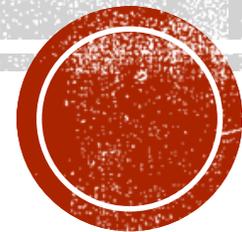


HOW TO ASK FOR A FAVOR

A Case Study on the Success of Altruistic Requests



Tim Althoff, Cristian Danescu-Niculescu-Mizil, Dan Jurafsky
Stanford University & Max Planck Institute SWS

What makes a request successful?
Here: Focus on language effects

OUR MAIN QUESTIONS

OUR MAIN QUESTIONS

1. Does the language of a request matter?

OUR MAIN QUESTIONS

1. Does the language of a request matter?
2. Can we understand how language matters and quantify its effects?

OUR MAIN QUESTIONS

1. Does the language of a request matter?
2. Can we understand how language matters and quantify its effects?
3. Can we predict which requests will be successful based on linguistic and social factors?

IMPORTANCE

Understanding success factors of requests

▪

▪



IMPORTANCE

Understanding success factors of requests

- Extends work in social psychology on helping behavior to online settings (e.g. status, urgency, reciprocity, gratitude)

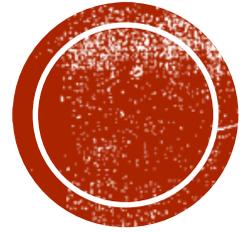


IMPORTANCE

Understanding success factors of requests

- Extends work in social psychology on helping behavior to online settings (e.g. status, urgency, reciprocity, gratitude)
- Practical implications for online communities





DOES LANGUAGE MATTER?



CONFOUNDS

(Mitra and Gilbert 2014; Mollick 2014; Etter, Grossglauser, and Thiran 2013; Ceyhan, Shi, and Leskovec 2011; Teevan, Morris, and Panovich 2011; Burke et al. 2007; Wash 2013; Cialdini 2001)

CONFOUNDS

Could you please donate \$1 ?

(Mitra and Gilbert 2014; Mollick 2014; Etter, Grossglauser, and Thiran 2013; Ceyhan, Shi, and Leskovec 2011; Teevan, Morris, and Panovich 2011; Burke et al. 2007; Wash 2013; Cialdini 2001)

CONFOUNDS

Could you please donate \$100?

What

(Mitra and Gilbert 2014; Mollick 2014; Etter, Grossglauser, and Thiran 2013; Ceyhan, Shi, and Leskovec 2011; Teevan, Morris, and Panovich 2011; Burke et al. 2007; Wash 2013; Cialdini 2001)

CONFOUNDS

Could you please donate \$100?

What

If you do, you'll get Google Glass in two weeks.

Incentive

(Mitra and Gilbert 2014; Mollick 2014; Etter, Grossglauser, and Thiran 2013; Ceyhan, Shi, and Leskovec 2011; Teevan, Morris, and Panovich 2011; Burke et al. 2007; Wash 2013; Cialdini 2001)

CONFOUNDS

Could you please donate \$100?

What

If you do, you'll get Google Glass in two weeks.

Incentive

17,392 people have already donated. These last \$100 would make us reach our final goal.

Group Dynamics

(Mitra and Gilbert 2014; Mollick 2014; Etter, Grossglauser, and Thiran 2013; Ceyhan, Shi, and Leskovec 2011; Teevan, Morris, and Panovich 2011; Burke et al. 2007; Wash 2013; Cialdini 2001)

WHAT MAKES REQUESTS SUCCESSFUL?

How to control for all these confounds and focus on language?

What

Incentive

Group Dynamics



RANDOM ACTS OF PIZZA

online community devoted to giving away
free pizza to strangers

RANDOM ACTS OF PIZZA

online community devoted to giving away free pizza to strangers

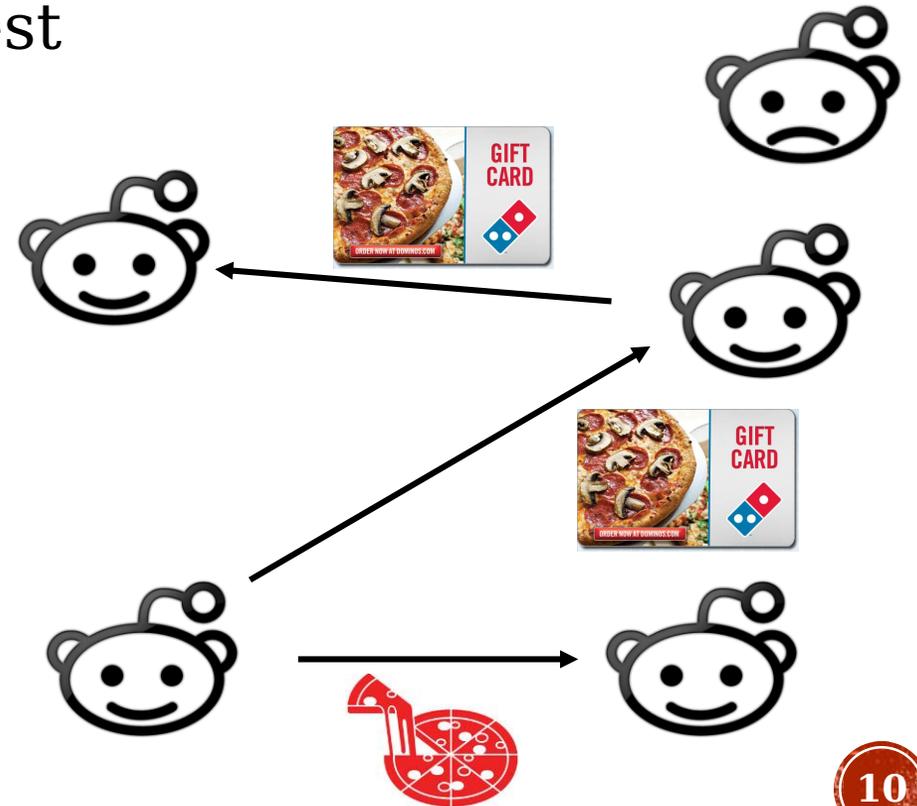
“because... who doesn't like helping out a stranger? The purpose is to have fun, eat pizza and help each other out. Together, we aim to restore faith in humanity, one slice at a time.”

