# POSITIVE ATTITUDES TOWARDS PETS

A study by Statistics without Borders for Petlanthropy.org

#### May 2016

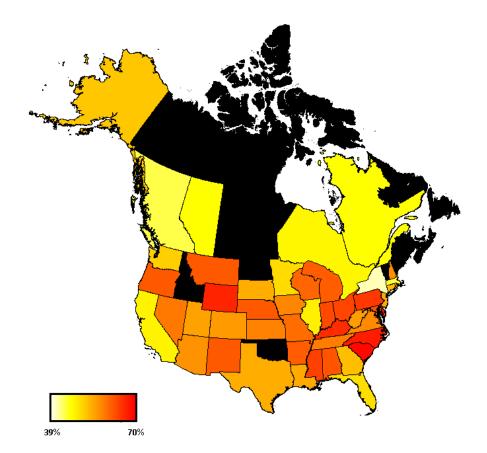
#### Authors

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#### **Statistics without Borders Coordinating Team**

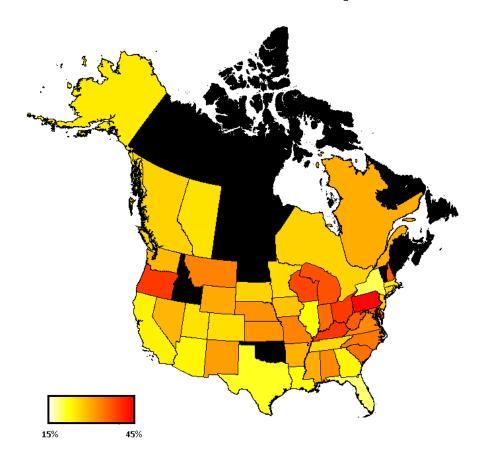
Raymond Majengo, Project Coordinator Marie Oldfield, Team Leader Smita Skrivanek, Quality Assurance Analyst

## Map of Cat or Dog Ownership



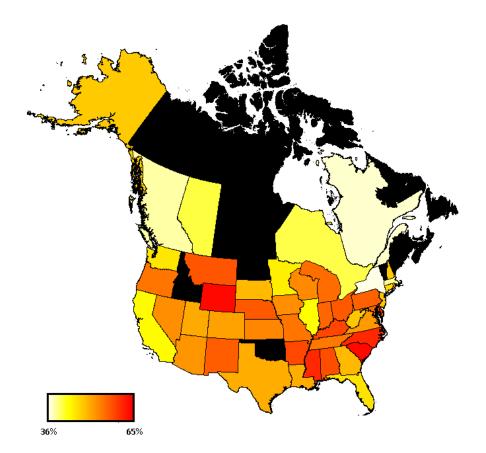
- Determined Percent of pet ownership by state
- States with more heat have higher pet ownership
- Color palette is scaled to specific pet ownership
- Canada sees overall lower pet ownership
- The four Canadian provinces were in the bottom 7 for "has cats or dogs" proportions

#### Map of Cat Ownership



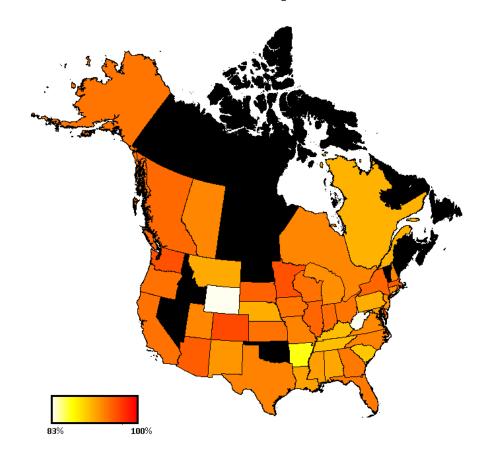
- Cat ownership is higher in Pacific Northwest and Rust belt states
- Pennsylvania, Ohio, and Oregon had three of the four highest "has cats" proportions

