

# EXPLORING MECHANISMS BEHIND RESIDENTIAL SCHOOL ATTENDANCE AND ADULT DEPRESSION

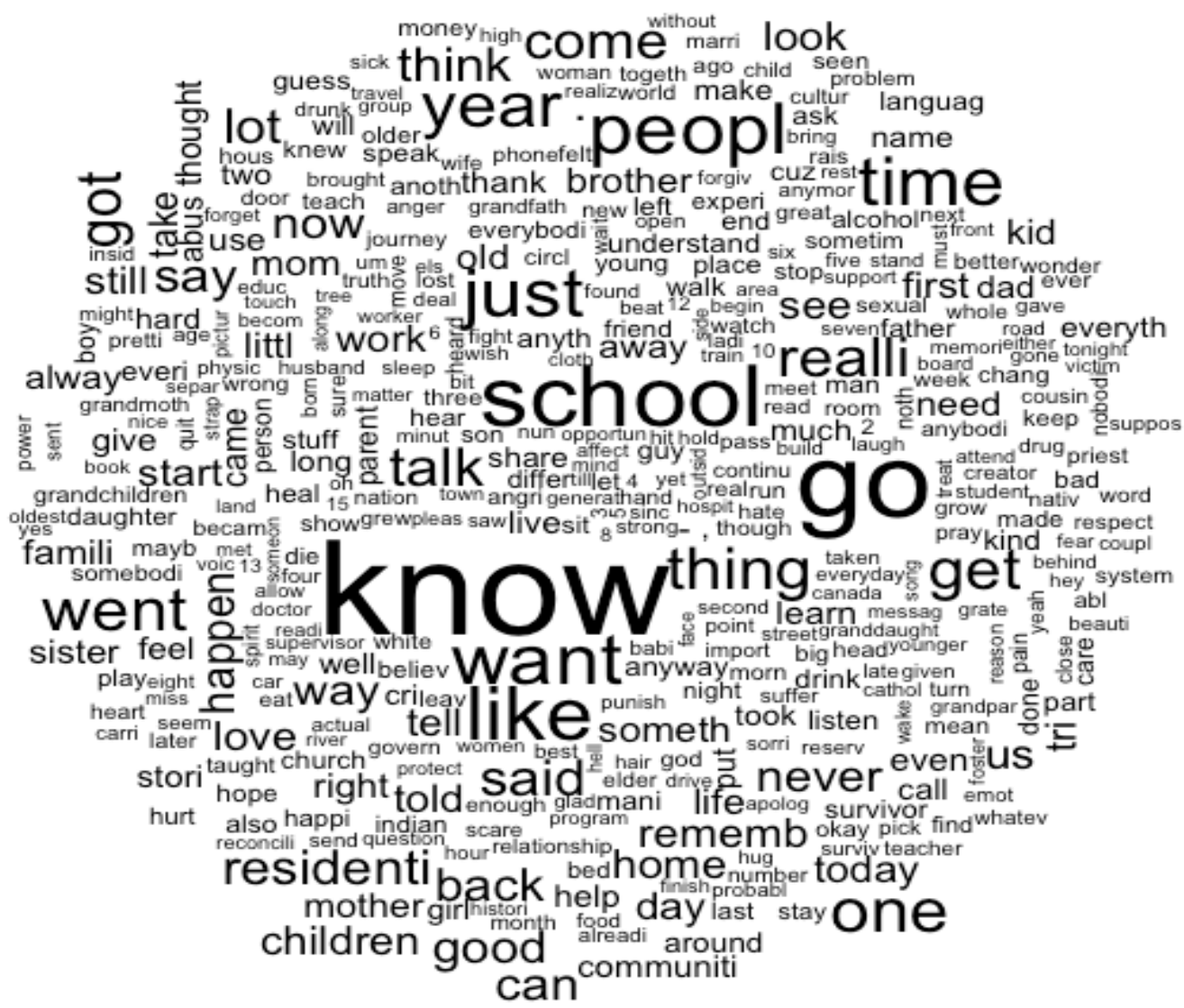


For more information, follow the adjacent QR code

## Canada's First Nations

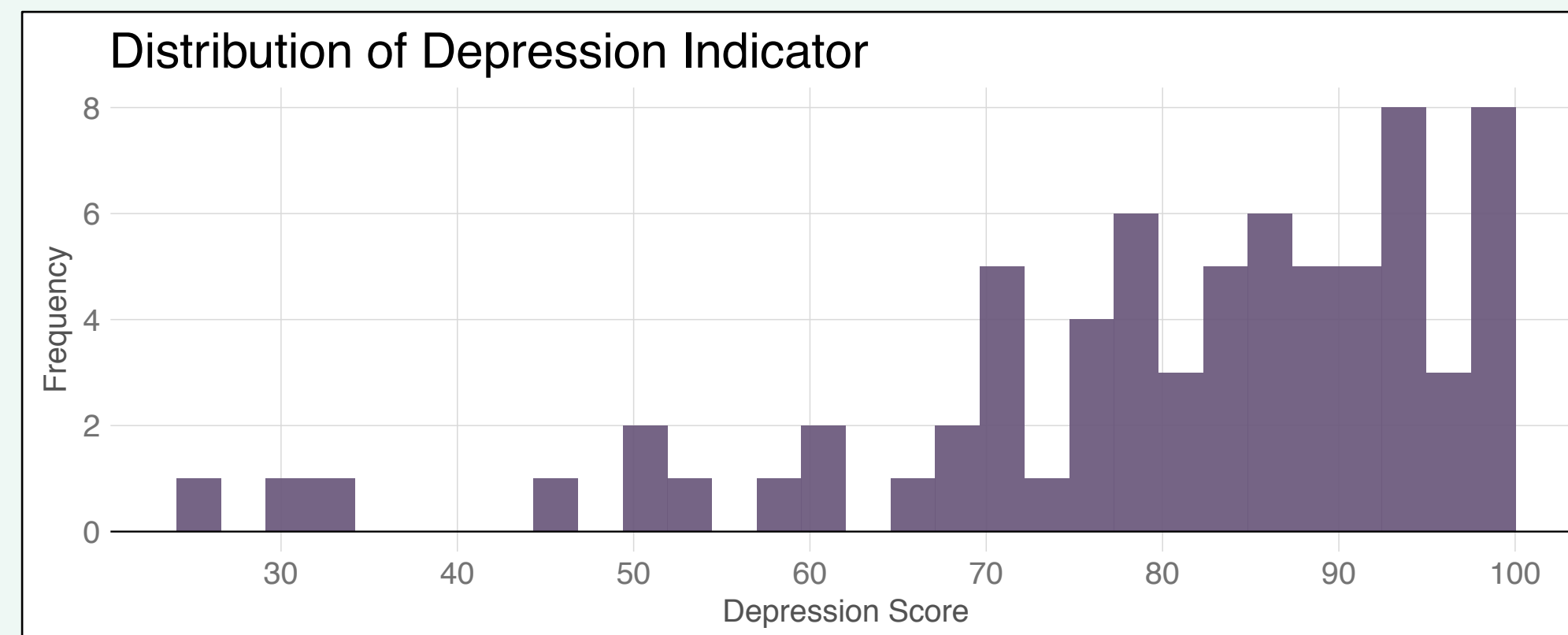
