESIS

- To find out if people who experience COVID-19 related stress regulate their emotions when training is received and does it ultimately lower their stress levels.
- To understand the different ways people think about stress, specifically COVID-19 related stress.
- Hypothesis:** Distancing will be more efficient than reinterpretation and it will be a better stress regulator.

## METHODS

### Participants

#### Descriptives

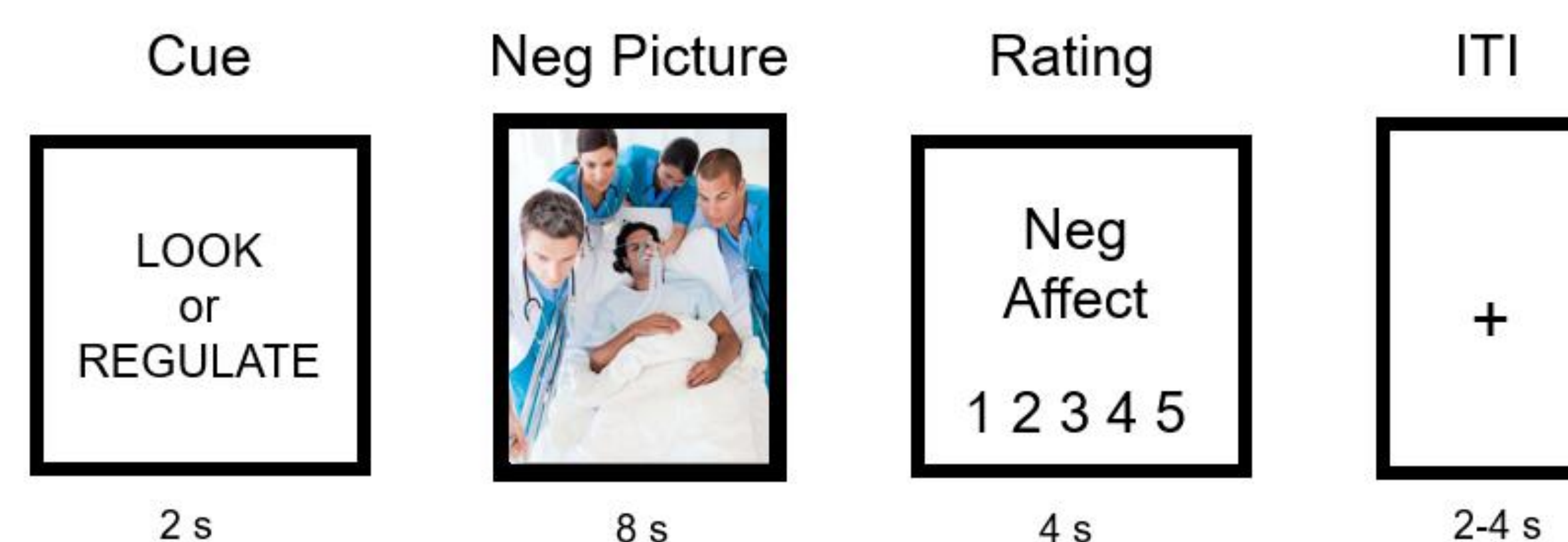
	Age	Education	Community SES	DERS-SF	PANAS Neg	PANAS Pos	CES-D	PSS	ERQ Cognitive Reappraisal	ERQ Expressive Suppression	STAI-6	Fear of COVID
Mean	43.4	16.4	5.21	45.6	12.5	17.6	18.4	18.5	29.8	14.4	10.6	19.6
Standard deviation	12.8	4.60	1.72	14.4	3.52	4.01	10.2	7.84	2.86	6.73	4.36	3.30

- All participants were healthy adults over the age of 18 who reported during the initial screener that they suffered from stress due to the COVID-19 pandemic. Participants were recruited on Prolific.
- We are aiming to recruit 80 participants and have recruited 14 so far.
- There were 11 female participants and 3 male participants.
- 12 participants indicated they were fully vaccinated and 2 reported that they were not currently vaccinated.

### Procedure

- Consent form and HIPAA
- Participant demographics and Questionnaires (age, gender, socioeconomic status (SES), race/ethnicity, DERS-SF, PANAS NEG, PSS, ERQ, etc. )
- Intervention training (participants were randomly assigned to distancing or reinterpretation group)
- 5 reappraisal tasks and 5 daily-check-ins over a period of 10 days