### Map of Dog Ownership



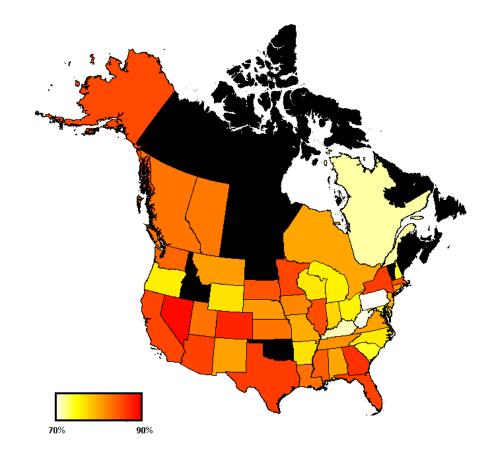
- Dog ownership is higher in Southern states
- North Carolina, Alabama, and Mississippi had three of the five highest "has dogs" proportions

# Map of "Likes" Dogs or Cats



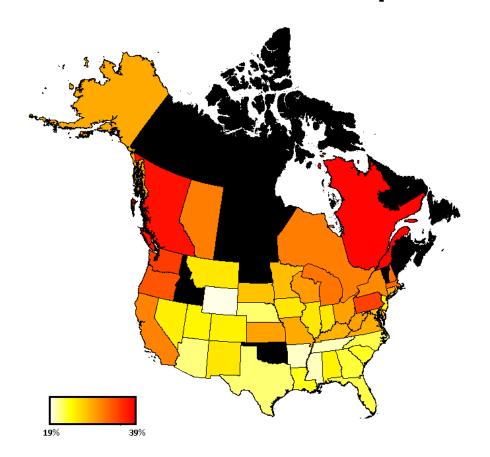
- Likes trends follow those of ownership
- Likes at higher rate than ownership

# Map of "Likes" Dogs



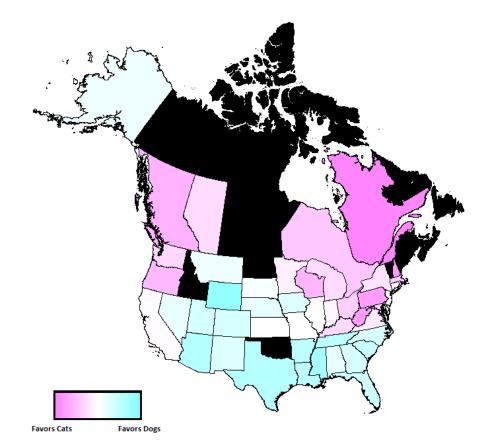
• Likes dogs is significantly higher than likes cats

#### Map of "Likes" Cats



- Canada has significantly higher portion of likes Cats
- Quebec and British Columbia had the two highest proportions of "likes cats" with Alberta and Ontario in tenth and eleventh place

# Comparing Dog and Cat Ownership



- Centered and Scaled % of Dog and Cat ownership by state
- Looked at difference between Cat and Dog ownership
- Measurements are relative
  - States with similar relative ownership will appear clear
  - States with higher relative cat ownership vs dog ownership will be purple
  - States with higher relative dog ownership vs cat ownership will be blue
- Trends are as expected
  - Higher relative cat ownership in Northeast, rust belt, Canada, and Pacific Northwest
  - Higher relative Dog ownership in Southern and Mountain West states

#### Groups of Account Profile Variables Investigated

Group	Variables
Account demographics	gender, partner sexual preference, age, children, relationship history, ethnicity, languages spoken
Seeking demographics	the demographics the account holder is seeking in a match
Account Appearance	body type, height, hair color, eye color
Seeking Appearance	the appearance the account holder is seeking in a
	match
Account Education/Beliefs	religious background, education background,
	astrological information, political views
Seeking Education/Beliefs	the education/beliefs the account holder is seeking
	in a match
Account Lifestyle	smoking habits, drinking habits, occupation, income
	range, hobbies, reading taste
Seeking Lifestyle	the lifestyle the account holder is seeking in a match