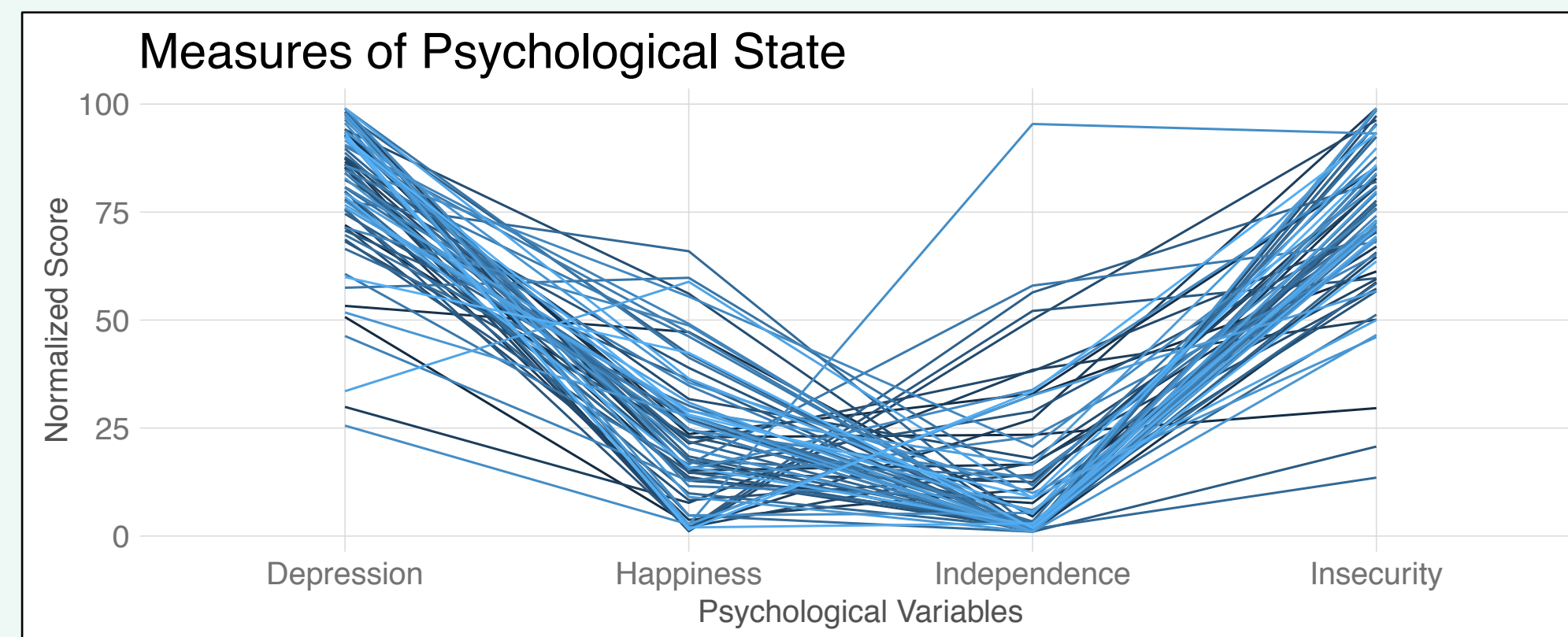
- Members of First Nations have historically experienced higher levels of depression and suicide.
- These effects have been traced back to European colonization and, in particular, the creation of Residential Schools. The mechanisms behind this relationship have yet to be explored.
- **My research adopts the psychological theory of ACEs, and conjects that abuse suffered in Residential Schools is positively correlated with levels of depression in adulthood.**

