Understanding Displacement from Hurricane Katrina; Risk Factors, Health, and Wellbeing Outcomes

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```
## -- Attaching core tidyverse packages ------------------------ tidyverse 2.0.0 --
## v dplyr     1.1.3     v readr     2.1.4
## v forcats   1.0.0     v stringr   1.5.0
## v ggplot2   3.4.4     v tibble    3.2.1
## v lubridate 1.9.3     v tidyr     1.3.0
## v purrr     1.0.2
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
## here() starts at /Users/emily/eds222/eds222-final-project
##
## Loading required package: carData
##
## lattice theme set by effectsTheme()
## See ?effectsTheme for details.
##
## corrplot 0.92 loaded
##
## Registered S3 method overwritten by 'geojsonsf':
##   method        from
##   print.geojson geojson
##
##
## Attaching package: 'geojsonio'
##
##
## The following object is masked from 'package:base':
##
##     pretty
##
##
## Suggested APA citation: Thériault, R. (2023). rempsyc: Convenience functions for psychology.
## Journal of Open Source Software, 8(87), 5466. https://doi.org/10.21105/joss.05466

## Rows: 344 Columns: 46
## -- Column specification --------------------------------------------------------
## Delimiter: ","
## chr  (3): EVENTCODEDATE, evac.state, state.most.time
## dbl (42): caseid, name_indicator, eventcode, sex, age, pre_marriagestat, cur...
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## lgl  (1): mobile
##
## i Use ‘spec()‘ to retrieve the full column specification for this data.
## i Specify the column types or set ‘show_col_types = FALSE‘ to quiet this message.
```

Introduction

As an Anthropologist, my central research focuses on the biological embodiment of environmental conditions, and how this embodiment affects overall health and wellbeing, both mental and physical. My main topics consist of the pathways and biological mechanisms in which this embodiment happens, understanding the larger circumstances causing environmental/biological stressors is becoming increasingly important. I also have interests in how environmental stressors inflict life change based on personal experience, and how these stressors can either lead to differing health outcomes. Long term, I want to examine resilience factors in this context, to understand what factors help decrease negative health outcomes in hopes of developing interventions. For the following project, I am working on the effects of natural disaster based displacement, examining risk factors for displacement and if displaced groups different in their mental and perceived overall health outcomes. As climate change is increasing the amount of natural disasters and increasing potential to induce large scale population movement (Oliver-Smith, 2009; McCarney & Kent 2020), understanding displacement from these events as a psychosocial stressor is necessary to be able to combat it and improve population health in times of uncertainty. Address risk factors of being in a displaced group also helps target interventions to those who may be more at risk.

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To attempt to answer this question, I will be working with data from the Displaced New Orleans Resident
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A growing body of work on natural disaster displacement patterns contends with the corresponding effect
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Morrow-Jones H. & Morrow-Jones C. (1991) also report a high incidence of depression and increased stres
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Analysis

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Burrows et al. (2021) was used as a reference for the analyses as preformed here. Burrows et al. implem
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Multivariate Logistic Regression

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Burrows et al. (2021) examined displacement due to landslides in Indonesia, so while there is variabili
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Welch Two Sample T-tests

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Three t-tests were also ran to determine if significant differences in mental health outcomes exist betw
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Results

Summary Tables and Figures

Table 1: Compairison of Sociodemogrpahic and Housing/Hurricane Displacement Variables Between Moved and Moved Back Groups

		Moved Away (N=94)		Moved Back (N=52)	
		N	Pct.	N	Pct.
Black	0	42	44.7	35	67.3
	NA	52	55.3	17	32.7
Hispanic	0	0	0.0	1	1.9
	NA	94	100.0	51	98.1
White	1	50	53.2	15	28.8
	NA	44	46.8	37	71.2
Level of School Completed	1	3	3.2	3	5.8
	2	8	8.5	7	13.5
	3	17	18.1	13	25.0
	4	19	20.2	13	25.0
	5	18	19.1	8	15.4
	6	28	29.8	8	15.4
	1	54	57.4	24	46.2
Employed Part-Time	0	5	5.3	3	5.8
	NA	89	94.7	49	94.2
Self Employed Full-Time	0	7	7.4	3	5.8
	NA	87	92.6	49	94.2
Self Employed Part-Time	0	3	3.2	1	1.9
	NA	91	96.8	51	98.1
Laid off from Job	0	1	1.1	1	1.9
	NA	93	98.9	51	98.1
Unemployed	0	2	2.1	2	3.8
	NA	92	97.9	50	96.2
Disabled	0	6	6.4	4	7.7
	NA	88	93.6	48	92.3
Student	0	1	1.1	1	1.9
	NA	93	98.9	51	98.1
Own Home	1	64	68.1	32	61.5
	2	30	31.9	20	38.5
	2	11	11.7	7	13.5
	3	67	71.3	32	61.5
	4	16	17.0	13	25.0
Damage to Residence	1	8	8.5	17	32.7
	2	26	27.7	25	48.1
	3	49	52.1	8	15.4
	4	11	11.7	2	3.8
Income	1	12	12.8	5	9.6
	2	15	16.0	8	15.4
	3	4	4.3	12	23.1
	4	13	13.8	8	15.4
	5	5	5.3	3	5.8
	6	6	6.4	3	5.8
	7	33	35.1	11	21.2