- Input variables grouped during model building process
- Groups of variables sequentially removed and replaced from GLM for each outcome
- Importance of variable groups assessed by comparing AICs from model including all variable groups and the AIC from a model without a specific group

# Importance of Variable Groups

	PercentDeltaAIC Values By Outcome						
Variable Group	Owns Dogs	Owns Cats	Owns Dogs Or Cats	Likes Dogs	Likes Cats	Likes Dogs Or Cats	
Account demographics	1.967%	2.676%	2.552%	0.751%	0.576%	1.139%	
Seeking demographics	0.195%	0.281%	0.226%	0.334%	0.232%	0.193%	
Account Appearance	0.035%	0.076%	0.048%	0.076%	0.004%	0.022%	
Seeking Appearance	0.010%	0.031%	0.016%	0.133%	0.105%	0.054%	
Account Education/Beliefs	0.095%	0.169%	0.115%	0.111%	0.176%	0.136%	
Seeking Education/Beliefs	0.046%	0.147%	0.060%	0.045%	0.128%	0.045%	
Account Lifestyle	0.232%	0.470%	0.259%	0.541%	0.629%	0.504%	
Seeking Lifestyle	0.036%	0.023%	0.035%	0.011%	0.052%	0.034%	

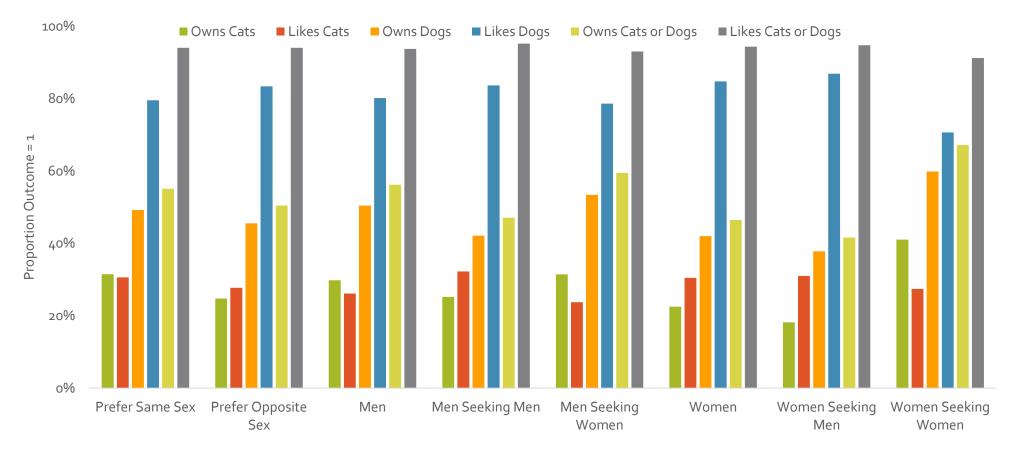
- Higher PercentDeltaAIC values mean that a group of variables is more important
- Account demographics most important group by a wide margin
- Demographics that an account is seeking in a match second most important

#### Top Drivers Across Outcomes, By Variable Group

Outcome	More Likely	Less Likely
Owns Dogs	Identify as White or Latino;	Women seeking men;
	Self-employed or student;	Never married;
	Identify as Christian;	Identify as Black;
	Enjoys the outdoors	Older age
Owns Cats	Identify as White;	Women seeking men;
	Liberal political views;	Identify as Black;
	Seeking non-religious match;	Slender/athletic body type;
	Likes to read	Seeking match age 20-29
Owns Dogs or Cats	Identify as White;	Women seeking men;
	Self-employed or medical work;	Identify as Black;
	Identify as Christian;	Slender/athletic body type;
	Attended college	Seeking match age 60+
Likes Dogs	Women seeking men;	Non-drinkers;
	Identify as Spiritual;	Seeking non-religious match;
	Slender/athletic body type;	Work in tech field;
	Likes sports	HS highest degree attained
Likes Cats	Older age;	Self-employed;
	Liberal political views;	Executive or Sales work;
	Seeking non-religious match;	Identify as Catholic or Spiritual;
	Earns < \$35K	Likes sports
Likes Dogs or Cats	Women seeking men;	Self-employed or medical work;
	Never married;	Spiritual Faith;
	Older age;	Identify as White;
	Identify as Black	Identify as Catholic

