

EXPLORING TOPICS AND THE SENTIMENT OF NEW YEAR'S RESOLUTION TWEETS

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BACKGROUND

- Many people make New Year's resolutions to better their lives.
- The majority of individuals (~60-80%) fail to keep their resolutions.
- To help individuals make lasting changes, different types of support are needed depending on the topic of the resolution.



BACKGROUND

Objectives

1. Determine topics that people are tweeting about related to New Year's resolutions.
2. Explore the overall sentiment of tweets related to New Year's resolutions.

Goal

- Identify how we can best support individuals to keep their resolutions and improve their health and well-being.

METHODS: DATA

- 16,660 Tweets scraped using Tweepy and the terms:
 - “New Years Resolution” (5,000 tweets), “2022 Resolution” (5,000 tweets)
 - “#NewYearResolution” (5,000 tweets), “#NewYearsResolution” (1,660 tweets)
- Time Frame: January 5, 2022 – January 19, 2022
- Search included only tweets in English and excluded retweets that did not have a user comment.
- Features included: text of tweet, number of favorites, number of retweets, username, and user ID.



METHODS: MODELS

Topic Modeling

- Exploratory data analysis with: CountVectorizer and TfidfVectorizer as well as LSA, NMF, LDA.
- CorEx used to finalize the topics using the terms found in the exploratory analysis.
- WordCloud to create a word cloud for each topic.

Sentiment Analysis

- Utilized VADER to explore the general sentiment of different topics and the most popular tweets.

TOPIC MODELING

“New Years Resolutions” and “2022 Resolutions”

- Politics
- Finances
- Travel
- Hopes/dreams/goals
- New beginnings
- K-Pop band
- Giveaways



TOPIC MODELING

“#NewYearsResolution” and
“#NewYearResolution”

- Abstaining from alcohol
- Veganism
- Crypto currency



SENTIMENT OF TWEETS

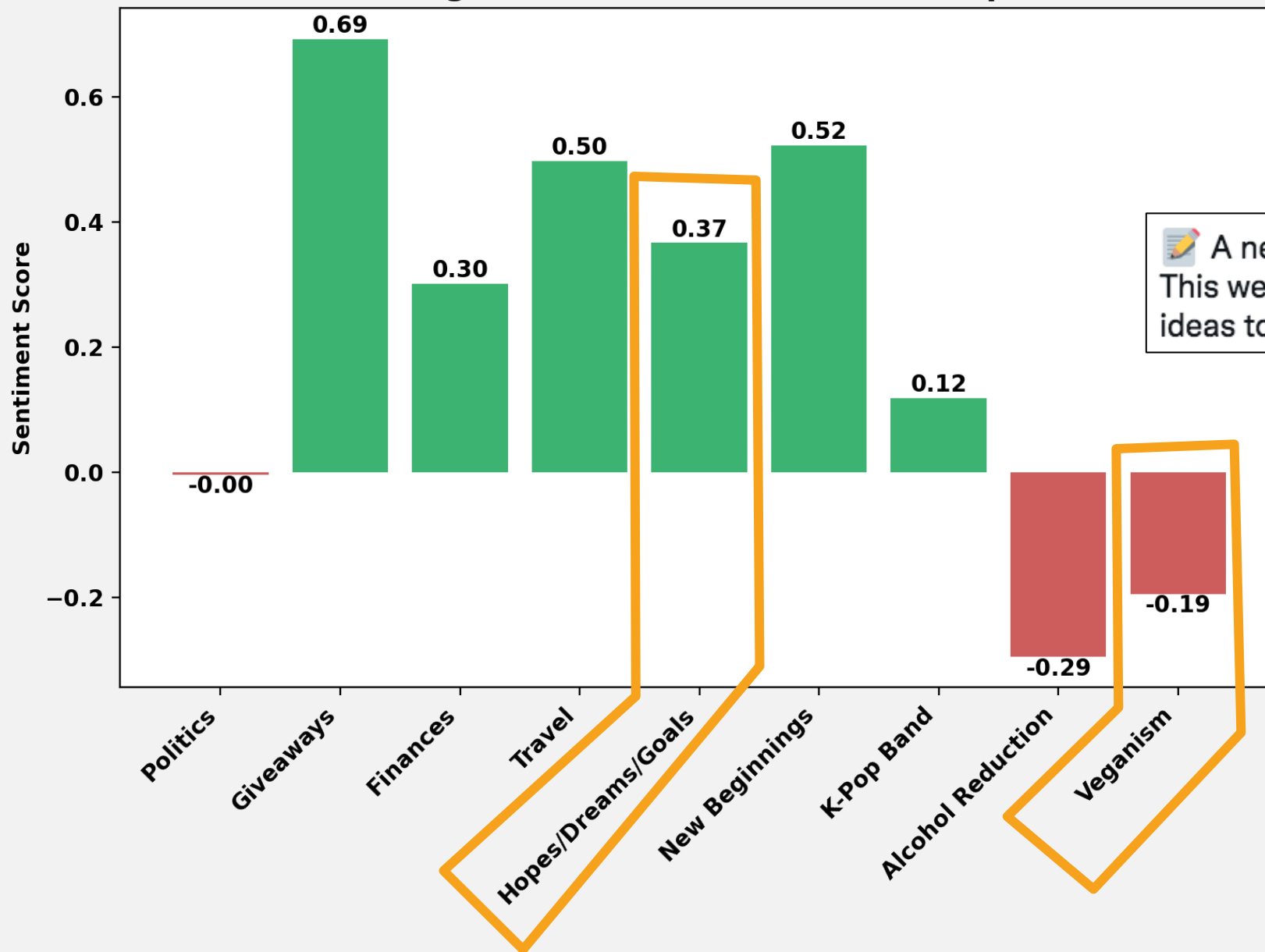
- Overall sentiment: 0.14
(overall positive)
- Most positive tweet: 0.98
- Most negative tweet: -1.00