## Word Cloud of Survivor Transcripts



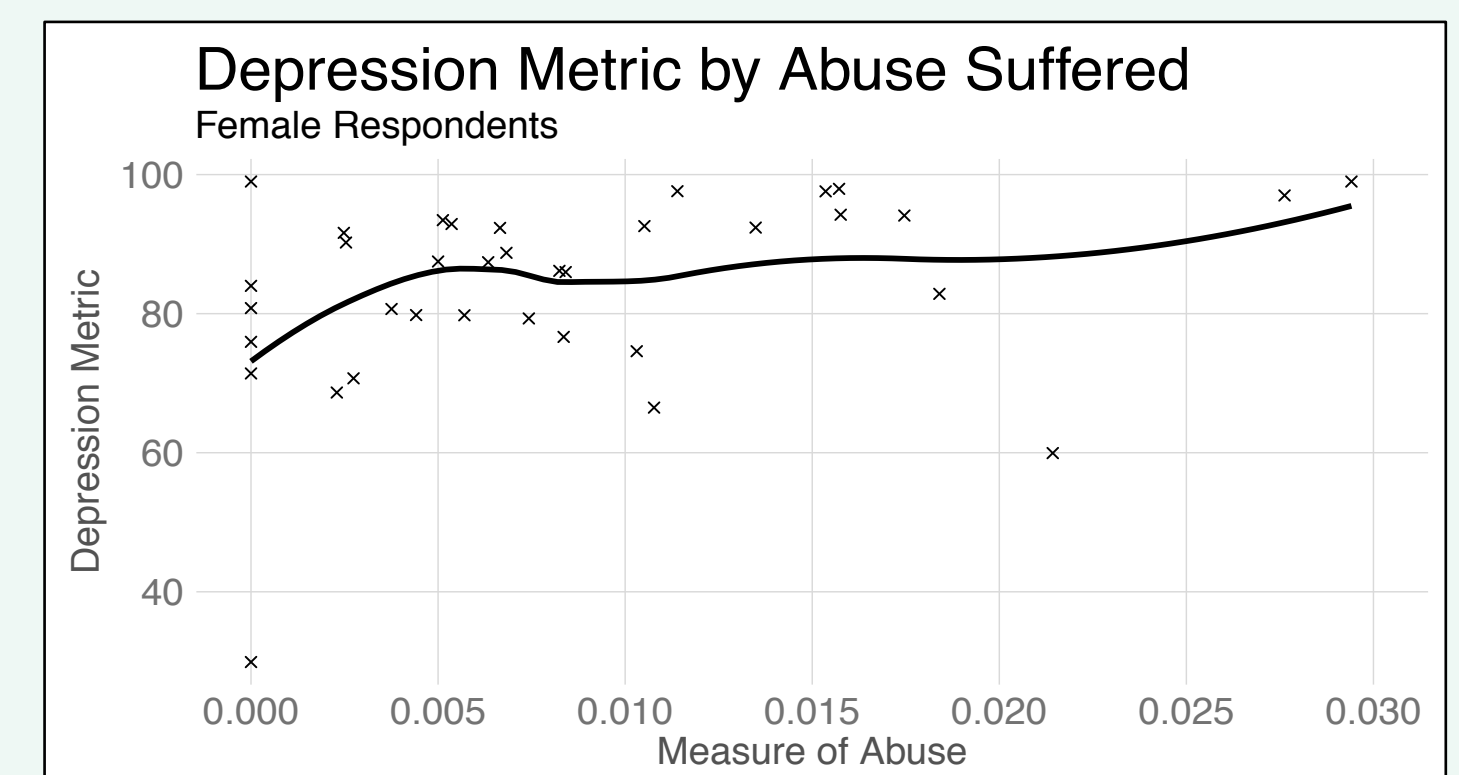
