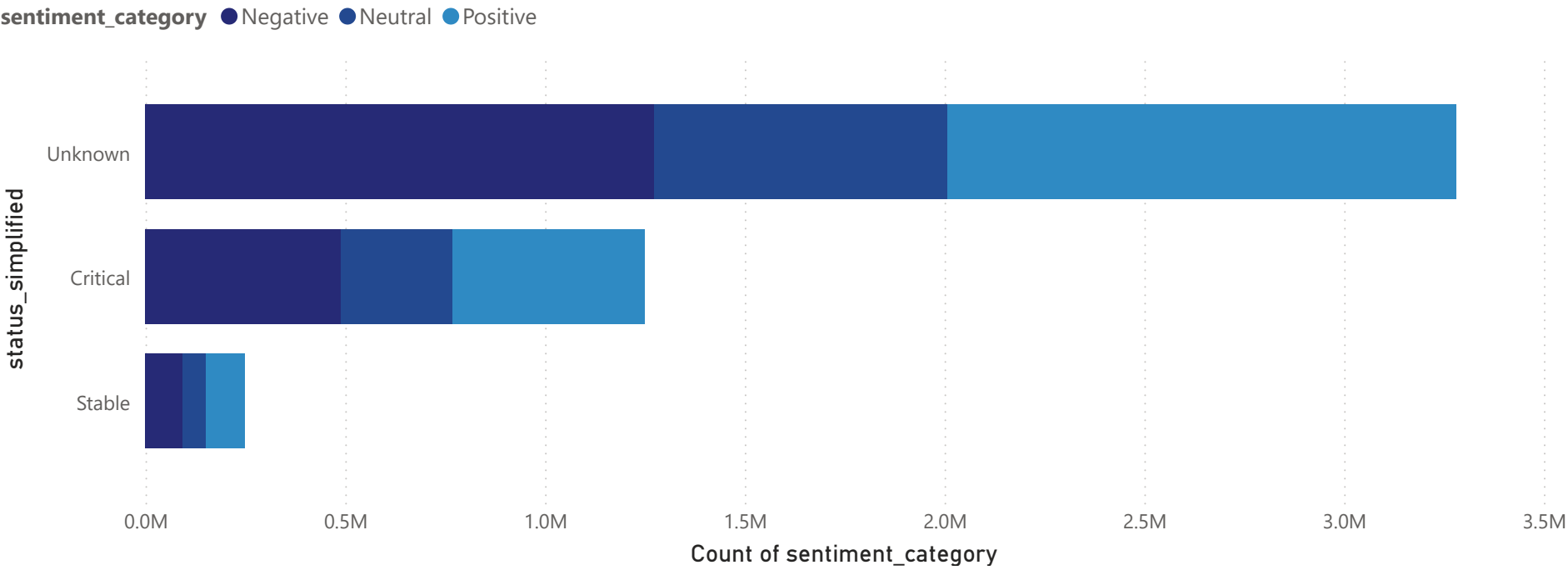
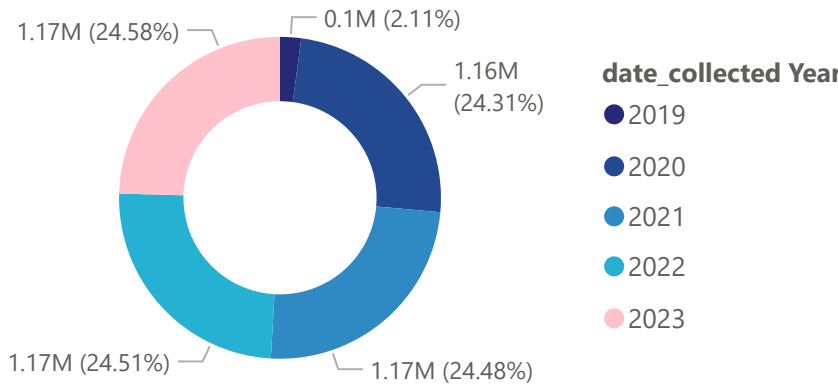


