

# Who says what about the most-discussed articles of Altmetric?

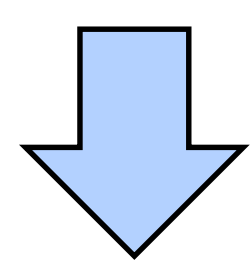
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- In Altmetrics, tweets are considered as important potential indicators of immediate social impact of scholarly articles. It is necessary to investigate the people who cite the articles and the content of the tweets with attitude towards the articles.
- The **results** could shed light on the understanding of the meaning of tweets as altmetric measure, and the improvement of the design of reasonable altmetric indicator.

## Opinion leader identification

number of  
followers

number of  
retweets



$$F_1(u) = 2 \cdot \frac{\#followers(u) \cdot \#retweets(u)}{\#followers(u) + \#retweets(u)}$$

## Sentimental analysis

Tweets content

preprocessing



SentiStrength

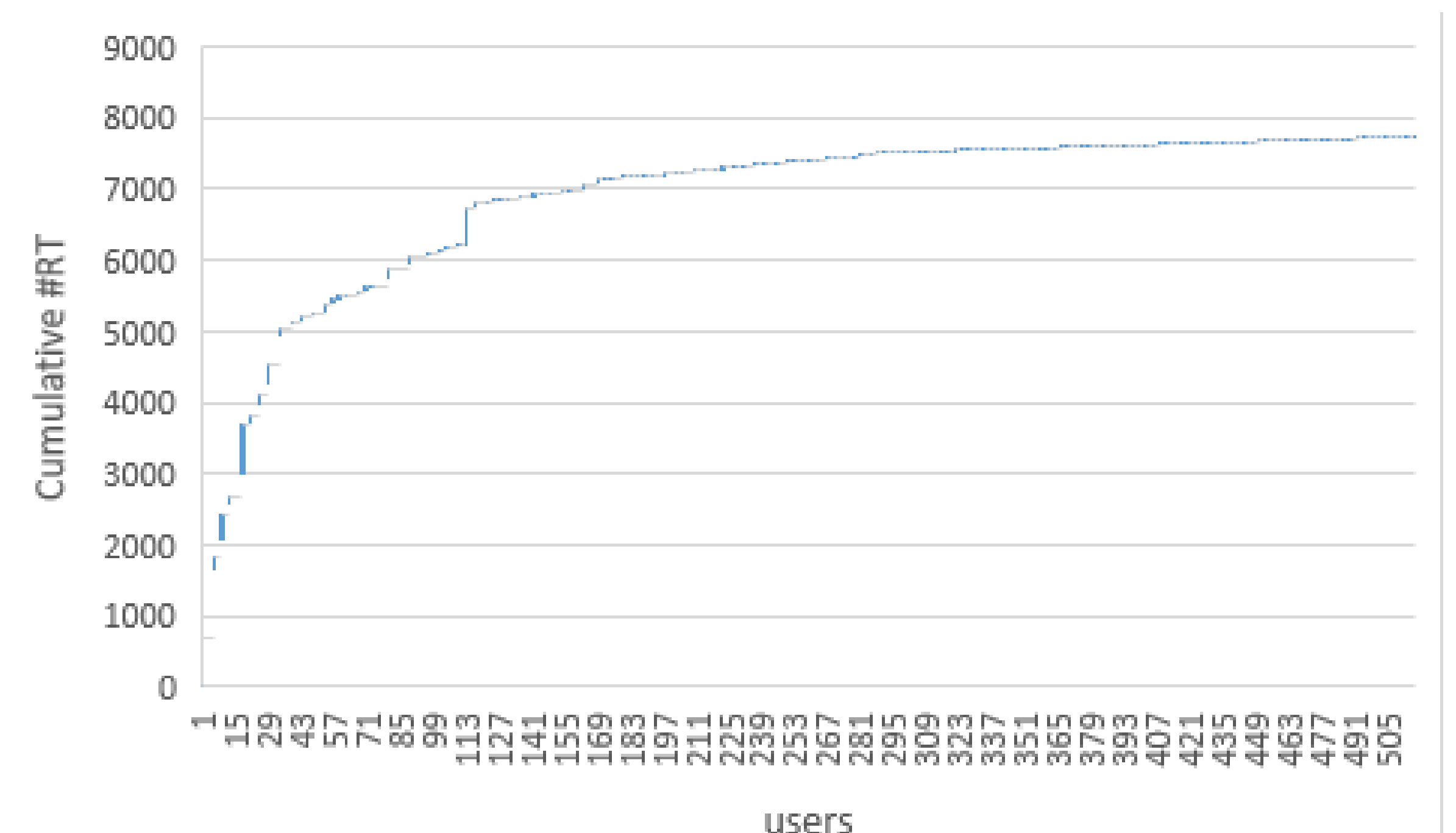
Positive

Neutral

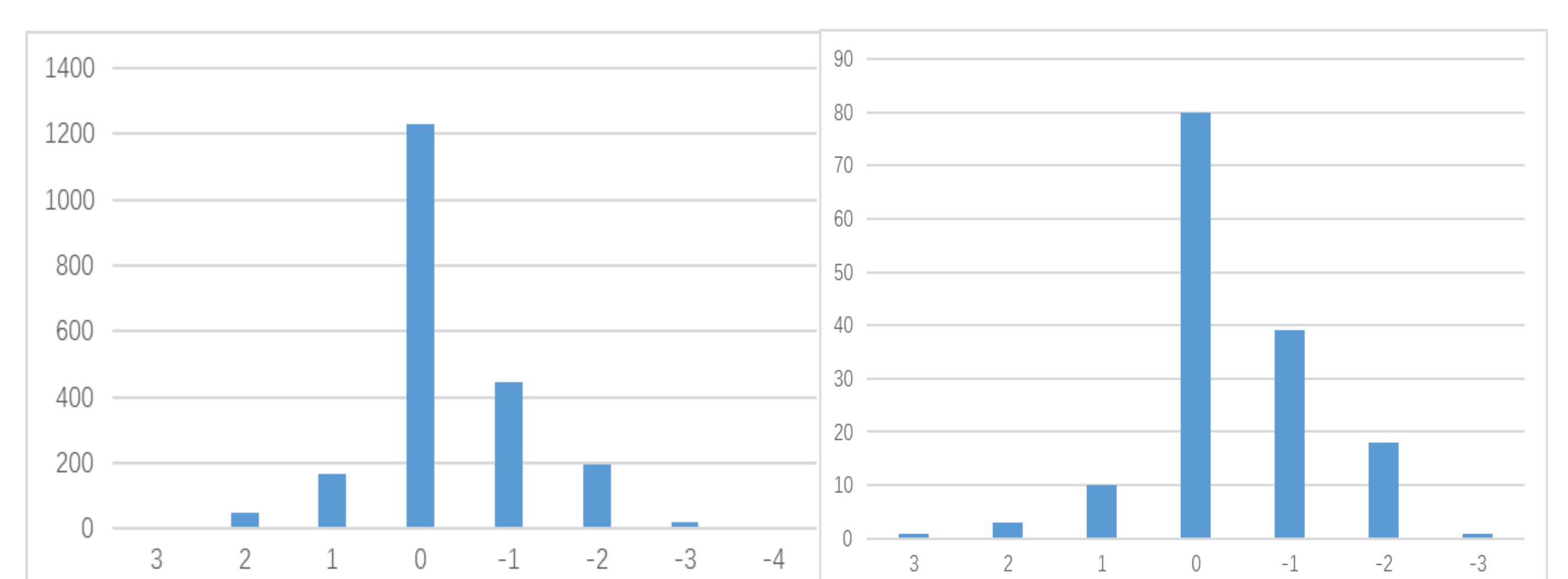
Negative

## Preliminary results

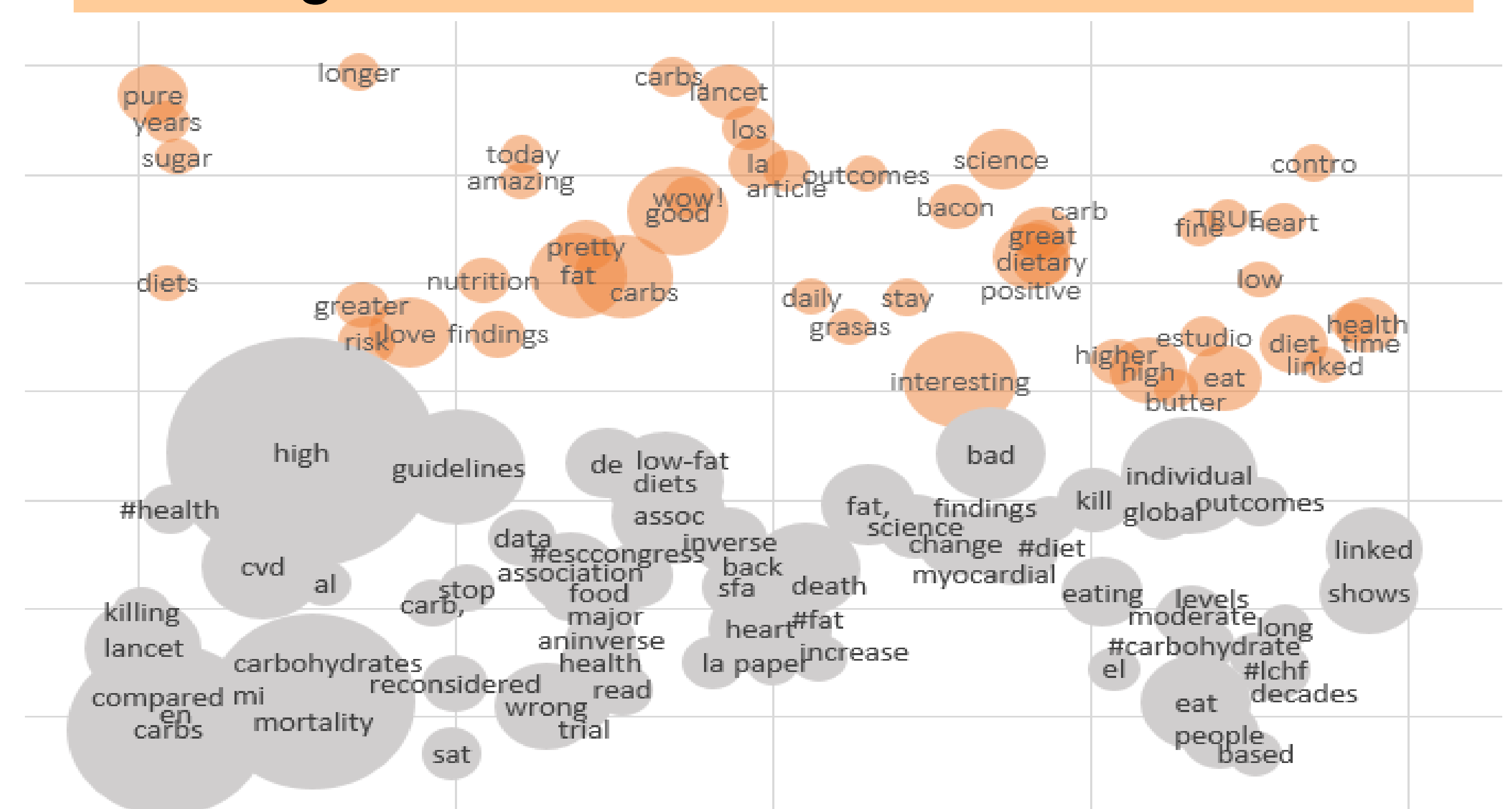
For an article, the number of retweets received by the top 20% users accounts for over 80% of the total number of retweets, which is consistent with the Matthew effect "the rich get richer"



There are strong correlations between the public opinions and the leaders opinions



Visualization of the words in positive tweets and negative tweets



## Experimental data

Altmetric - top 100 most-discussed articles every year from 2013 to 2017, and the corresponding twitter information including when and who says what about the articles.