www.randomactsofpizza.com



DATASET

- 21k total posts between December 2010 and September 2013
- Focus on users that post a single request
- Average success rate: 24.6%

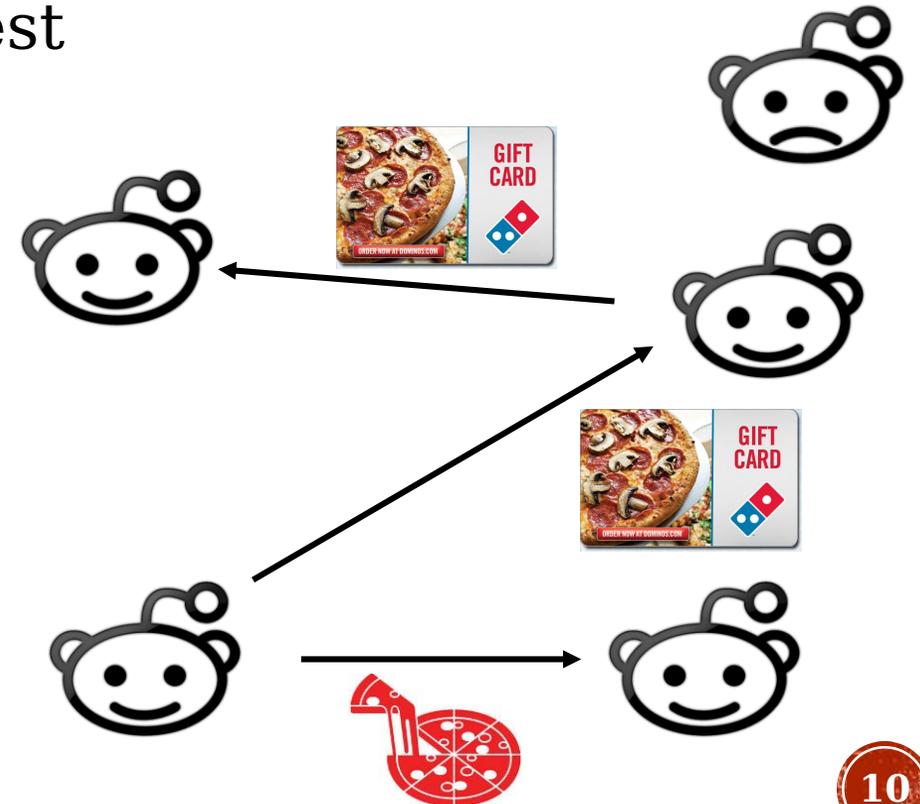


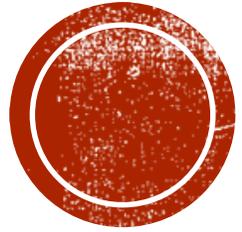
DATASET

- 21k total posts between December 2010 and September 2013
- Focus on users that post a single request
- Average success rate: 24.6%

Ideal situation

- All requests ask for same thing
- No additional rewards
- Requests satisfied by single user
- Requests embedded in social network





HOW DOES LANGUAGE MATTER?



FACTORS (1)

“My gf and I have hit some hard times with her **losing her job** and then **unemployment** as well for being **physically unable to perform her job** due to **various hand injuries** as a server in a restaurant. She is currently petitioning to have **unemployment** reinstated due to medical reasons for being unable to perform her job, but until then **things are really tight** and ANYTHING would help us out right now. I [...] would certainly **return the favor again** when I am able to **reciprocate**.”

FACTORS (1)

“My gf and I have hit some hard times with her **losing her job** and then **unemployment** as well for being **physically unable to perform** as a server in a restaurant. We **have unemployment** and being unable to perform. **Things are really tight** and ANYTHING would help us out right now. I [...] would certainly **return the favor again** when I am able to **reciprocate**.”

Reciprocity: Promises to return the favor (Wilke and Lanzetta 1970; Willer et al. 2013; Gray, Ward, and Norton 2012; Plickert, Côté, and Wellman 2007)

FACTORS (1)

“My gf and I have hit some hard times with her **losing her job** and then **unemployment** as well for being **physically un** and **injuries** as a **Length:** Long requests demonstrate extra effort and can provide more evidence **conditioning to** ha (Lettice et al. 2012) **al reasons for** being un **perform her job**, but until then **things are really** and **ANYTHING** would help us out right now. I [...] would certainly **return the favor again** when I am able to **reciprocate.**”

Evidentiality: Urgent requests are met more frequently than non-urgent requests (Yinon and Dovrat 1987; Shotland and Stebbins 1983; Colaizzi, Williams, and Kayson 1984; Gore, Tobiasen, and Kayson 1997)



| Bank Accounts | Balance ^a |
|---------------------|----------------------|
| ▶ Checking - 1491 | \$0.49 |
| ▶ Saving - 7127 | \$5.60 |
| Investment accounts | |

Merrill Lynch

“My g
job an
unable
a serve

have unemployed
being unable to perform her job, but until then things are really tight and ANYTHING would help us out right now. I [...] would certainly return the favor again when I am able to reciprocate.”

osing her
ysically
juries as
ning to

FACTORS (1)

“My gf and I have hit some hard times with her **losing her job** and then **unemployment** as well for being **physically unable to perform her job** due to **various hand injuries** as a server in a restaurant. She is currently petitioning to have **unemployment** reinstated due to medical reasons for being unable to perform her job, but until then **things are really tight** and ANYTHING would help us out right now. I [...] would certainly **return the favor again** when I am able to **reciprocate**.”

