



Room to Grow: Understanding Personal Characteristics Behind Self Improvement Using Social Media



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Research Question

- Can we computationally **identify characteristics** of people who are likely to **persist** in personal change?

Data



- ↑ Posted by u/cdaction1234567 2 days ago
- 26 [NeedAdvice] Avoiding responsibility and anxiety induced binges.
- ↓
- ↑ Posted by u/Rusty_James 3 days ago
- 4 [Need Advice] Techniques for getting focus back mid-day
- ↓

- Focus on those who post for the first time within 5 month period
 - **Persistently** active - 3 or more posts
 - **Temporarily** active - only one post

Task

- **Classify** those whose interest in self change persists (**persistently active**) vs those with momentary interest (**temporarily active**)
- Use posting behavior of each person
 - **Prior** general posts on Reddit
 - **Initial** r/getdisciplined-specific posts

People's online posting behavior can predict their persistence in self-improvement.

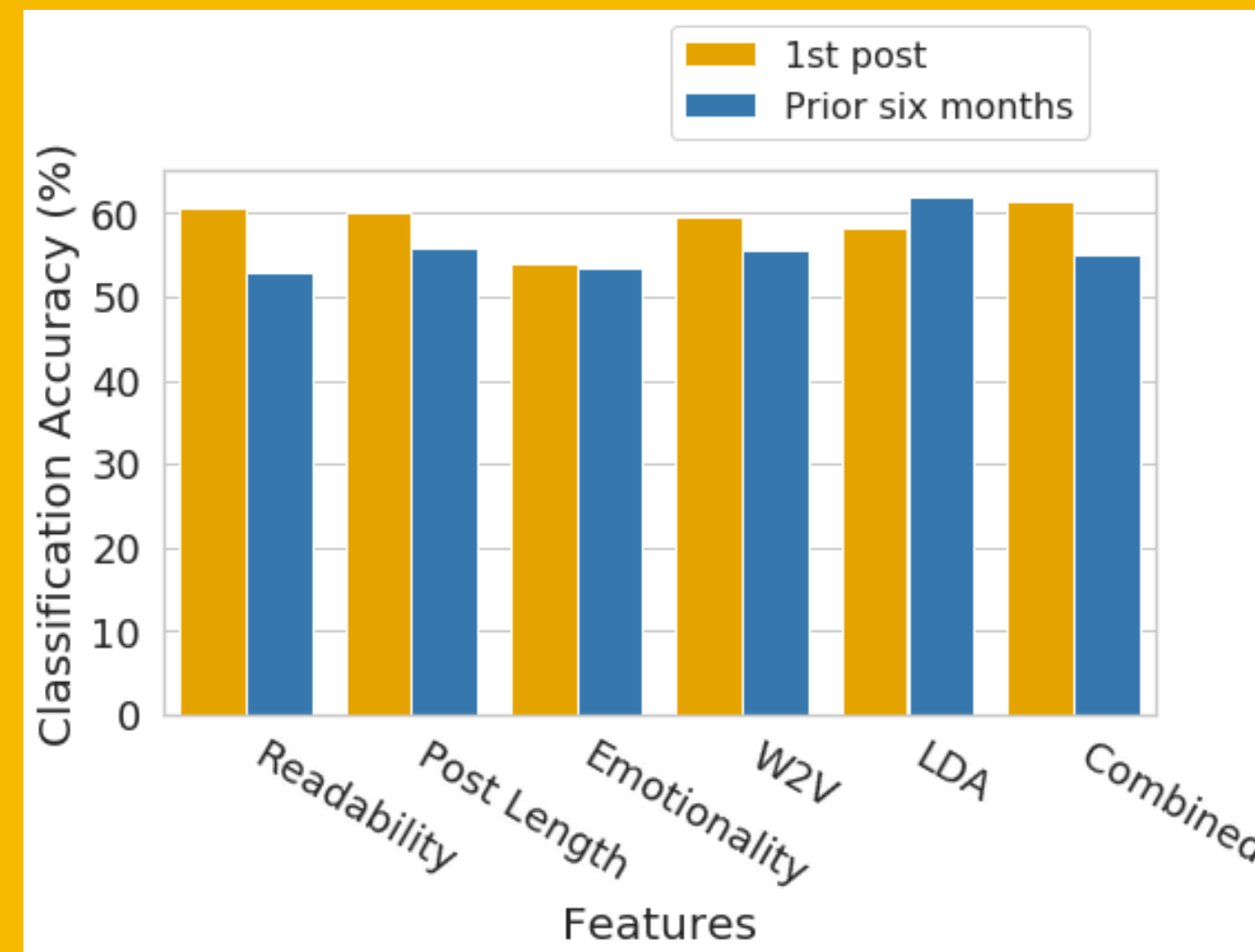


Fig. 1: Prediction results for binary classification of persistence level in r/getdisciplined.