- Owns/Likes Dogs:
  - Like sports and outdoors
  - Christian or spiritual
  - Athletic or slender
- Owns/Likes Cats:
  - Liberal political views
  - Seeking non-religious match
  - Not seeking 20-29 year old match

# Outcomes by Sex and Sex Preferences



- Most accounts liked dogs, regardless of sex or sex preferences
- Greater proportion of men owned pets than women
- Accounts who prefer same sex own cats more frequently than like cats, whereas accounts who prefer opposite sex like cats more frequently than own cats

# Linguistic Analysis

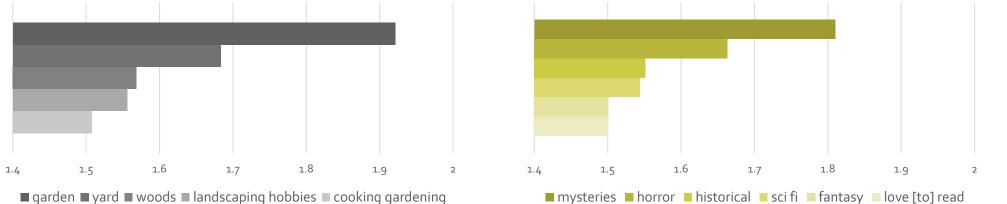
Terms (words and two-word combinations) most used by:
Cat Owners

- Themes: Outdoors, book/movie genres
- Dog Owners
  - Themes: Outdoors
- Individuals who report liking cats but don't own cats
  - Themes: Book/movie genres, the arts, 'intellectuality', locations
- Individuals who report liking dogs but don't own dogs
  - Themes: Sports, TV shows, locations

#### Cat Owners vs. Others

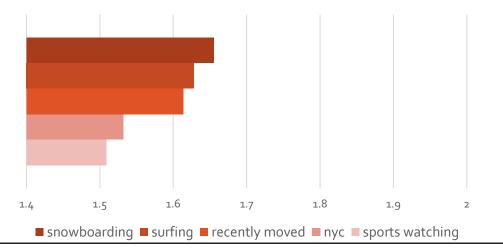
High Usage Ratio for Cat Owners: Outdoors

High Usage Ratio for Cat Owners: Book/Movie Genres

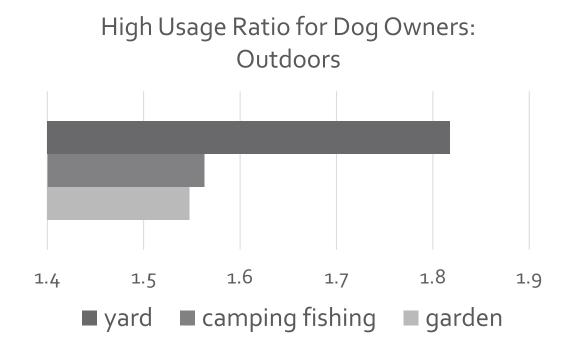


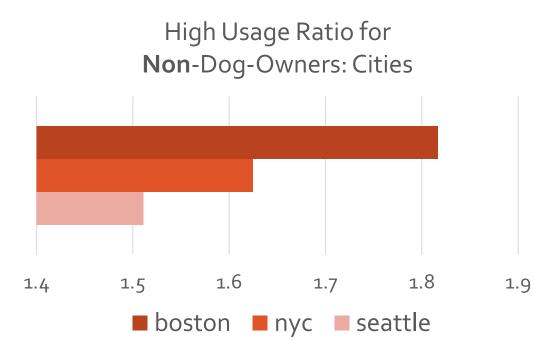
■ garden ■ yard ■ woods ■ landscaping hobbies ■ cooking gardening