FACTORS (2)

“My friend is coming in town for the weekend and my friends and i are so excited because we haven’t seen him since junior high. we are going to a high school football game then to the dollar theater after and it would be so nice if someone fed us before we embarked :)
[Thank you!]”

FACTORS (2)

“My **friend is coming in town** for the weekend and my friends and i are so excited because we haven’t seen him since junior high. we are going to a **high school football game** then to the dollar theater after and **it would be so nice if someone fed us before we embarked :)**
[Thank you!]”

Politeness: A person experiencing gratitude is more likely to behave prosocially towards their benefactor and others (Tsang 2006; Bartlett and DeSteno 2006; McCullough et al. 2001; Danescu-Niculescu-Mizil et al. 2013)

FACTORS (2)

Sentiment: Are requests that exhibit strong sentiment (positive or negative) more likely to succeed?

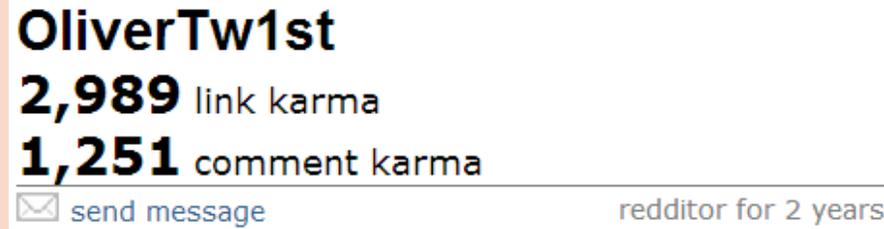
(Forgas 1998; Milberg and Clark 1988)

Since you're going to a high school football game tomorrow to the dollar theater after and it would be so nice if someone fed us before we embarked :) [Thank you!]"

FACTORS (2)

“My friend is friends and i since junior game then to nice if someone [Thank you!]”

Status: People of high status (e.g. occupation or wealth) receive help more often.
(Solomon and Herman 1977; Goodman and Gareis 1993)



A screenshot of a Reddit user profile for 'OliverTw1st'. The profile shows 2,989 link karma and 1,251 comment karma. There is a 'send message' button with an envelope icon and a note that the user is a 'redditor for 2 years'.

FACTORS (2)

“My friend is coming in town for the weekend and my friends and i are so excited because we haven’t seen him since junior high. we are going to a high school football game then to the dollar theater after and it would be so nice if someone fed us before we embarked :)
[Thank you!]”

MEASURING FACTORS

-

-

-

-

MEASURING FACTORS

- **Temporal Factors:** Controlling for temporal or seasonal effects

-

-

-

MEASURING FACTORS

- **Temporal Factors:** Controlling for temporal or seasonal effects
- **Reciprocity:** Detect phrases like “pay it forward” or “return the favor”

■

■

MEASURING FACTORS

- **Temporal Factors:** Controlling for temporal or seasonal effects
- **Reciprocity:** Detect phrases like “pay it forward” or “return the favor”
- **Length:** total number of words in request

MEASURING FACTORS

- **Temporal Factors:** Controlling for temporal or seasonal effects
- **Reciprocity:** Detect phrases like “pay it forward” or “return the favor”
- **Length:** total number of words in request
- **Evidentiality:** Presence of an image link (86% of images in random sample included some kind of evidence)

MEASURING FACTORS (2)

-

-

-

MEASURING FACTORS (2)

- **Politeness:** Extract all 19 politeness features from the computational politeness model in (Danescu-Niculescu-Mizil et al. 2013)

-

-

MEASURING FACTORS (2)

- **Politeness:** Extract all 19 politeness features from the computational politeness model in (Danescu-Niculescu-Mizil et al. 2013)
- **Sentiment:** Extract sentiment annotation using Stanford CoreNLP Package, positive & negative lexicons based on LIWC, and emoticons

MEASURING FACTORS (2)

- **Politeness:** Extract all 19 politeness features from the computational politeness model in (Danescu-Niculescu-Mizil et al. 2013)
- **Sentiment:** Extract sentiment annotation using Stanford CoreNLP Package, positive & negative lexicons based on LIWC, and emoticons
- **Status:** karma points (up-votes minus down-votes) & user account age

(Tausczik and Pennebaker 2010)

MODELING NARRATIVES

Discovered five narratives using topic modeling

MODELING NARRATIVES

Discovered five narratives using topic modeling

- 1. Money:** “Broke until next paycheck. [...] I had to pay to get my car repaired this week, leaving me with little money until next Friday when I get paid again.”

MODELING NARRATIVES

Discovered five narratives using topic modeling

- 1. Money:** “Broke until next paycheck. [...] I had to pay to get my car repaired this week, leaving me with little money until next Friday when I get paid again.”
- 2. Job:** “He lost his job last week and I had to pay his month’s rent, and I’m going to have to until he finds another job.”

MODELING NARRATIVES

Discovered five narratives using topic modeling

- 1. Money:** “Broke until next paycheck. [...] I had to pay to get my car repaired this week, leaving me with little money until next Friday when I get paid again.”
- 2. Job:** “He lost his job last week and I had to pay his month’s rent, and I’m going to have to until he finds another job.”
- 3. Student:** “Studying for finals, no time to go get food. Im studying for my last batch of finals before applying to college in the fall (transfer student, community college path).”