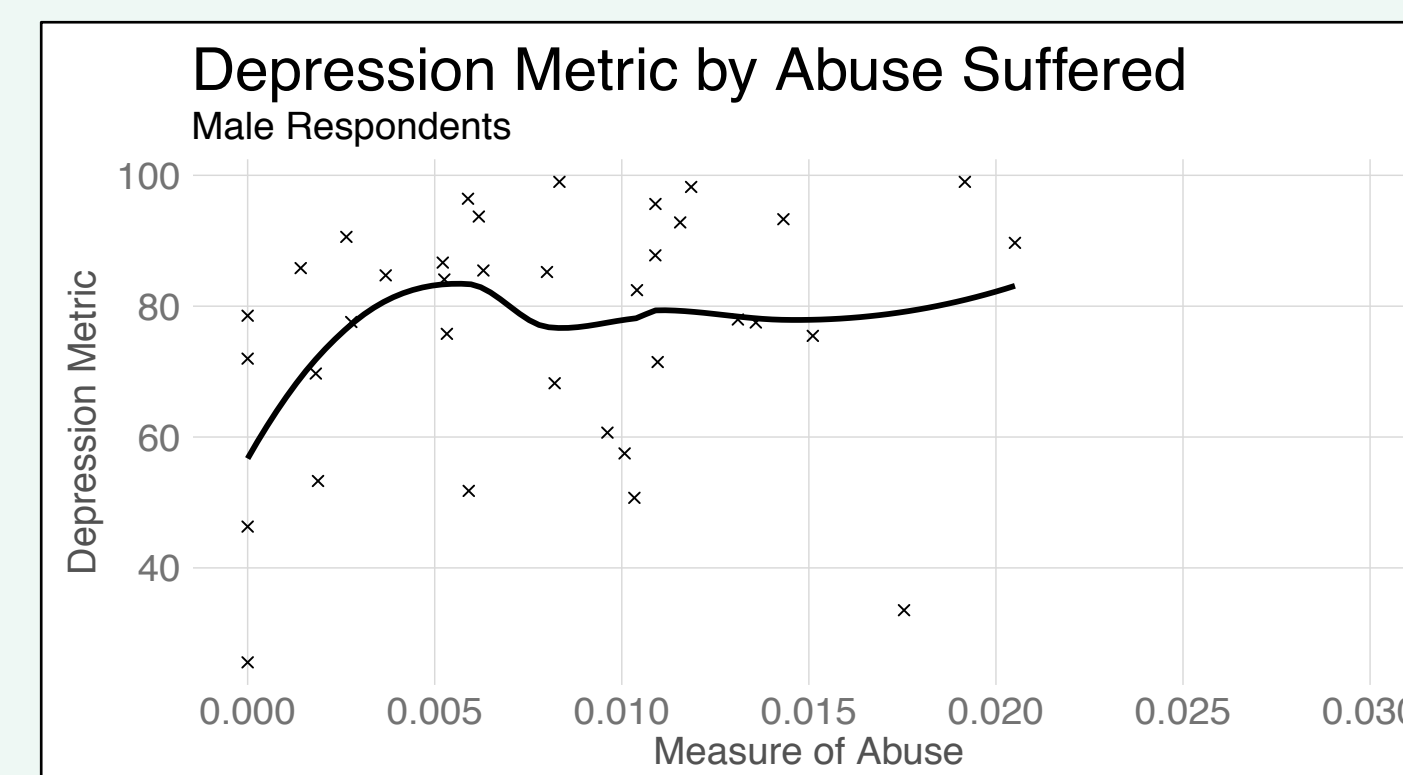
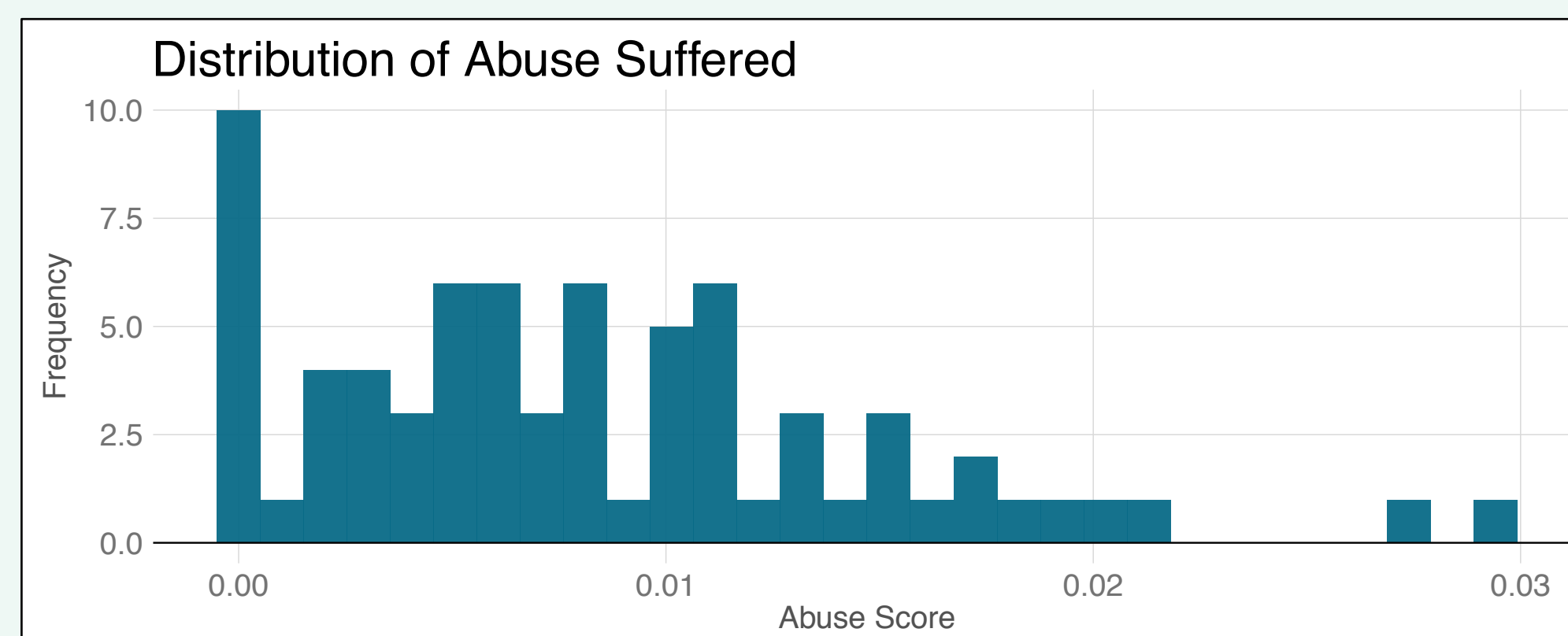
## Firsthand Accounts

