# A collaborative examination of the online communities of autistic individuals

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# A note on language

Person-first language

Adults with autism

Adults with ASD

(autism spectrum disorder)

Identity-first language

**Autistic Adults** 



## Autism Spectrum Disorder (ASD)

Neurodevelopmental condition

- Differences in social communication
- Patterns of inflexible behavior (restricted and repetitive behavior)

• 1 in 66 of the population (Public Health Agency of Canada, 2018)

"There is not one autism but many subtypes, and each person with autism can have unique strengths and challenges."

~Autism Speaks

# "If you've met one person with autism, you've met <u>ONE</u> person with autism"

~Dr. Stephen Shore

#### Autism and Social Interactions

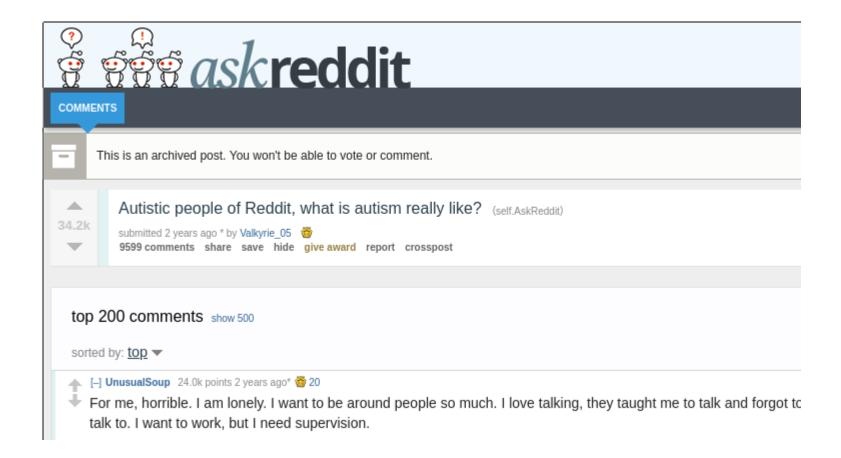
- Differences in social communication impact relationships:
  - Misunderstandings
  - Marginalized
  - Vulnerable

- Social isolation
  - because others incorrectly assume that all autistic people prefer to be alone rather than with others

#### Autism and Social Media

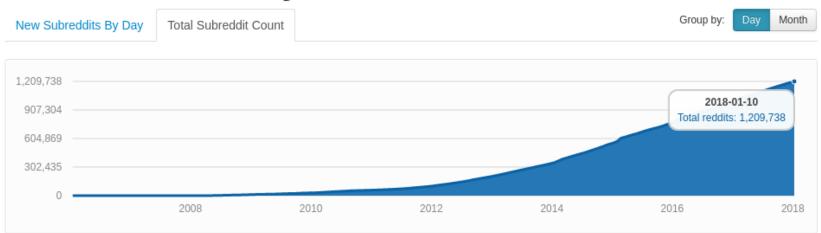
- Social media has been suggested as a potential solution.
- Reducing the demands of face-to-face conversation
- Social media may create a more welcoming environment.
- Social media might reduce isolation and enhance social interactions for autistic individuals.
  - Research: Research broader population

### Reddit



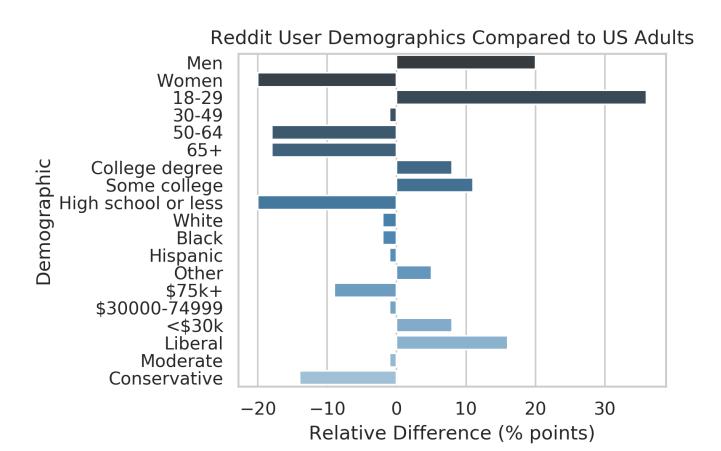
### Subreddits

New subreddits by date (How Reddit grew over time)



https://subredditstats.com/

#### Reddit Users



Pew Research Centre (Reddit Survey Jan 12-Feb 8 2016 N=288 and 2015 March Current Population Survey)

### Research Questions:

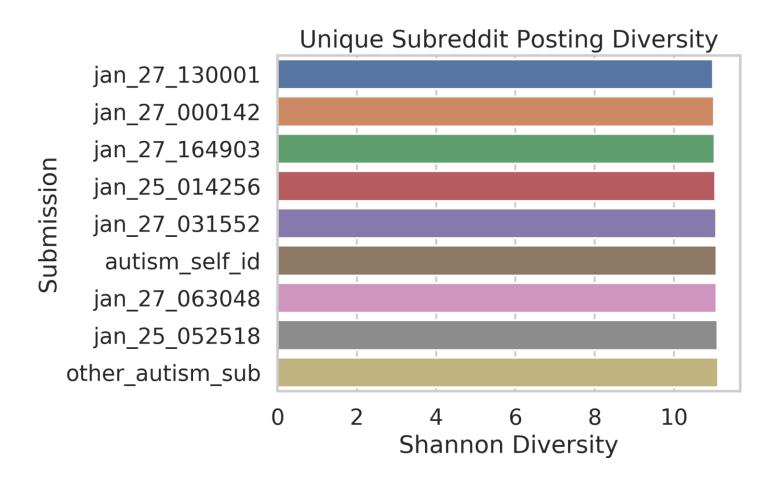
Alpha Diversity: Do autistic individuals post in as many different spots on Reddit as other users?

