Reviewer's report

Title: Analyzing hidden populations online: topic, emotion, and social network of HIV-related users in the largest Chinese online community

Version: 1 Date: 02 Oct 2017

Reviewer: Jiang Bian

Reviewer's report:

> 4) Have the results of the sentiment analysis methods been validated? Sentiment analysis based on word counts is known for its inaccuracy.

I understand the justification for choosing the specific sentiment analysis method that you choose. What I would like to see is a validation of the sentiment analysis result. One simple way to do is to pick out, e.g., 100 random posts from your sample, ask two people manually annotate these 100 posts as the gold-standard, and compare the sentiment analysis results against this gold-standard.

Present the kappa agreement between the two people and present the precision, recall of the sentiment analysis result.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics
Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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