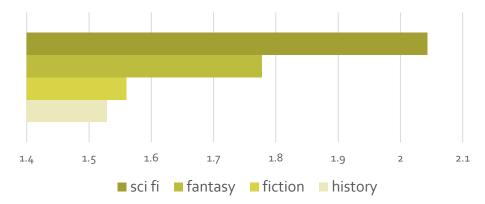
# Dog Owners vs. Others



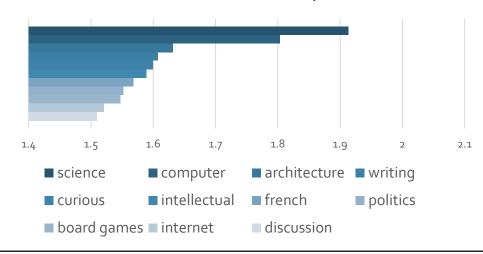


#### Non-Cat-Owners who Like Cats

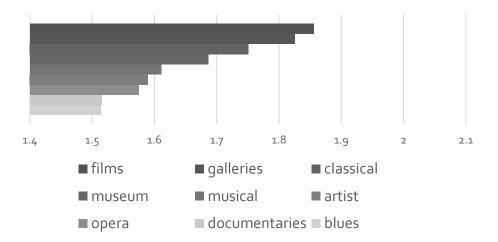
Genres



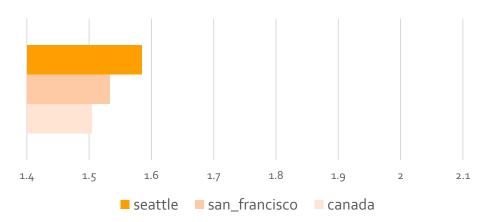
'Intellectuality'





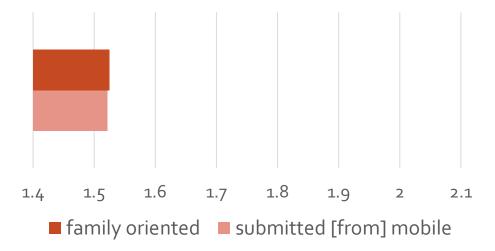




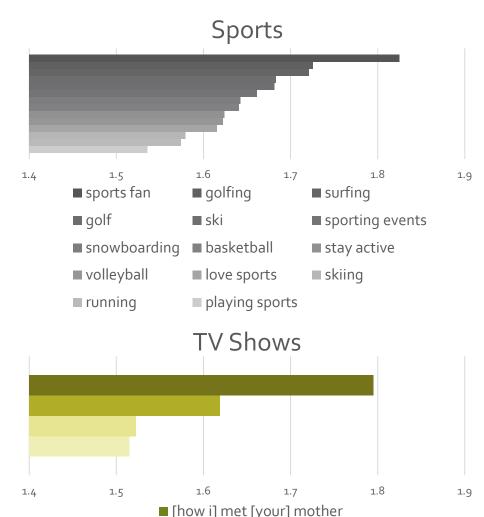


#### Non-Cat-Owners who do not Like Cats

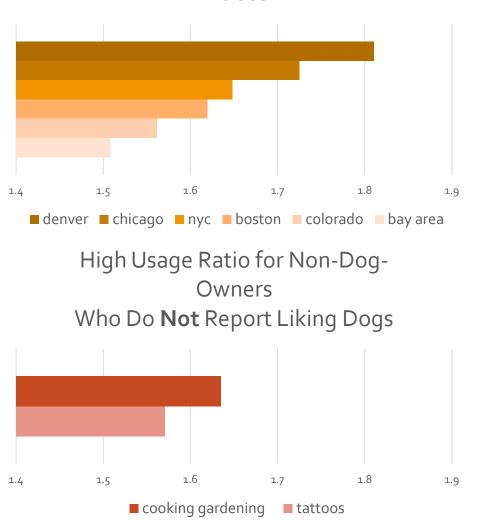
High Usage Ratio for Non-Cat-Owners Who Do **Not** Report Liking Cats