Methods

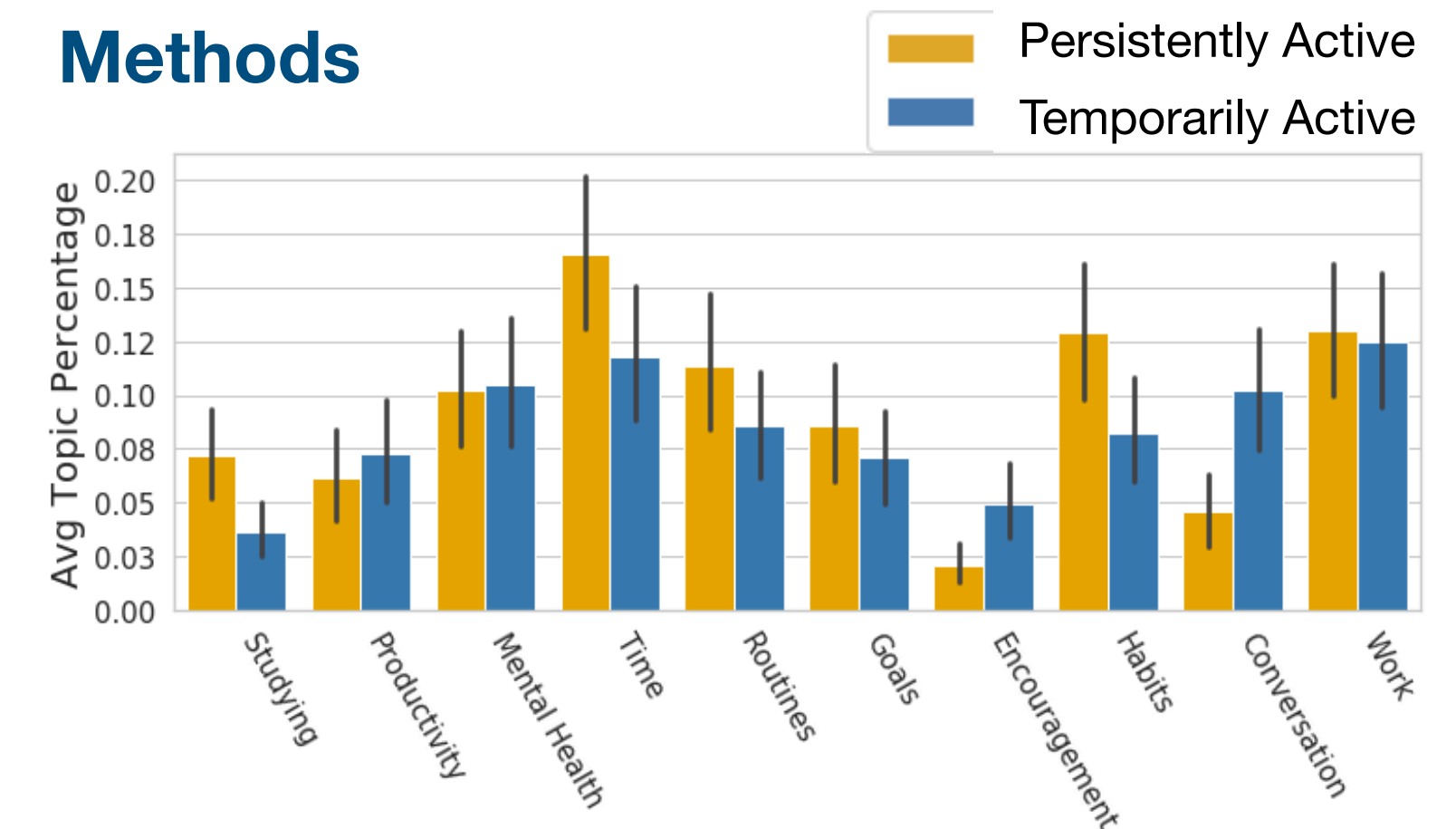


Fig. 2: Topical interests from 30-topic LDA model based on initial r/getdisciplined activity.

