

# Content and Linguistic Analysis of the Emotional Themes within the Food Allergy SubReddit: r/FoodAllergies

## Allergy SubReddit: r/FoodAllergies

Asher Boorstein<sup>1</sup>, Isa Garlough-Shah<sup>2</sup>

<sup>1</sup>Middleton High School, <sup>2</sup>Department of Pediatrics, University of Wisconsin-Madison



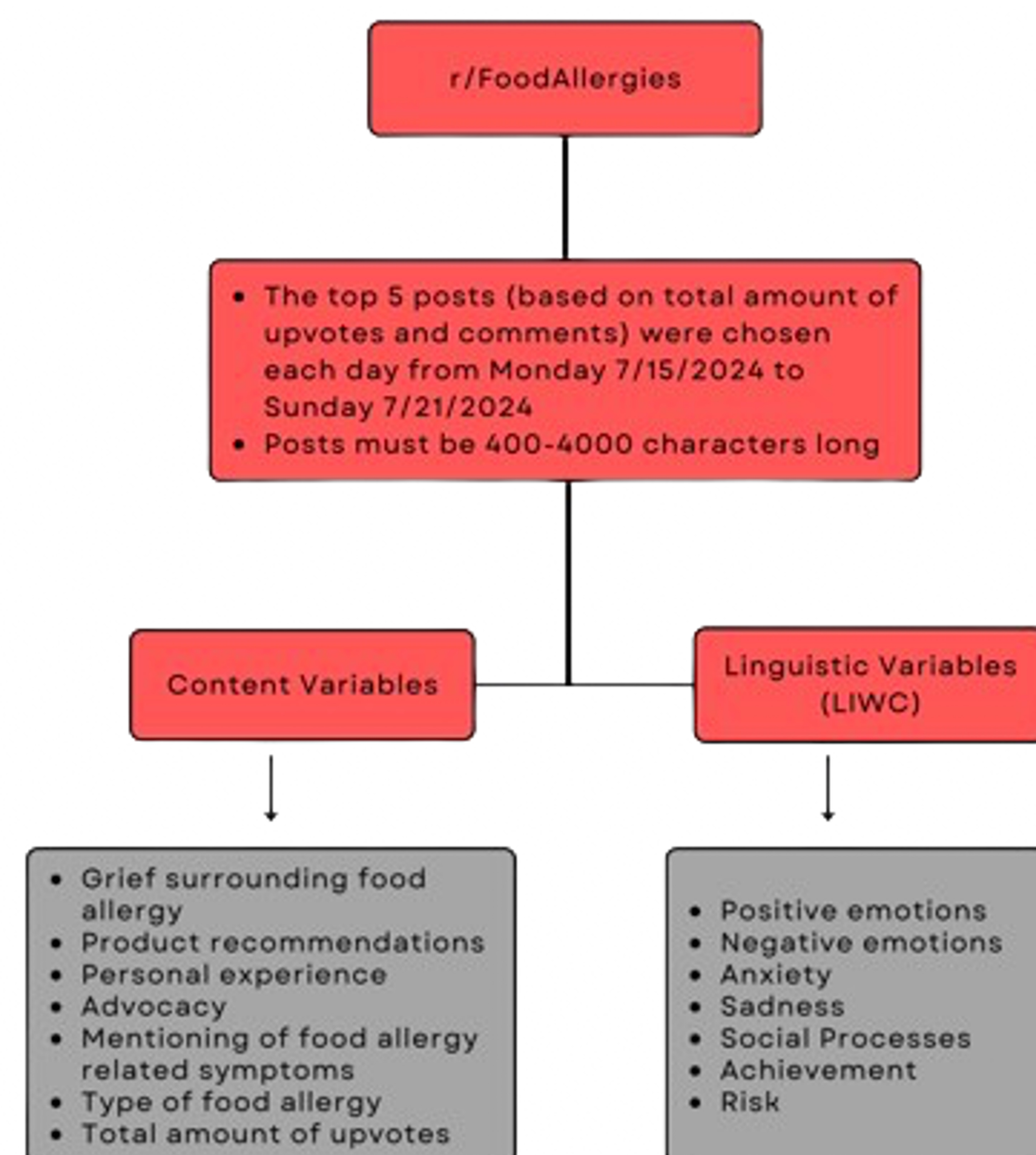
### Introduction

- Approximately 33 million Americans have food allergies, with about 1 in 13 children
- The prevalence of food allergies in children has increased by 50% from 1997 to 2011
- Food allergies have been associated with depression, anxiety, and an overall lower quality of life
- Other studies have only found connections between certain mental states of people with food allergy, but not those who use social media for questions, support, advice, or help regarding food allergies, and there remains a gap in how those with food allergies express their emotions online

*The purpose of this study is to analyze the engagement and frequency of various content and emotional themes of food allergy based posts within the subreddit: r/FoodAllergies.*

### Methods

#### Content and Linguistic Analysis of 35 SubReddit Posts



Descriptive statistics will be used to evaluate the prevalence and frequency of certain content and emotional themes throughout the posts within the subreddit

