

# Are All Posts Equal?



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# Introduction

# Introduction- Mine Your Own Business

- Understanding market structure
- Empirical Applications
- All comments are treated equally
- Is the data representative?

# Motivation

# THE HUFFINGTON POST

Edition: US ▼



FRONT PAGE

POLITICS

ENTERTAINMENT

WHAT'S WORKING

HEALTHY LIVING

WORLDPOST

HIGHLINE

HUFFPOST LIVE

ALL SECTIONS

## 28 Percent Of Americans Admit To Being Internet Trolls

🕒 10/20/2014 12:59 pm ET | Updated Oct 20, 2014

306



## SCIENCE CONFIRMS: INTERNET TROLLS REALLY ARE NARCISSISTIC, PSYCHOPATHIC, AND SADISTIC



offering five options: “debating issues that are important to you,” “chatting with others,” “making new friends,” “trolling others,” and “other.” Here’s how different responses about these Internet commenting preferences matched up with responses to questions designed to identify Dark Tetrad traits:

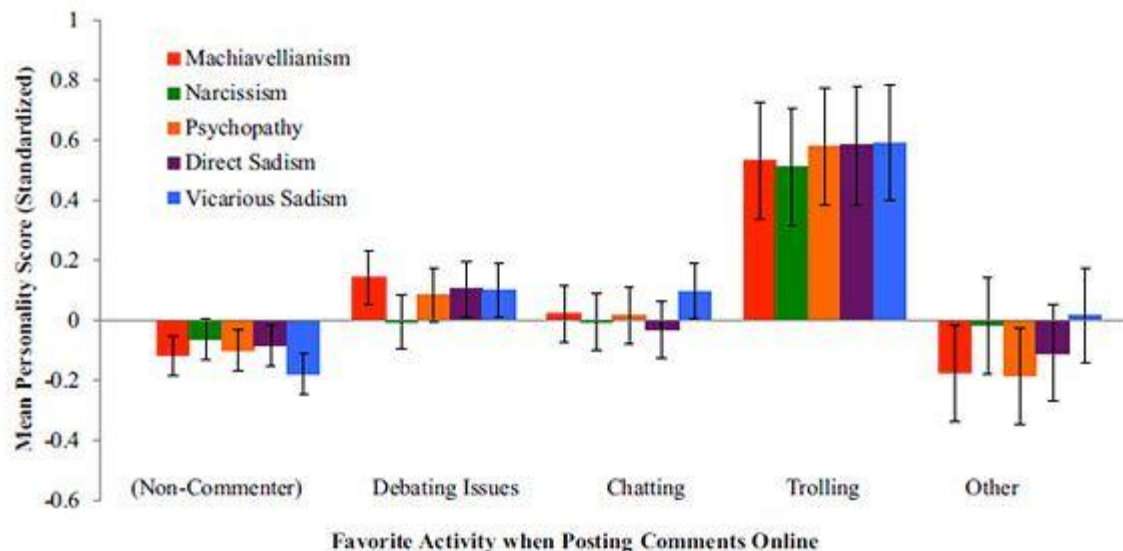


Fig. 1. Dark Tetrad scores as a function of favorite online activity in Study 1. Error bars represent standard errors.

# Motivation

- All comments should NOT be given equal weightage
- Reward best reviews
- Account for negative bias
- More accurate relationships between products and terms
- Increase in lift precision



# Data

**Data-r/Cars**



reddit

**CARS****hot****new****rising****controversial****top****gilded****wiki****promoted**

7sj (1)



preferences | logout

'What car should I buy' mega thread. Also help others buy. [Post in here.](#)



**\$50 off tire and wheel purchases of \$300 or more. Limited time only.** (www.ebay.com)

promoted by eBayOfficial

save hide report

sponsored link what's this?

search

[Submit a new link](#)[Submit a new text post](#)

**'What car should I buy' thread. Don't know what to buy? Post in here.** (self.cars)

submitted 1 day ago by verdegrll | Axles of Evil - German &amp; Italian junk - stickied post

130 comments share save hide report



**1650 miles later, I am minus one STI and plus one Lotus.** (self.cars)

submitted an hour ago by SNAPEKILLSDUMBLDORE | 2005 Lotus Elise/2014 Ducati 899 Panigale

21 comments share save hide report



**My 1985 Ford Escort XR3 Convertible** (self.cars)

submitted 8 hours ago \* by fschiva | Ford Escort XR3 Cabriolet, 1965 Mercedes 230S, Passat Variant V6

47 comments share save hide report



**The Worst Car Names In History** (dimegeek.com)

submitted 18 hours ago by riotme

374 comments share save hide report



**Saw a really cool rare old Lincoln i thought you guys might like** (self.cars)

submitted an hour ago by CutsLikeABuffalo333 | '02 E46 325i '95' E34 540i (Sold)