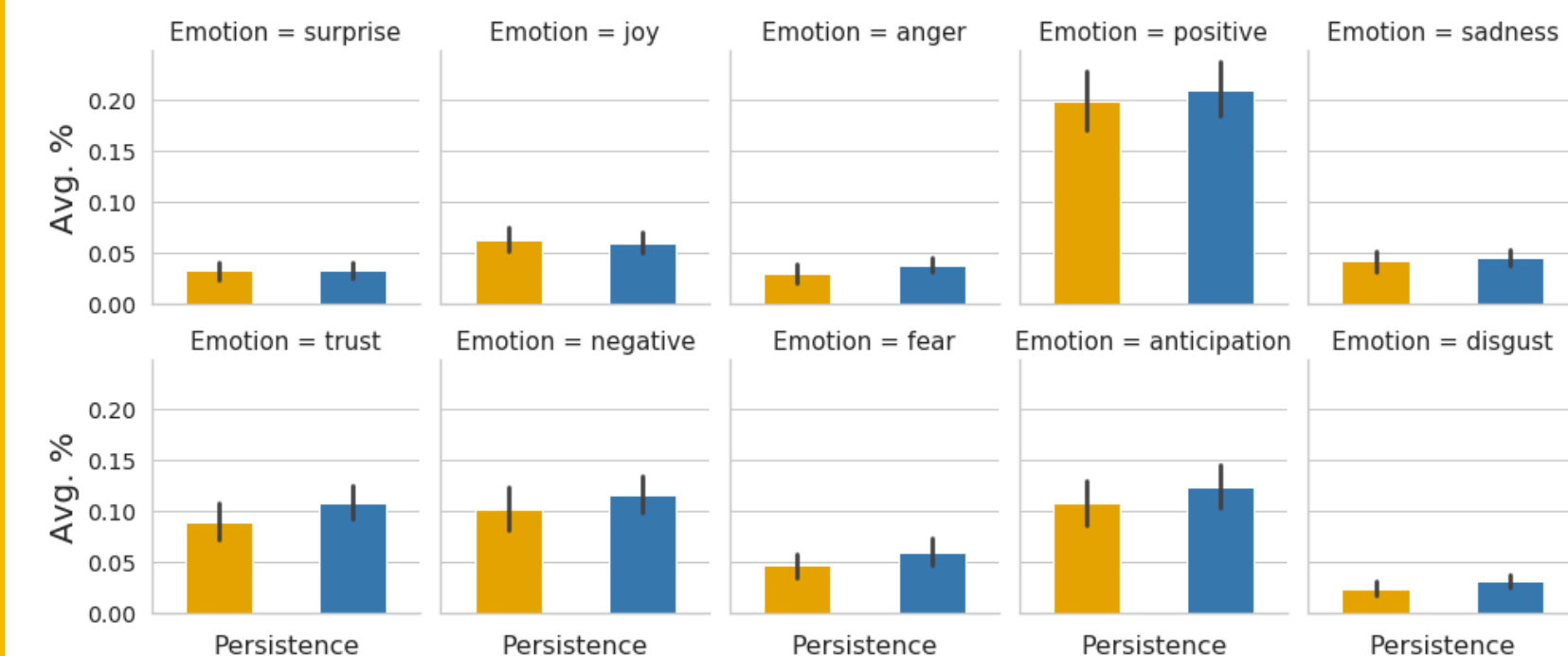


Fig. 3: Emotional features from NRC Emotion Lexicon based on initial r/getdisciplined activity.