### Results

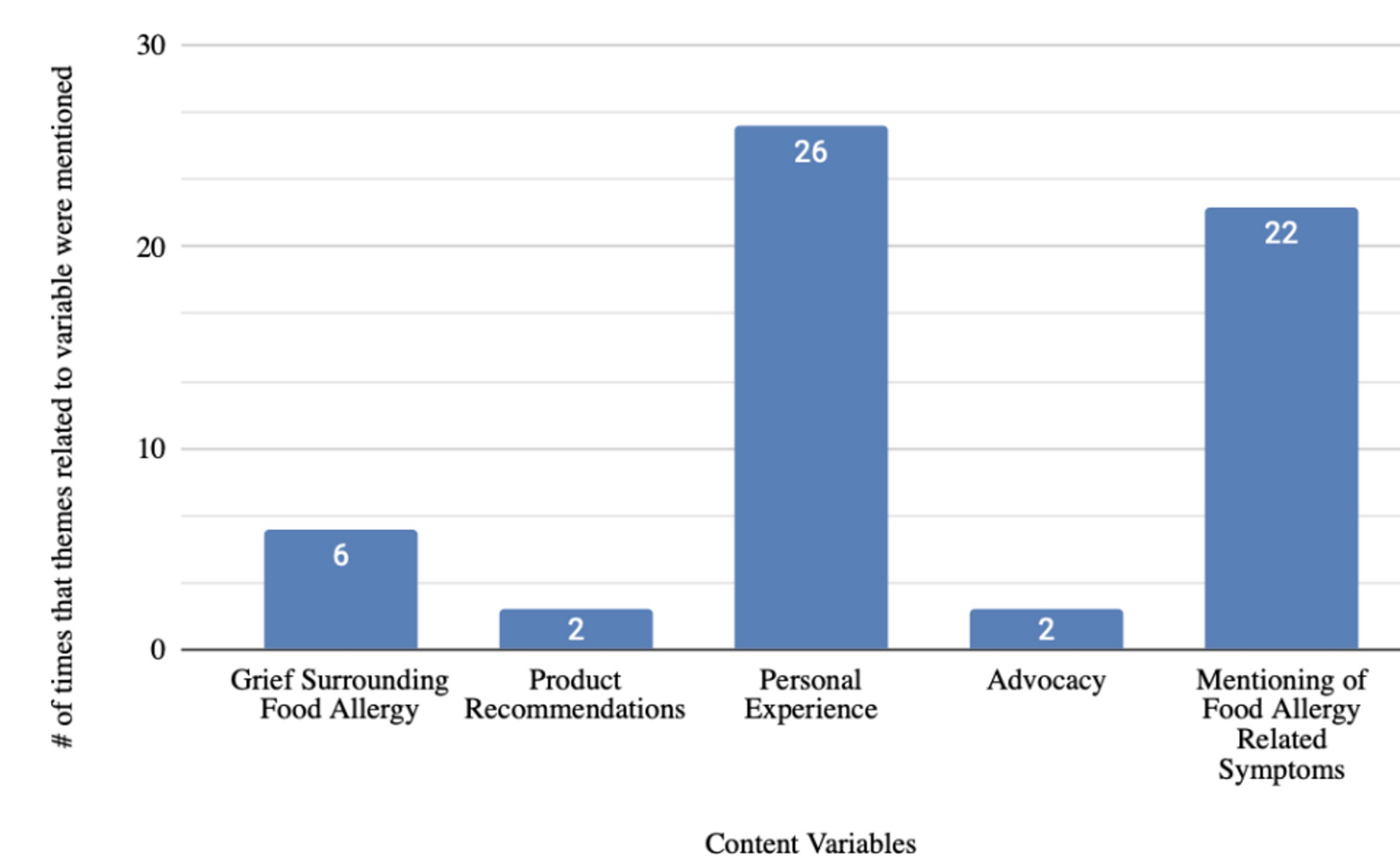
#### Demographics

- **Avg. amount of replies on all posts: 12.7**
