Facilitating Peer-Support for Recovery from Substance Use Disorders

Sabirat Rubya (rubya001@umn.edu), Department of Computer Science and Engineering, University of Minnesota

Introduction

People suffering from substance use disorders, such as addiction and alcoholism, seek support through synchronous communication to maintain abstinence. Twelve-step meeting attendance has been popular and proved to have potential for positive impact. This work presents the findings from a questionnaire and an interview study about challenges people face in attending these meetings and how technology can help facilitate the peer-support process for these groups.

Online Questionnaire

- 285 participants from members of the largest online recovery community (InTheRooms.com)
- Participation in different face-to-face and online meetings was self-reported as an important part of recovery

Semi-structured Interviews

- Fourteen active participants (nine female) of InTheRooms
- Different Fellowships, representing 18 different countries

Creation and Auto-update of a Global List of AA Meetings

Why is it difficult?

- Individual AA groups operate at regional levels: no global meeting list
- No consistencies in how these pages are structured: high variance input
- Local lists are often out of date

Hard to achieve perfect extraction accuracy through machine learning, crowdsourcing is essential. But we can reduce the need for crowdsourcing, while not losing meeting pages. Classifier must be able to split its output in a way such that misclassified meeting pages always end up in the crowdsourcing group. The classifier with the best performance on this criteria was bagging random forests, with a prediction margin cutoff of 0.9

Crowdsourcing Interface

- Volunteers choose between two tasks: determining if the areas that contain meetings are correctly identified, or determining whether extracted meeting information is accurate
- The former verifies phase 3 (and indirectly phase 2) of the pipeline, and the latter verifies phase 4

Methods

Findings

People attending face-to-face and online meetings have higher average time in recovery with more involvement score!

1. Lack of Global List of face-to-face AA Meetings

   “I went to visit family, I looked up for some face-to-face meeting, and one of the meetings that I was going to go to, I drove down the road and it wasn’t there. I really really needed a meeting, I didn’t have my computer. It was awful.”

   (P6)

2. Difficulty in Finding the Right Online Meeting

   “It feels good if you know the people in the meetings. The message and the people make a meeting effective.”

   (P8)

3. Information Overload for Newcomers

   “When you are a newcomer in AA there is a lot of information thrown at you. From a lot of different directions, from people of different Fellowships. So it can be a little bit confusing, like an information overload.”

   (P2)