10 comments share save hide report



**Fiat Reveals US-Spec Version of 124 Spider (via Sniff Petrol)** (sniffpetrol.com)

submitted 7 hours ago by rectal\_prolapse | 2011 Fit Sport

15 comments share save hide report

**cars**[subscribe](#) 193,345 Motor Heads

1,074 Motor Heads

☒ Show this subreddit's theme☐ Show my flair on this subreddit. It looks like:

7sj (edit)

**Master list of vehicle related subreddits here!**

Buying a used car? [START HERE](#)What people love and hate about their cars. [Good insights here.](#)Looking for a \$5K car, give or take? [Here's a handy chart thanks to 4chan.](#) Now updated.Learning to drive a stickshift/manual? Visit [here](#) for some advice.

# Approach

# Approach

- Rank the comments
  - User characteristics
    - Link Karma
    - Comment Karma
    - Reddit Gold
  - Comment posting time
  - Comment rating
- Rank boosting [Drakihsu, Khabiri, Caverlee '09]
- Only look at top 70% of the comments

# Impact of Comment Posting Time

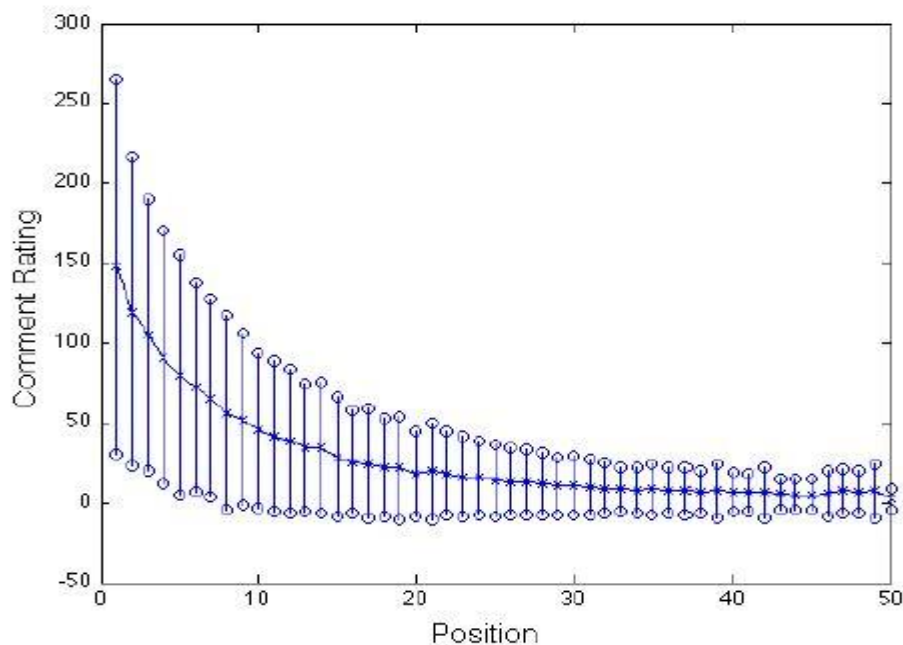
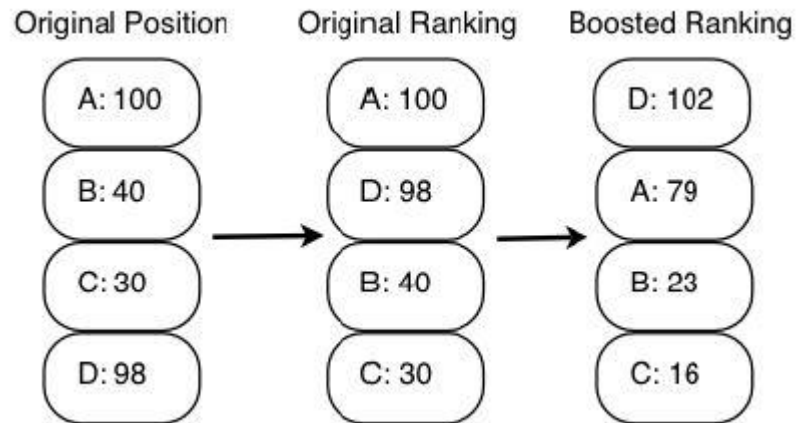


Fig. 4. Comment posting time (by position) versus comment community rating. We report the mean comment rating  $\pm$  one standard deviation.

# Rank Boosting



# Evaluation



# Evaluation

- Recommendation System
  - Based on both approaches
  - Model-Term data analysis
- Ask users for feedback on relevance of results
- Check if our approach returns more relevant results
  - Precision@10

**Thank You**