# Sentiment Insights on Mental Health

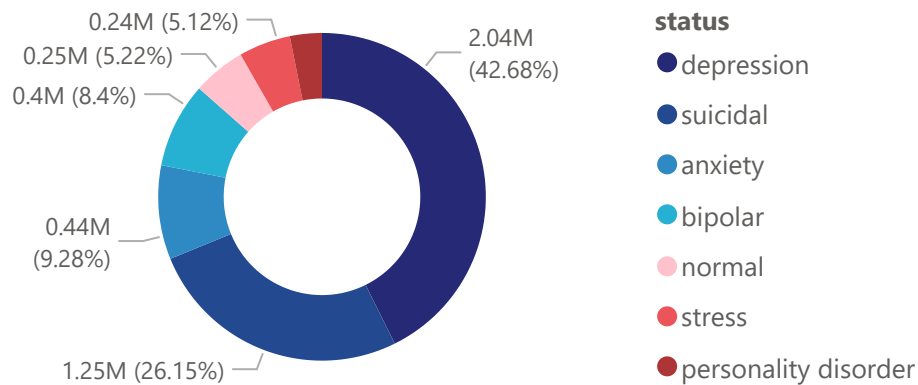
Count of sentiment\_category by status\_simplified and sentiment\_category



Count of SentimentScore by Year



Count of SentimentScore by status



TotalRecords

5M

PositiveSentiment

0.39

NegativeSentiment

0.39

NeutralSentiment

0.22

# Overview of Mental Health Sentiment Data

TotalRecords

5M

Count of...

14

Count of age

81

Count of...

21

Year	Quarter	Month	Day	author	gender	age_group	statement	status
2022	Qtr 4	December	5	Aaron Allen	Male	30-44	i thought i lost my id card, i just gave up my personal data and turned it into a fried bagel and distributed it to 7 states, it turns out that this month i thought he was lost, he's been in my wallet all this time '???'??? i where have you been looking?	normal
2022	Qtr 4	October	24	Aaron Anderson	Female	18-29	hi all i ve got a script for clonidine for my anxiety and i am curious if anyone here ha any experience with it good or bad thanks in advance	depression
2022	Qtr 4	December	17	Aaron Arellano	Male	30-44	i don t feel any desire towards anything in life anymore i see life a a pointless pursuit that ha more pain than joy it s simply not worth it if i m playing a video game or watching a tv show and it s not getting better i simply want to turn it off my passion energy love motivation and empathy isn t what it used to be and i feel trapped i feel like cement when i wake up and lay there until the hunger drive me out of bed i m stuck in my head all day and feel dead to myself and this world i can t even hate myself anymore or bring myself to really do anything i wish so many thing in this life were different but they never will be	depression
2022	Qtr 2	April	3	Aaron Bailey	Female	18-29	for reference, i am a fifteen year old transmasc who has no diagnoses simply because my parents will not allow me to get tested. back when i was twelve, i dealt with the suicide of a loved one and received no support from my own family simply because it was an online relationship. and before you say anything, i know hes gone for sure, i saw his whole obituary.i was doing better, but always started crashing around mid-july until i do not know, maybe september. i neglect to take care of myself and start to withdraw socially.this year was particularly bad. i had recently discovered that i am	depression

sentiment\_category, L...

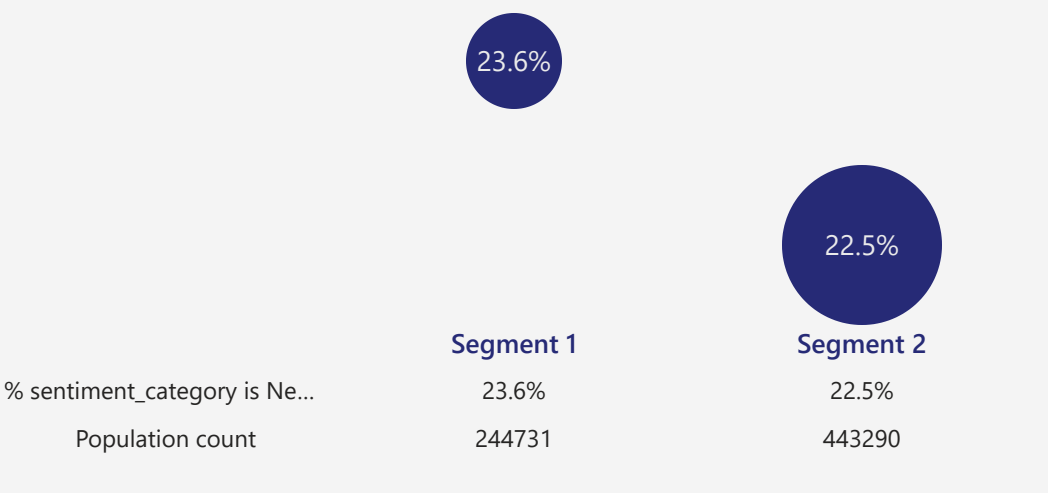
- ^ ☐ Negative
  - ✓ ☐ Australia
  - ✓ ☐ Brazil
  - ✓ ☐ Canada
  - ✓ ☐ China
  - ✓ ☐ France
  - ✓ ☐ Germany
- ^ ☐ India
  - ✓ ☐ <18
  - ✓ ☐ 18-29
  - ✓ ☐ 30-44
  - ✓ ☐ 45-59
  - ✓ ☐ 60-74
  - ✓ ☐ 75+
- ✓ ☐ Italy
- ✓ ☐ Japan
- ✓ ☐ Mexico
- ✓ ☐ Russia
- ✓ ☐ South Africa
- ✓ ☐ Uk
- ✓ ☐ Usa