MODELING NARRATIVES (2)

MODELING NARRATIVES (2)

4. **Family:** “Help out a **Dad** please? [...] My **daughter** is 2 and we usually do a pizza and movie night every once in a while, and she’s been asking about it. [...] I try to not let my **wife** know exactly how bad we are when it gets like this.”

MODELING NARRATIVES (2)

- 4. Family:** “Help out a **Dad** please? [...] My **daughter** is 2 and we usually do a pizza and movie night every once in a while, and she’s been asking about it. [...] I try to not let my **wife** know exactly how bad we are when it gets like this.”
- 5. Craving:** “I went out with some **friends** earlier in the week and ended up lending my **friend** 20 bucks til he could get to an ATM. Long story short, we ended up pretty silly **drunk** and crashed at different houses [...].”

REGRESSION RESULTS

| Coefficient | Estimate |
|------------------------------|----------|
| Community Age (Decile) | -0.13*** |
| First Half of Month (Binary) | 0.22** |
| Reciprocity (Binary) | 0.32** |
| Length (in 100 Words) | 0.30*** |
| Including Image (Binary) | 0.81*** |
| Gratitude (Binary) | 0.27** |

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

REGRESSION RESULTS

| Coefficient | Estimate |
|------------------------------|----------|
| Community Age (Decile) | -0.13*** |
| First Half of Month (Binary) | 0.22** |
| Reciprocity (Binary) | 0.32** |
| Length (in 100 Words) | 0.30*** |
| Including Image (Binary) | 0.81*** |
| Gratitude (Binary) | 0.27** |

Temporal Controls

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

REGRESSION RESULTS

| Coefficient | Estimate |
|------------------------------|----------|
| Community Age (Decile) | -0.13*** |
| First Half of Month (Binary) | 0.22** |
| Reciprocity (Binary) | 0.32** |
| Length (in 100 Words) | 0.30*** |
| Including Image (Binary) | 0.81*** |
| Gratitude (Binary) | 0.27** |

Reciprocity

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

REGRESSION RESULTS

| Coefficient | Estimate |
|------------------------------|----------|
| Community Age (Decile) | -0.13*** |
| First Half of Month (Binary) | 0.22** |
| Reciprocity (Binary) | 0.32** |
| Length (in 100 Words) | 0.30*** |
| Including Image (Binary) | 0.81*** |
| Gratitude (Binary) | 0.27** |

Length

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

REGRESSION RESULTS

| Coefficient | Estimate |
|------------------------------|----------|
| Community Age (Decile) | -0.13*** |
| First Half of Month (Binary) | 0.22** |
| Reciprocity (Binary) | 0.32** |
| Length (in 100 Words) | 0.30*** |
| Including Image (Binary) | 0.81*** |
| Gratitude (Binary) | 0.27** |

Evidentiality

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

REGRESSION RESULTS

| Coefficient | Estimate |
|------------------------------|----------|
| Community Age (Decile) | -0.13*** |
| First Half of Month (Binary) | 0.22** |
| Reciprocity (Binary) | 0.32** |
| Length (in 100 Words) | 0.30*** |
| Including Image (Binary) | 0.81*** |
| Gratitude (Binary) | 0.27** |

Politeness

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

REGRESSION RESULTS (2)

| Coefficient | Estimate |
|------------------------------------|----------|
| Strong Positive Sentiment (Binary) | 0.14 |
| Strong Negative Sentiment (Binary) | -0.07 |
| Karma (Decile) | 0.13*** |
| Posted in RAOP before (Binary) | 1.34*** |
| Narrative Money (Binary) | 0.19** |
| Narrative Job (Binary) | 0.26** |
| Narrative Student (Binary) | 0.09 |
| Narrative Family (Binary) | 0.22* |
| Narrative Craving (Binary) | -0.34*** |

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

REGRESSION RESULTS (2)

Coefficient

Estimate

| | |
|------------------------------------|-------|
| Strong Positive Sentiment (Binary) | 0.14 |
| Strong Negative Sentiment (Binary) | -0.07 |

Sentiment

| | |
|--------------------------------|----------|
| Karma (Decile) | 0.13*** |
| Posted in RAOP before (Binary) | 1.34*** |
| Narrative Money (Binary) | 0.19** |
| Narrative Job (Binary) | 0.26** |
| Narrative Student (Binary) | 0.09 |
| Narrative Family (Binary) | 0.22* |
| Narrative Craving (Binary) | -0.34*** |

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

REGRESSION RESULTS (2)

| Coefficient | Estimate |
|------------------------------------|----------|
| Strong Positive Sentiment (Binary) | 0.14 |
| Strong Negative Sentiment (Binary) | -0.07 |
| Karma (Decile) | 0.13*** |
| Posted in RAOP before (Binary) | 1.34*** |
| Narrative Money (Binary) | 0.19** |
| Narrative Job (Binary) | 0.26** |
| Narrative Student (Binary) | 0.09 |
| Narrative Family (Binary) | 0.22* |
| Narrative Craving (Binary) | -0.34*** |

Status

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

REGRESSION RESULTS (2)

| Coefficient | Estimate |
|------------------------------------|----------|
| Strong Positive Sentiment (Binary) | 0.14 |
| Strong Negative Sentiment (Binary) | -0.07 |
| Karma (Decile) | 0.13*** |
| Posted in RAOP before (Binary) | 1.34*** |
| Narrative Money (Binary) | 0.19** |
| Narrative Job (Binary) | 0.26** |
| Narrative Student (Binary) | 0.09 |
| Narrative Family (Binary) | 0.22* |
| Narrative Craving (Binary) | -0.34*** |