Resolve to read more in 2022. ✨ ✨ ✨ Staff pick.
❤️ ❤️ ❤️ Life is changing for a small community of
Pacific NW loggers in the 1970s. Life is tough & getting
tougher. Request a copy from bccls.org
[#newyearresolution](#) [#resolvetoreadmorein2022](#)
[#happynewyear](#)



Officially [#single](#) 😬😭😭😭😭😭😭😭😭😭😭😭😭😭😭😭
😭😭😭😭😭😭😭😭😭😭😭😭😭😭😭😭😭😭😭😭😭😭
😭😭😭😭😭😭😭😭😭😭😭😭😭😭😭😭😭😭😭😭😭😭
[#30s](#) [#California](#) [#Norcal](#)
[#40s](#) [#divorce](#) [#divorceclub](#) [#separated](#)
[#NewYearResolution](#) [#SingleMom](#) 😊😭

Average Sentiment for Identified Topics



A new year means new goals, hopes, and dreams. This week we've been reflecting on a few resolution ideas to share for some 2022 inspiration:

* Most favored tweet in this topic (1,244 likes)

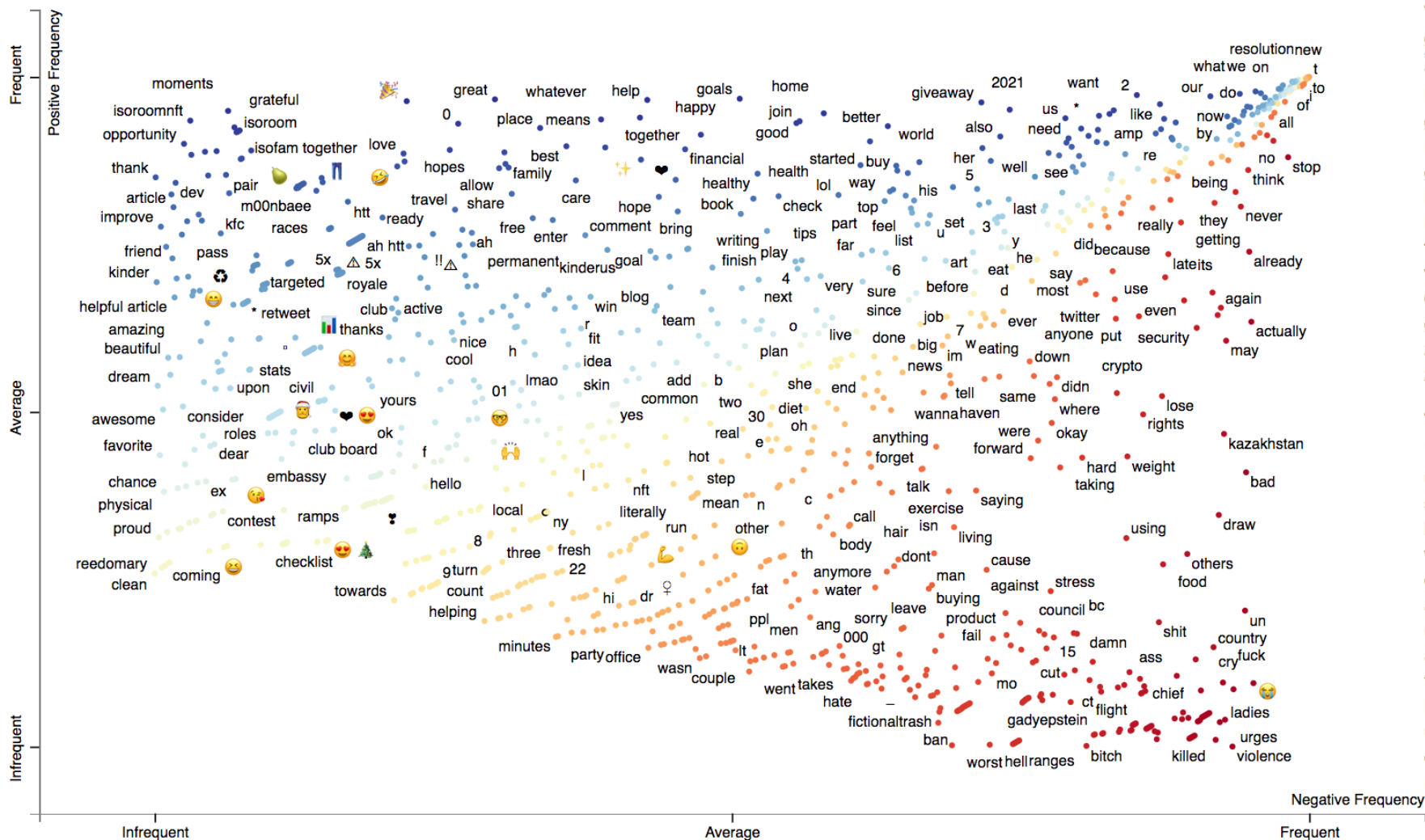
Sentiment score: 0.67

CONCLUSION

- Tweets about New Year's resolutions cover a variety of topics.
- There are already many tweets about setting goals and using New Year's resolutions as an opportunity to improve (so more tweets on this topic are not needed)
- Positive tweets about alcohol consumption and diet could be an area to target to support individuals with their New Year's resolutions.



SCATTERTEXT



Positive document count: 4,858; word count: 96,873
Negative document count: 1,773; word count: 32,593

Top Positive	Characteristic
great	isooroomnft
help	isooroom
goals	isofam
moments	antoniogetherres
giveaway	whatsapp
isooroomnft	https
home	covid
together	barunsobti
whatever	happynewyear
0	elkamcyspeaks
grateful	twitter
2021	ossia
2	ollysmithtravel
	unhumanrights
	mbachelet
Top Negative	
un	dmbakura
stop	denims
bad	nrlysyrahfaisal
violence	onmywaydrives
cry	onmyway
actually	thedemcoalition
urges	barunsobtisays
amid	retweet
fuck	kinderus
ladies	tweet
unhumanrights	nationalparkfdn
chief	ajenglish
mbachelet	refr
	gabagoolk
	learntocoderpg