



Content Analysis of Values-Affirmation Essays

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The Questions

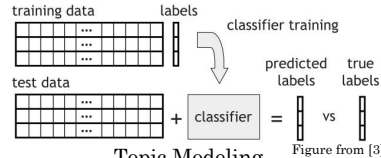
- Values affirmation interventions have been shown to be effective at improving outcomes in a number of domains.
- Less is known about the content of the writing produced as part of the affirmation.
- Integrating tools from computer science & psychology, we answer the questions:
 - Q1:** *What do people write about in values affirmation essays?*
 - Q2:** *What linguistic features distinguish younger and older writers?*

The Data

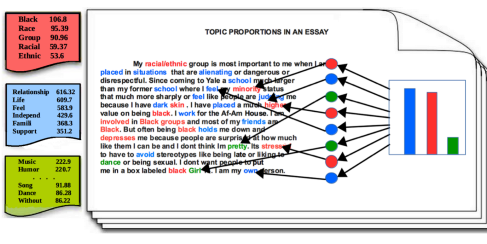
- Affirmation essays from 9 studies (published and unpublished) over the last decade.
- Classifier features:
 - Unigram language model
 - TF-IDF language model
 - Within-essay topic distribution from topic model
- Classifier labels:
 - Essay written by an adult vs by a child
- 8,554 essays
- Inclusion criteria:
 - Prompts did not dramatically depart from standard affirmation prompt

The Tools

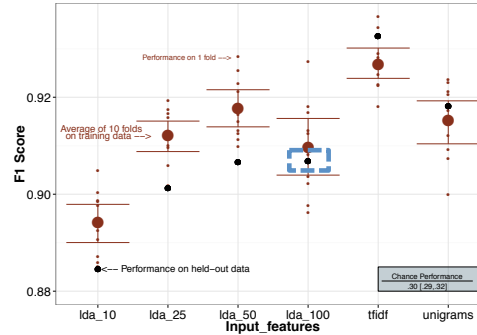
Machine Learning Classifier



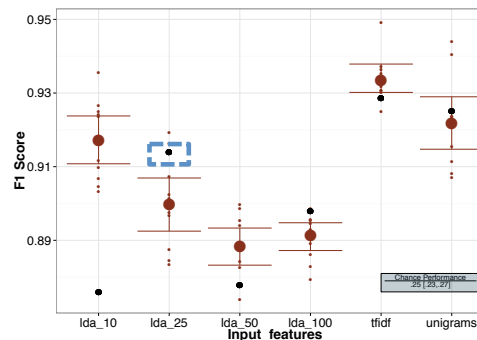
Topic Modeling



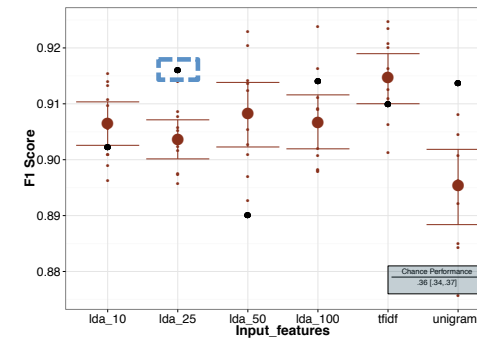
All Essays



Control Essays



Treatment Essays

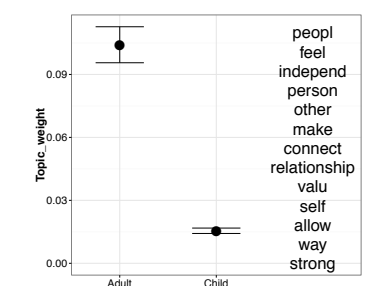
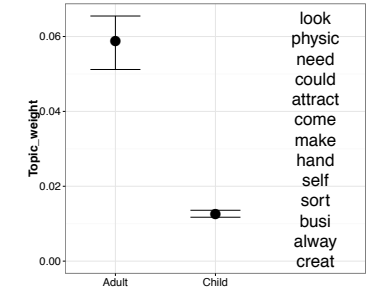
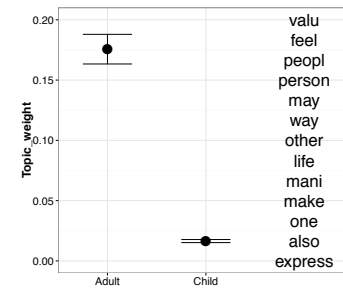
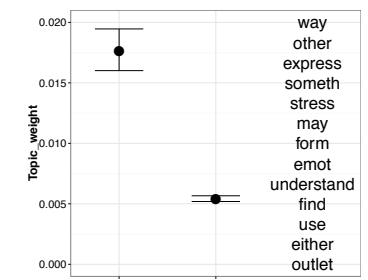
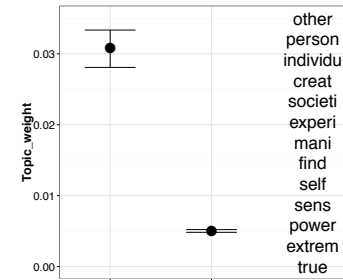


Conclusions

Adults and children have very different approaches when writing values-affirmation essays

Children spend more language writing about the value itself (not shown)
Adults spend more language connecting the value to reasons for its importance

Top 2 most discriminative features from best-performing classifier



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