Beta Diversity: Do autistic individuals post in the same spots on Reddit as other users?

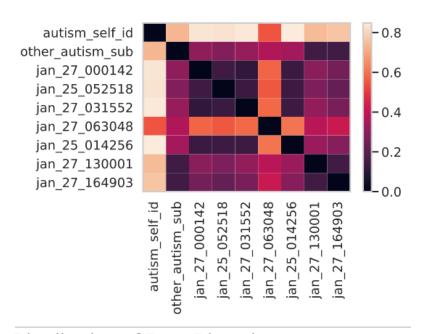
## Data Acquisition

- AskReddit submission: "Autistic people of Reddit, what is autism really like?" (Jan. 2017)
- 7 control submissions (top of AskReddit day before and after autism submission).
- Classify users in Autism submission that selfidentify as having autism
- Retrieve location of last 1000 posts for every user
- Encode posting location into matrix (row = submission, col = subreddit, value = number of users)

# Alpha-Diversity



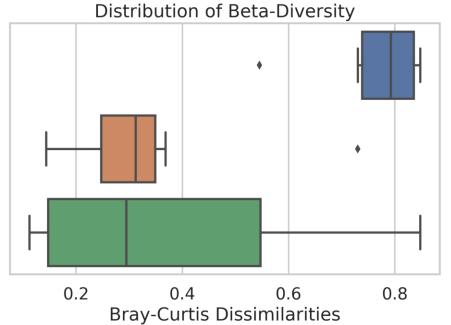
## Beta-Diversity



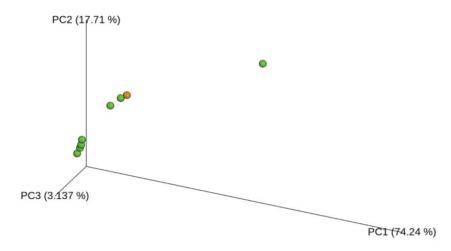
Self-ID Users Autism Submission

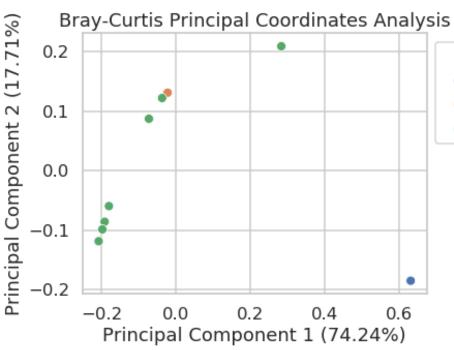
Other Users Autism Submission

Users on Non-Autism Related Submissions



### Ordination





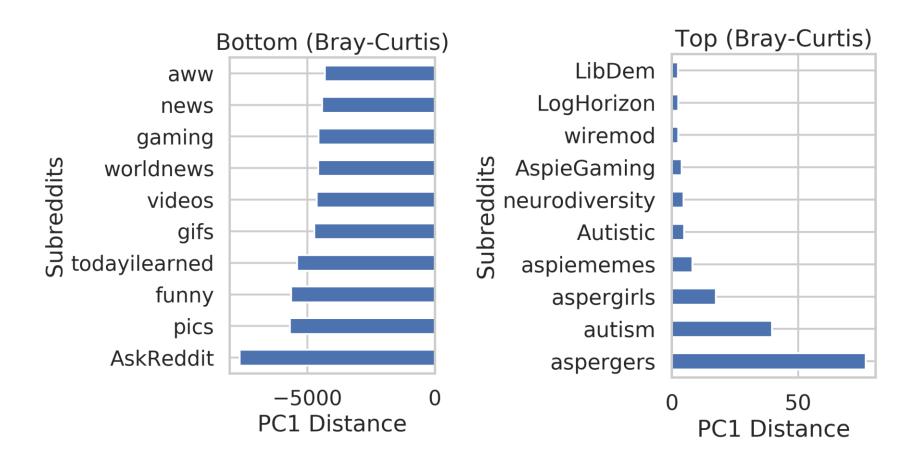
#### Type

- Self-ID Users Autism Submission
- Other Users Autism Submission
- Users on Non-Autism Related Submissions

#### PERMANOVA:

test statistic name pseudo-F sample size 6246 number of groups 2 test statistic 12.6546 p-value 0.001 number of permutations 999

# **Activity Differences**



# Summary of Main Findings

 Autistic individuals post in as many different places as other Reddit users.

 Autistic individuals do not post in the same places as other Reddit users.

# Where are autistic individuals posting?

Threads related to autism

- Online community
  - Advice
  - Friendship

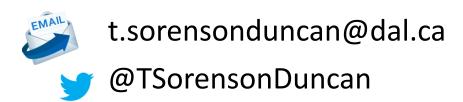
#### **Future Directions**

 Qualitative study of the experiences and preferences of autistic individuals

Continued collaboration – Language use

 Focus group to include perspective of individuals not represented online

# Thank you!



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