# Non-Dog-Owners who Like Dogs



Places

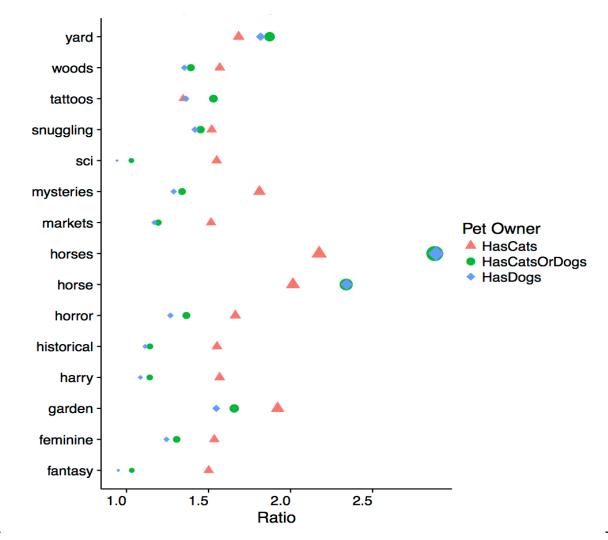


modern family mad men

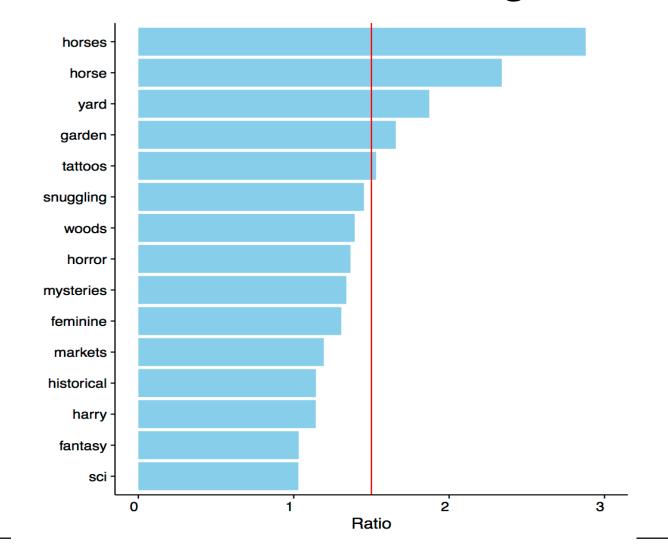
breaking bad

# Appendix

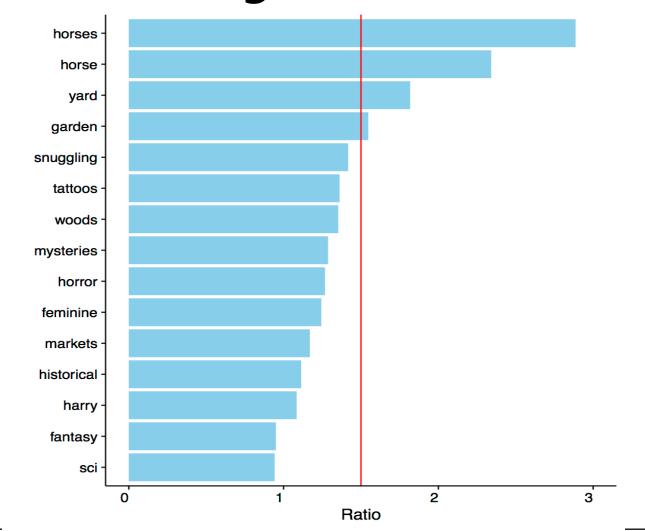
## Most Likely Occurring Terms for Pet Owners