Narrative

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

EXAMPLE

| | Short Request |
|-------------|----------------------|
| Length | 50 words |
| Narrative | Craving |
| Picture | |
| Gratitude | |
| Reciprocity | |
| | |
| | |
| | |
| | |

EXAMPLE

| | Short Request | Displaying Need |
|-------------|--|---|
| Length | 50 words | 50 words |
| Narrative | Craving | Job & Money |
| Picture | | |
| Gratitude | | |
| Reciprocity | | |
| |  |  |

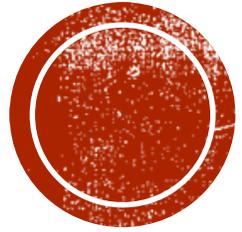
EXAMPLE

| | Short Request | Displaying Need | Optimized Request |
|-------------|--|---|-------------------|
| Length | 50 words | 50 words | 150 Words |
| Narrative | Craving | Job & Money | Job & Money |
| Picture | | | ✓ |
| Gratitude | | | ✓ |
| Reciprocity | | | ✓ |
| |  |  | |

EXAMPLE

How to
get pizza!

| | Short Request | Displaying Need | Optimized Request |
|-------------|--|---|---|
| Length | 50 words | 50 words | 150 Words |
| Narrative | Craving | Job & Money | Job & Money |
| Picture | | | ✓ |
| Gratitude | | | ✓ |
| Reciprocity | | | ✓ |
| |  |  |  |



IS REQUEST
SUCCESS
PREDICTABLE?

SETUP

- Predicting held-out requests (1.6k)

-

-

-

-

-

-

SETUP

- Predicting held-out requests (1.6k)
- **Features:**
 - *Temporal*: Control factors
 - *Social*: Status, User account age
 - *Linguistic Insights*: Reciprocity, Length, Evidentiality, Politeness, Sentiment, Narratives
-
-

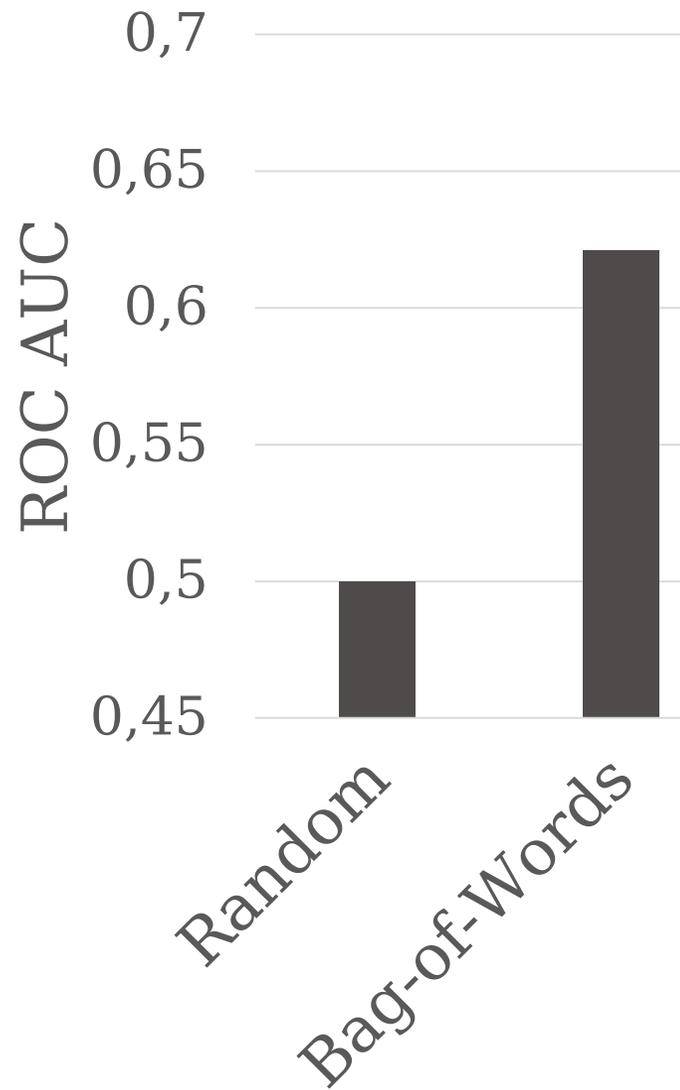
SETUP

- Predicting held-out requests (1.6k)
- **Features:**
 - *Temporal*: Control factors
 - *Social*: Status, User account age
 - *Linguistic Insights*: Reciprocity, Length, Evidentiality, Politeness, Sentiment, Narratives
- **Model**: L_1 penalized Logistic Regression model
-