- **Avg. amount of upvotes on all posts: 6.2**

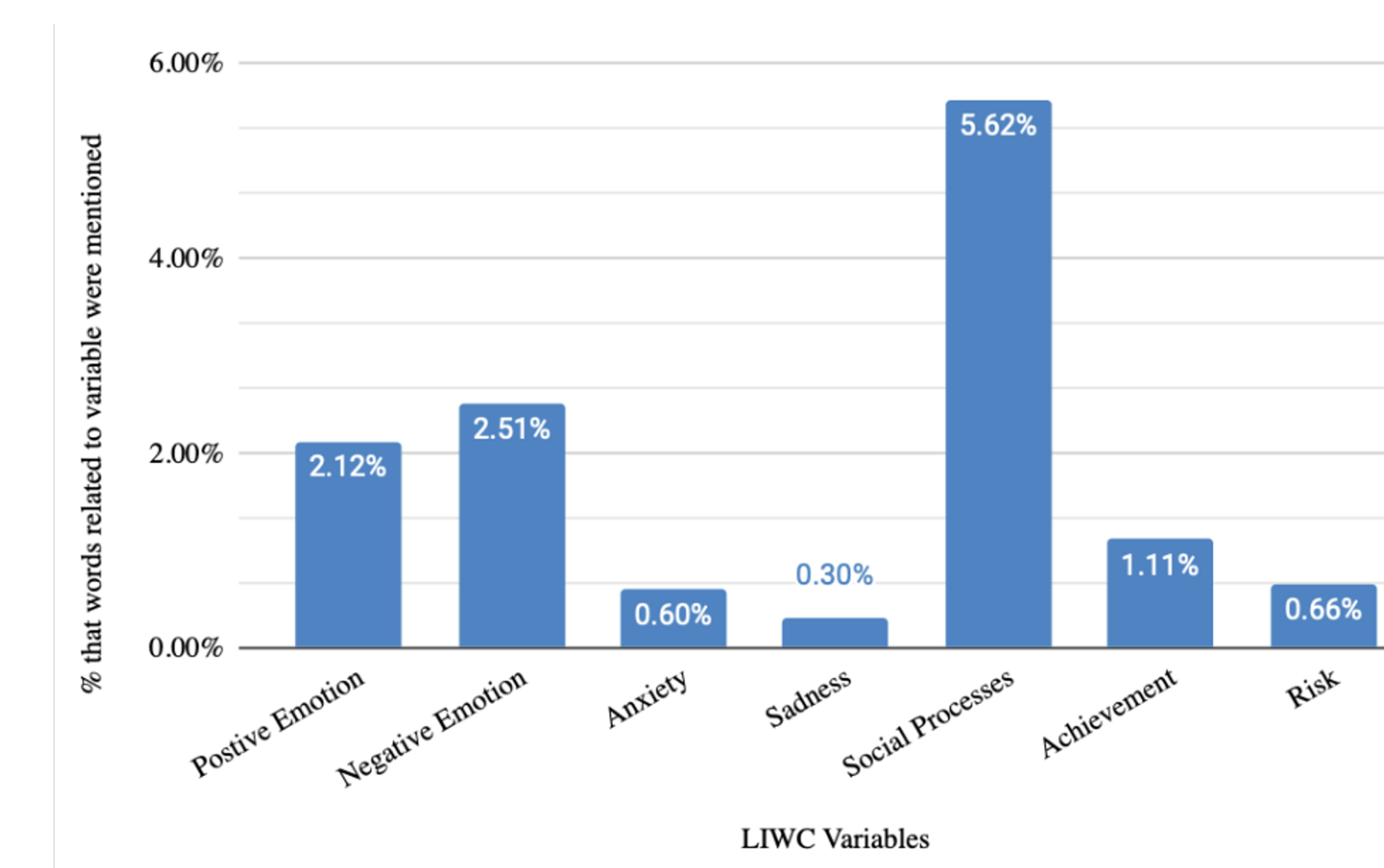
Food Allergies mentioned:



Frequency of Content Variables



Frequency of LIWC Variables



#### Examples of Posts Analyzed

##### Personal Experience + Mentioning of symptoms

**Allergy or poisoning?**

Hi, so last night I woke up from severe stomach ache. It was roughly 4 hours since I ate some gummy bears and 6 hours from my dinner (Caesars salad, fried chicken/chips, bruschetti with smoked salmon and cheese, chocolate cake with some nuts on top). Type wise, nothing that I haven't eaten yet. However, it was a food that was brought to us from a local restaurant so I am not sure of the quality.

So I woke up with stomach cramps and while in the WC 3-4 hives appeared on my chest/arms and it felt like my right side of the throat is swelling up. I looked at the mirror and indeed, the palatopharyngeal arches were red and swollen. An anxiety bout followed as well, some heart palpitations, shivers etc. I had no allergy medication to take so I took some stomach pain killers and went to bed. The hives and swelling went down in an hour or so.

Now I am not really sure if this was some kind of an allergy or poisoning?

On top of that, quite odd but I discovered 3 painful pimples (1 on one side, 2 on the other but next to each other) under each armpit at the exact same location. They do not look like hair pimples because they are nowhere near armpit hair.

So this basically leaves me with 3 options - food allergy, poisoning or bug bite allergy?