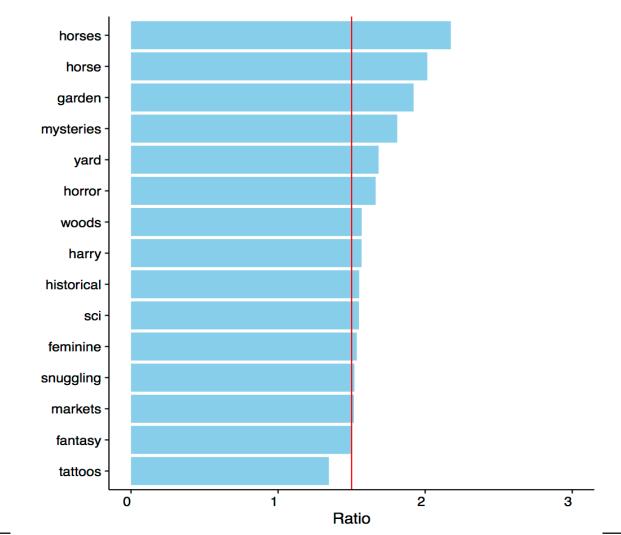
#### Most Likely Occurring Terms Among Owners of Cats or Dogs



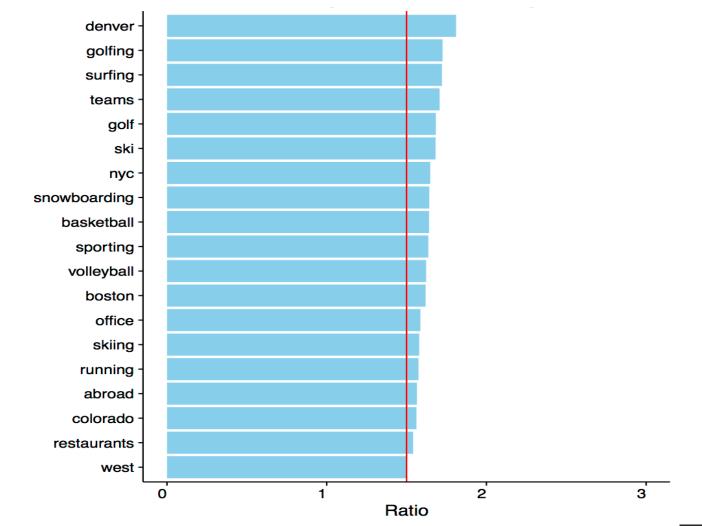
## Most Likely Occurring Terms Among Dog Owners



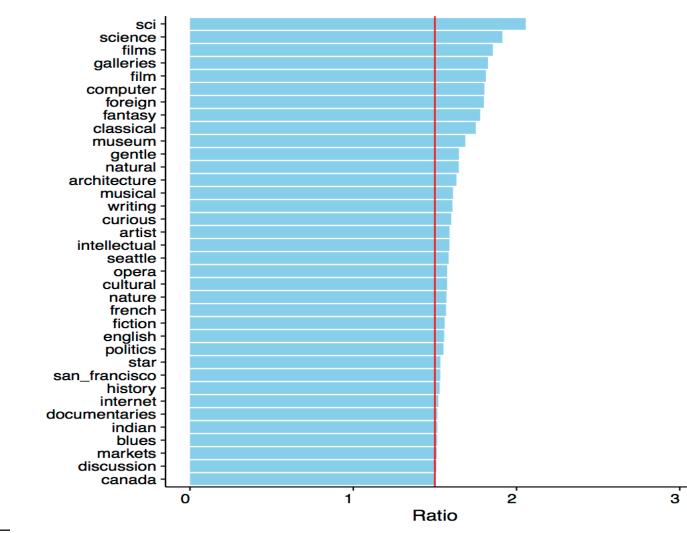
### Most Likely Occurring Terms Among Cat Owners



# Most Likely Occurring Terms for NonDogOwners That Like Dogs



# Most Likely Occurring Terms for NonCatOwners That Like Cats



#### Most Likely Occurring Terms for NonPetOwners that Like Both Cats and Dogs