### Task Overview



## RESULTS

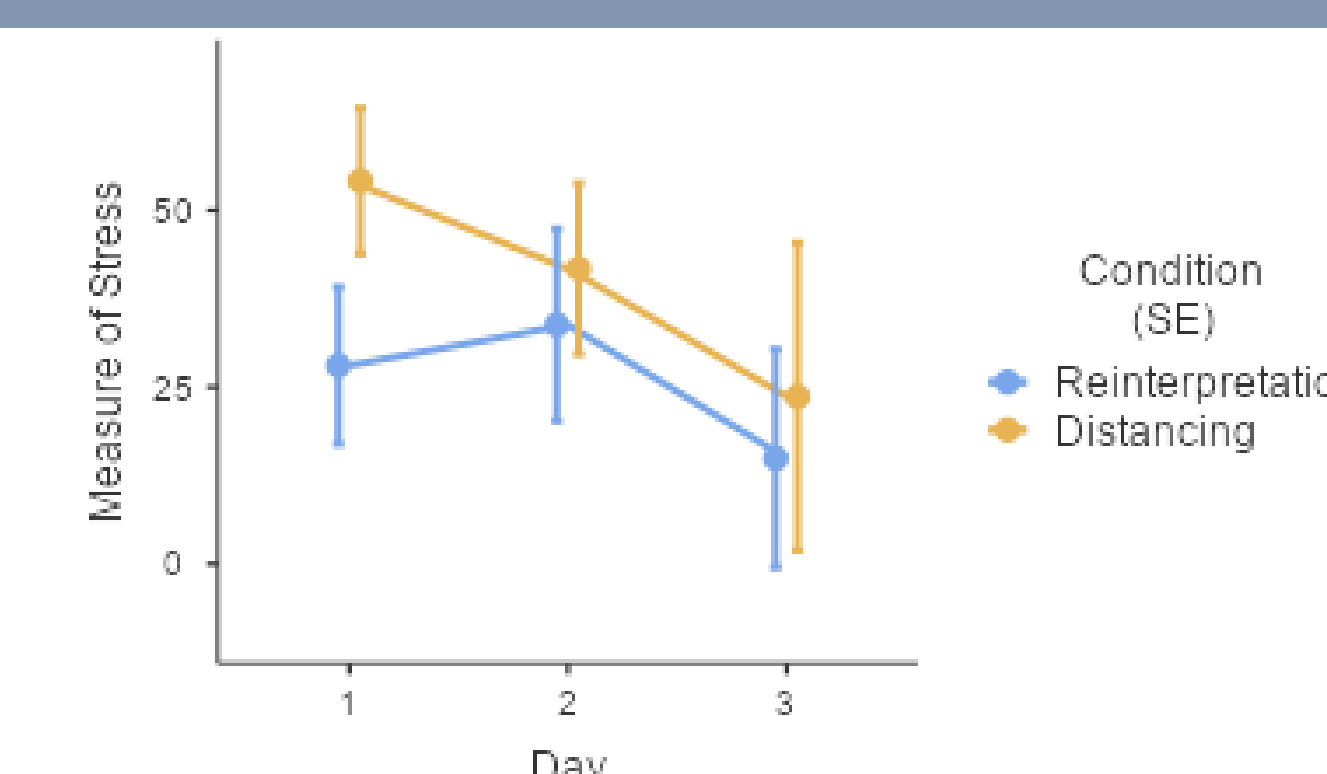
### Correlation Matrix

Correlation Matrix	Age	Education	Community SES	DERS-SF	PANAS Neg	PANAS Pos	CES-D	PSS	ERQ Cognitive Reappraisal	ERQ Expressive Suppression	STAI-6	Fear of COVID
Age	—											
Education	0.234	—										
Community SES	-0.077	0.581*	—									
DERS-SF	-0.438	0.141	0.189	—								
PANAS Neg	0.121	0.171	0.032	0.666**	—							
PANAS Pos	0.153	-0.002	-0.185	-0.320	-0.656**	—						
CES-D	0.144	0.227	-0.163	0.544*	0.888***	-0.454	—					
PSS	-0.233	0.390	0.294	0.825***	0.736**	-0.474	0.774**	—				
ERQ Cognitive Reappraisal	0.053	0.200	-0.093	-0.110	0.027	-0.183	-0.092	-0.074	—			
ERQ Expressive Suppression	-0.303	-0.354*	-0.596*	0.233	-0.204	0.183	0.109	-0.205	-0.295	—		
STAI-6	0.191	0.389	0.003	0.265	0.645*	-0.530	0.719**	0.630*	0.313	-0.259	—	
Fear of COVID	0.159	-0.344	-0.271	-0.097	0.063	-0.001	-0.062	-0.299	-0.327	-0.004	-0.172	—

Note: \* p < .05. \*\* p < .01. \*\*\* p < .001

- All significant correlations ( $p > .05$ ) were expected.
- Analysis of other dependent variables is ongoing.

### Feelings of Stress Due to the COVID-19 Pandemic



- Stress was measured on a scale from 0 to 100, 0 meaning no stress at all, and 100 meaning extreme stress.
- Interpretations are limited due to data being preliminary.

## FUTURE IMPLICATIONS

- Could possibly help many people who are highly stressed due to a pandemic or social isolation through therapies and interventions.
- If we can identify the strategies in which people best regulate their emotions, we can create more formal interventions that are tailored to the individual and situation.
- Development of mobile applications which help the user build their emotion regulation skills.

## References

Denny, B. T., & Ochsner, K. N. (2014). Behavioral effects of longitudinal training in cognitive reappraisal. *Emotion (Washington, D.C.)*, 14(2), 425–433. <https://doi.org/10.1037/a0035276>

Dicker et al., *under review*, Psychological distancing usage uniquely predicts reduced perceived stress during the COVID-19 pandemic

Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of general psychology*, 2(3), 271-299.

Kar, N., Kar, B., & Kar, S. (2021). Stress and coping during COVID-19 pandemic: Result of an online survey. *Psychiatry Research*, 295, 113598. <https://doi.org/10.1016/j.psychres.2020.113598>

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