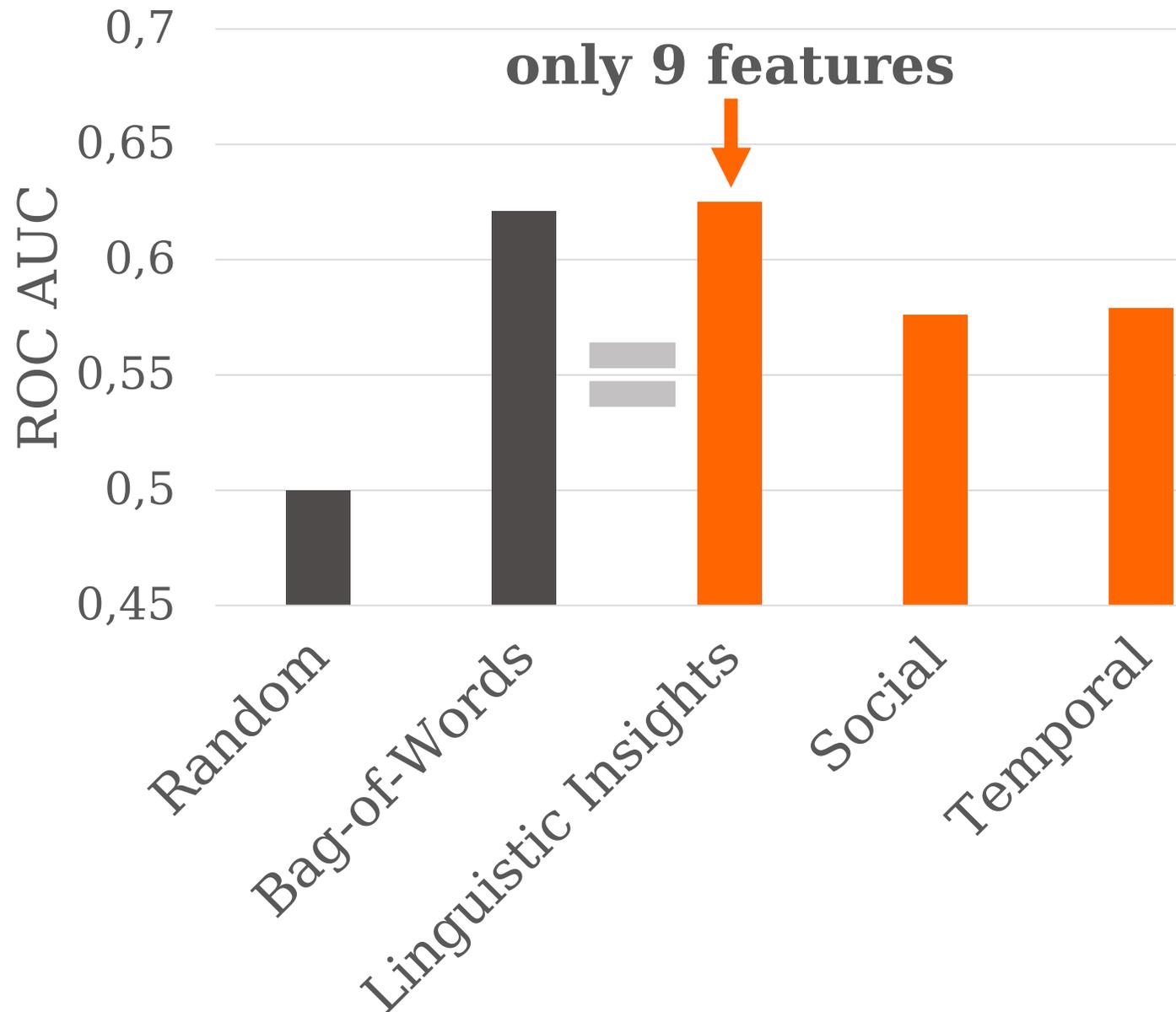
SETUP

- Predicting held-out requests (1.6k)
- **Features:**
 - *Temporal*: Control factors
 - *Social*: Status, User account age
 - *Linguistic Insights*: Reciprocity, Length, Evidentiality, Politeness, Sentiment, Narratives
- **Model**: L_1 penalized Logistic Regression model
- **Metric**: Area under receiver operating characteristic curve (ROC AUC)