- Data used in this research are 70 testimonies from Residential School survivors taken by the Canadian Truth and Reconciliation Commission.
- Testimonies were transcribed using the Google Speech API and manually checked for accuracy.
- Term-document matrices were then created, words were stemmed, and stopwords removed.



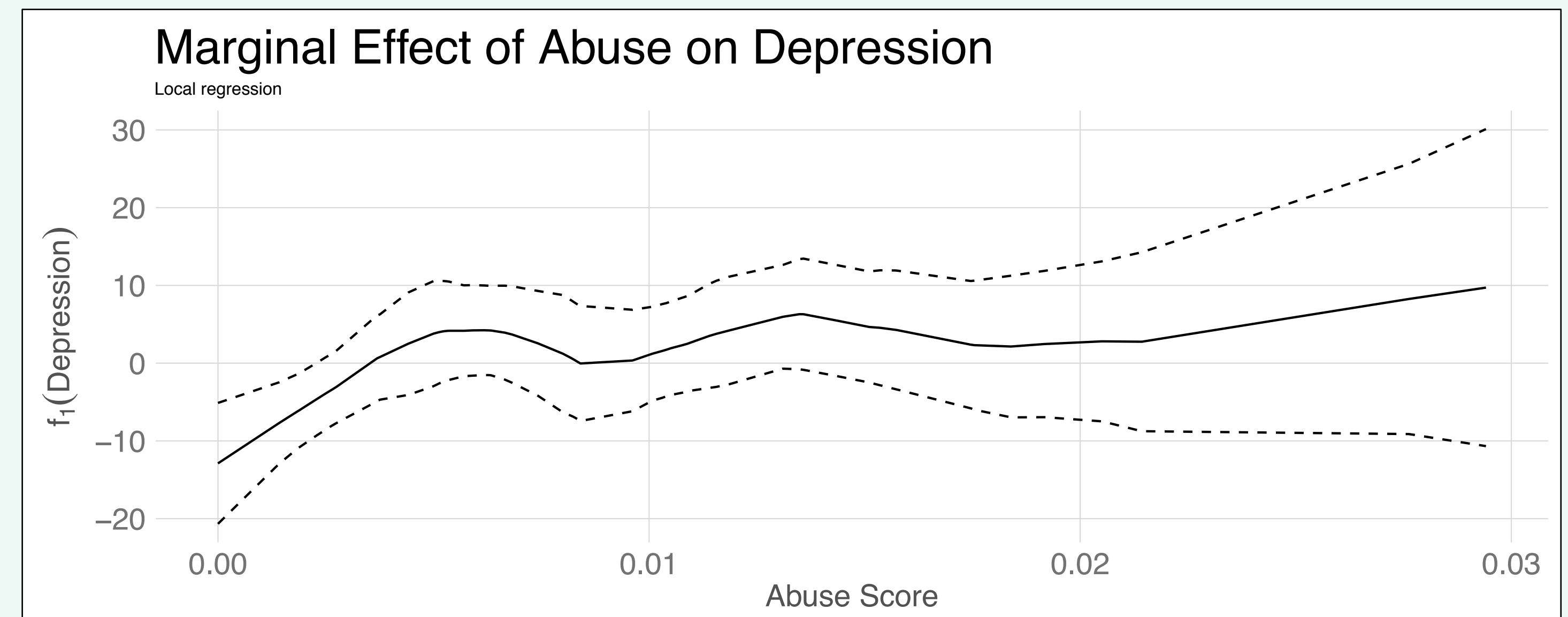
## Key Feature Extraction and Modelling

- **Abuse Metric**
  - Each document was then inspected and instances of abuse-related words were documented. Each abuse metric was then normalized against specific document length
- **Depression**
  - LIWC dictionaries were implemented through the Receptiviti API in order to detect psychological states, including depression. These dictionaries rely on the style of speech such as pronouns and passive voice and are not effected by the specific content of documents.
- **Generalized Additive Model**
$$\text{Depression}_i = \text{Experienced Abuse}_i + \text{Gender}_i$$



## Noteworthy Findings

- Abuse has a significant effect on depression at a 95% significance level.
- However, the marginal effects are indistinguishable from 0 when the abuse score is higher than 0.005.
- This result indicates that perhaps abuse is a significant regressor for only a small subset of First Nations individuals.
- Both women and men show high levels of depression, but the average depression score for women is approx. 20 points higher than men.
- Being female has a significant effect on depression at a 90% significance level.



## Limitations and Future Paths

- Employing the Google Speech API for transcriptions introduces noise into the document corpus. Future research could involve manual transcription work.
- The relationship between abuse and other psychological measure has yet to be explored and could add insight to the mechanisms behind Residential School attendance and adult psychological state.

Variable	Coefficient
Intercept	71.23 (3.49)***
Abuse	656.44 (284.74)*
Female	7.00 (3.74) .
R-Squared	0.09

. p < 0.01   \* p < .05   \*\* p < .01   \*\*\* p < .001



National Centre for  
Truth *and* Reconciliation  
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