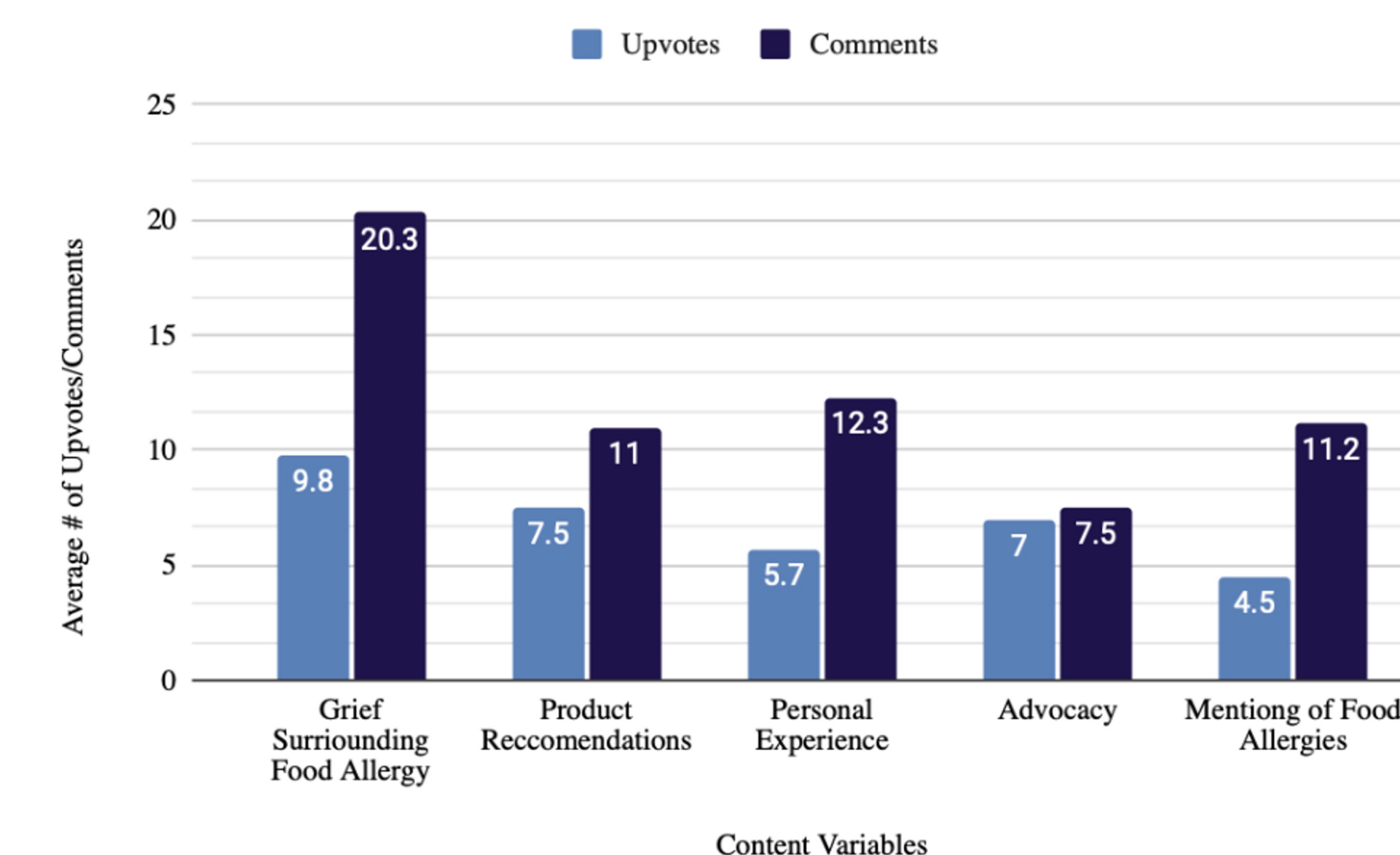
##### Grief Surrounding Food Allergy + Personal Experience

**Frustrated**

This is more of a question for those who didn't develop food allergies until they were adults, like I did. Do you guys ever get sentimental or upset when you think back to what food you could eat before developing your allergy/allergies? I do every so often, and sometimes, it makes me fairly upset where I get in a mood for a bit. It's more because I feel like I took the foods that I used to be able to eat for granted, and now, I'll never have them again. True, I can have a similar variation of them, but it's not the same.

I miss real bread, I miss real Thanksgiving stuffing, I miss real donuts, etc. I never thought I'd get food allergies, but turning 25 6 years ago told me otherwise. I've accepted my wheat allergy now, but every now and then, I think back to how good and easy I had it. Sorry for the rant, I'm just wanting to know if you guys ever feel the same? Like you were robbed somehow?

Average Amount of Upvotes and Comments per Content Variable



### Conclusions

#### Main Findings:

- Most common themes were personal experience and mentioning of food allergy related symptoms
- Among LIWC Variables, words related to social processes (Social interactions and relationships) were used the most.
- Engagement was the highest among posts that mention Grief Surrounding Food Allergies

#### Limitations:

- Sample size of posts could have been larger to produce more meaningful results
- Project was limited to a content and linguistic analysis, preventing from discovering an established correlation between post and mental state of post creator

#### Implications:

- Higher levels of the social processes variable suggest that the food allergy subreddit serves as a powerful tool for community building and social support
- The high engagement with the Grief variable suggests that emotional struggles relating to food allergy resonates deeply within the community, and these types of posts could be used as a tool to aid in supporting individuals who cope with food allergy
- Future studies could extend analysis across various platforms to identify patterns and do a more in depth analysis of how engagement in these communities affects individuals' mental health and the variables with are most beneficial for mental health

### Acknowledgements

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#### Contact us

Asher Boorstein  
asherboor@gmail.com