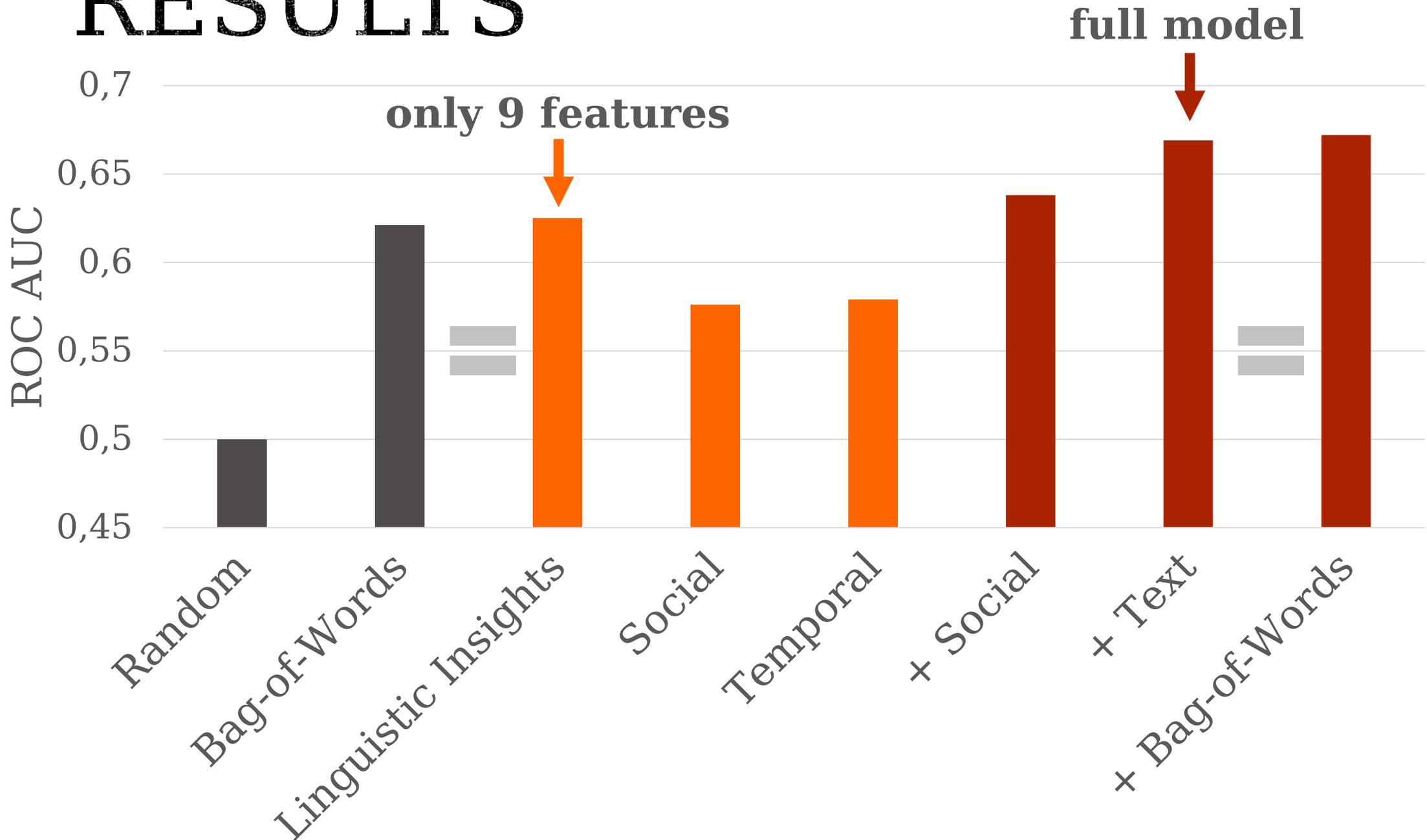
RESULTS

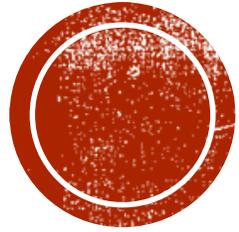


RESULTS



RESULTS





**TAKE-HOME
MESSAGES
OUR CONTRIBUTIONS**



1

Language matters! A lot!
Dataset of requests controlling for what is requested (publicly available)

2

We tied narratives to success



Generalized reciprocity matters:
Promise to pay it forward

4

Pro-social behavior toward requestors who are of high status or expressing gratitude

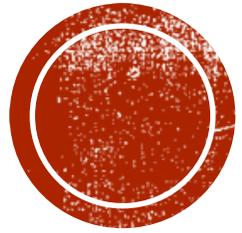
5

Success is predictable!
Practical implications for online
communities

THANK YOU!



Data and slides available at <http://cs.stanford.edu/~althoff>



BACKUP SLIDES





15

[Request] Hungry student wants to surprise colleagues at RAOP presentation

submitted 5 months ago by omega81

Please help out my friend (<http://www.reddit.com/user/schummelpilz/>). He doesn't use reddit much so he can't post himself. Here is his post:

TL/DR: Presenting a class project on RAOP tomorrow. Want to surprise attendees with delicious pizza.

I have been working on a project on Random Acts of Pizza for a class on social media and social network analysis. For the last months I stared at pizza requests and offers and learned about this community (looking at all the pizza photos can be really hard when you're hungry!). It's been a fun project and I am very grateful for the help I received from Reddit. For instance, I learned that claiming to forward pizza makes you more likely to succeed. However, only 25% of pizza'd users seems to actually follow through. I could claim that myself but who would really believe me now? Therefore I chose to give pizza myself last week to prove that I'm actually a huge fan of what this subreddit is doing and that I'm happy to help out myself. Including images also seems to be appreciated. Here is one of me presenting another poster: <http://i.imgur.com/wMKfqup.jpg>

Tomorrow at noon (PST) I will present my project to at least a hundred people at a poster session. It would be absolutely amazing to have some pizza there! Giving out free pizza would

- 1) be in the spirit of this community and this work
- 2) prove to the doubters that RAOP "works"
- 3) attract more people to come learn about RAOP

Obviously, I don't need to feed everybody, just a small pie would be a beautiful statement and could restore peoples' faith in humanity :-)

If you help us out I promise to share another picture at our poster with the pizza! Thank you all!

11 comments share save hide give gold report



15

[Request] Hungry student wants to surprise colleagues at RAOP presentation

submitted 5 months ago by omega81

Please help me out. I'm a student and I have a poster session at my university. I want to surprise my colleagues with pizza. It post himself. Here is a link to the post.

TL/DR: Presenting a poster at a poster session. I have been told that pizza is appreciated. Here is one of me presenting another poster: <http://i.imgur.com/wMKfup.jpg>

For the last few weeks, I have been presenting photos of my work. I received 25% of pizza from Redditors. I'm now presenting another poster. I want to prove that I'm actually a huge fan of what this subreddit is doing and that I'm happy to help myself. Including images also seems to be appreciated. Here is one of me presenting another poster: <http://i.imgur.com/wMKfup.jpg>

Tomorrow at noon (PST) I will present my project to at least a hundred people at a poster session. It would be absolutely amazing to have some pizza there! Giving out free pizza would

- 1) be in the spirit of this community and this work
- 2) prove to the doubters that RAOP "works"
- 3) attract more people to come learn about RAOP

Obviously, I don't need to feed everybody, just a small pie would be a beautiful statement and could restore peoples' faith in humanity :-)

If you help us out I promise to share another picture at our poster with the pizza! Thank you all!

11 comments share save hide give gold report

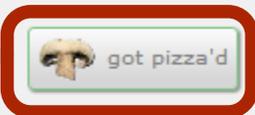
POLITENESS FEATURES

| Strategy | Politeness | In top quartile | Example |
|--------------------------|----------------------|--------------------|--|
| 1. Gratitude | 0.87 ^{***} | 78% ^{***} | I really appreciate that you've done them. |
| 2. Deference | 0.78 ^{***} | 70% ^{***} | Nice work so far on your rewrite. |
| 3. Greeting | 0.43 ^{***} | 45% ^{***} | Hey , I just tried to ... |
| 4. Positive lexicon | 0.12 ^{***} | 32% ^{***} | Wow! / This is a great way to deal... |
| 5. Negative lexicon | -0.13 ^{***} | 22% ^{**} | If you're going to accuse me ... |
| 6. Apologizing | 0.36 ^{***} | 53% ^{***} | Sorry to bother you ... |
| 7. Please | 0.49 ^{***} | 57% ^{***} | Could you please say more... |
| 8. Please start | -0.30 [*] | 22% | Please do not remove warnings ... |
| 9. Indirect (btw) | 0.63 ^{***} | 58% ^{**} | By the way , where did you find ... |
| 10. Direct question | -0.27 ^{***} | 15% ^{***} | What is your native language? |
| 11. Direct start | -0.43 ^{***} | 9% ^{***} | So can you retrieve it or not? |
| 12. Counterfactual modal | 0.47 ^{***} | 52% ^{***} | Could/Would you ... |
| 13. Indicative modal | 0.09 | 27% | Can/Will you ... |
| 14. 1st person start | 0.12 ^{***} | 29% ^{**} | I have just put the article ... |
| 15. 1st person pl. | 0.08 [*] | 27% | Could we find a less complex name ... |
| 16. 1st person | 0.08 ^{***} | 28% ^{***} | It is my view that ... |
| 17. 2nd person | 0.05 ^{***} | 30% ^{***} | But what's the good source you have in mind? |
| 18. 2nd person start | -0.30 ^{***} | 17% ^{**} | You 've reverted yourself ... |
| 19. Hedges | 0.14 ^{***} | 28% | I suggest we start with ... |
| 20. Factuality | -0.38 ^{***} | 13% ^{***} | In fact you did link, ... |

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|-------------------------------------|-----------------|----------------|-------|----------|----------------|----------------|----------|--------|-----------------|---------|----------|-----------------|----------------|---------|
| 1 Length (in 100 Words) | | | | | | | | | | | | | | |
| 2 Community Age | -0.14*** | | | | | | | | | | | | | |
| 3 First Half of Month | 0 | -0.01 | | | | | | | | | | | | |
| 4 Including Image | 0.08*** | -0.03* | 0 | | | | | | | | | | | |
| 5 Gratitude | 0.22*** | -0.05*** | 0.01 | 0.02 | | | | | | | | | | |
| 6 Reciprocity | 0.09*** | 0 | -0.02 | -0.01 | 0.09*** | | | | | | | | | |
| 7 Karma | -0.03* | 0.36*** | 0 | 0.03** | -0.05*** | 0.03* | | | | | | | | |
| 8 Posted in RAOP before | -0.03* | 0.10*** | 0.01 | 0 | 0.01 | -0.01 | 0.07*** | | | | | | | |
| 9 Strong Positive Sentiment | 0.10*** | -0.04*** | 0 | -0.01 | 0.21*** | 0.08*** | -0.02 | -0.03* | | | | | | |
| 10 Strong Negative Sentiment | 0.10*** | -0.03 | 0 | -0.02 | -0.09*** | 0 | 0.02 | 0 | -0.28*** | | | | | |
| 11 Narrative Craving | 0.15*** | 0.01 | 0.02 | 0.02 | 0.02 | -0.01 | 0.02 | 0 | 0.05*** | -0.01 | | | | |
| 12 Narrative Family | 0.10*** | -0.09*** | -0.02 | -0.03* | 0.06*** | -0.03* | -0.10*** | -0.02 | 0.04*** | 0.04** | -0.02 | | | |
| 13 Narrative Job | 0.01 | 0.05*** | 0.02 | -0.04** | 0.01 | 0.06*** | 0.03* | 0 | 0.01 | 0.03* | -0.05*** | -0.01 | | |
| 14 Narrative Money | -0.07*** | 0.06*** | 0 | -0.05*** | 0 | 0.11*** | 0.03* | -0.01 | -0.03 | 0.04** | -0.06*** | -0.06*** | 0.15*** | |
| 15 Narrative Student | 0.10*** | -0.02 | 0.02 | 0 | 0.02 | 0.03* | 0.07*** | -0.02 | -0.01 | 0.05*** | -0.01 | -0.11*** | 0 | 0.06*** |

65 ▲ 0 [Request] I have gotten pizza before from this subreddit, but it's Easter, and I'm stuck at school because finals for me start tomorrow, and I'm broke.

submitted 3 days ago by silents



comment share



66 ▲ 4 [Request] I've been working on my first computer for 6 hours, only to find my GPU was DOA. Can someone hit me up with some pizza please?

submitted 3 days ago by bigbootypanda

4 comments share

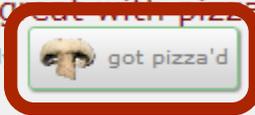
67 ▲ 0 [Request] It's 4/20 and Liverpool FC are top of the table. Having some friends of mine over to celebrate the win and the last week of classes before we graduate but I can't shell out that much for pizza considering what else I'm providing. Anyone feel like helping out?

submitted 2 days ago by HumanautPassenger

1 comment share

68 ▲ 1 [Request] Spooky podcasts go great with pizza! (California)

submitted 3 days ago by posolutelyabsotivel



comment share



69 ▲ 23 [REQUEST] I know this is a long shot. But I've come to the end of college and have drained my funds for it 100% I am currently waiting on an email from said college that will basically determine my future. I have never been so stressed or scared. Pizza would be a comfort. Promise to pay it forward.

submitted 3 days ago by mrshansgruber

3 comments share