# Why Sentiment Analysis Matters

Key influencers Top segments

When is sentiment\_category more likely to be Neutral ?

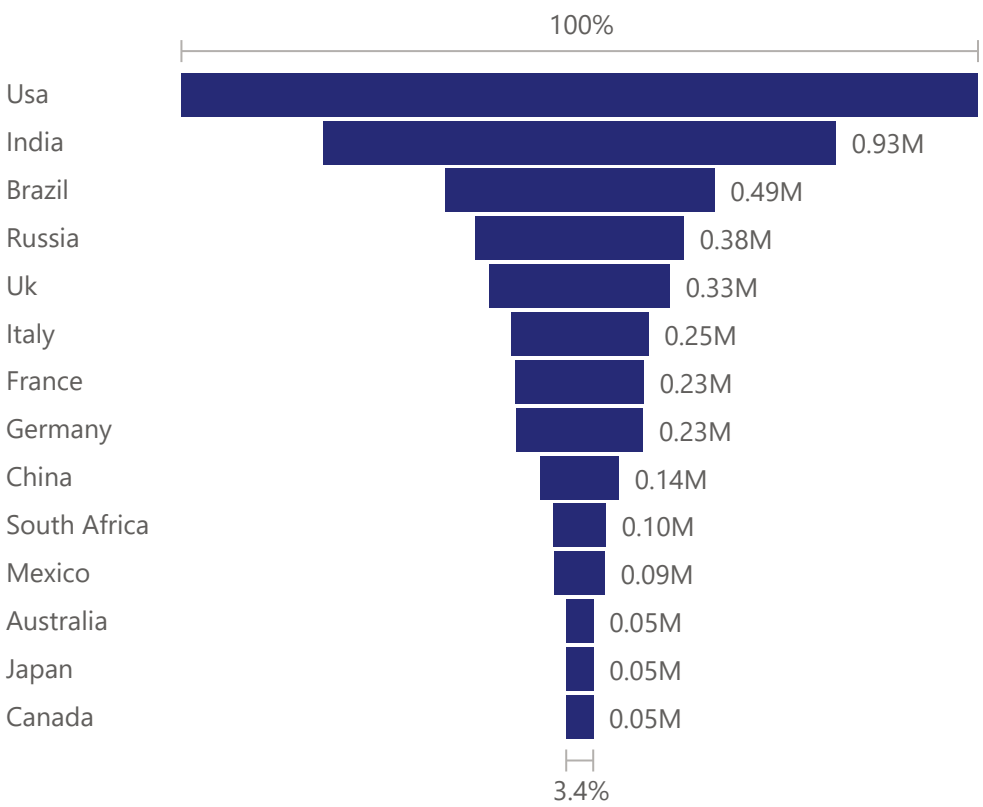
We found 2 segments and ranked them by % sentiment\_category is Neu...



**Mental health issues are becoming increasingly prevalent worldwide, affecting people of all ages, genders, and backgrounds. Despite growing awareness, the emotional and psychological experiences of individuals are often difficult to measure and understand at scale.**

**Traditional mental health research relies heavily on surveys and interviews, but these methods lack real-time insights and emotional nuance. Sentiment analysis of mental health statements allows us to identify emotional patterns, detect early warning signs, and develop more effective support strategies.**

Count of sentiment\_category by location

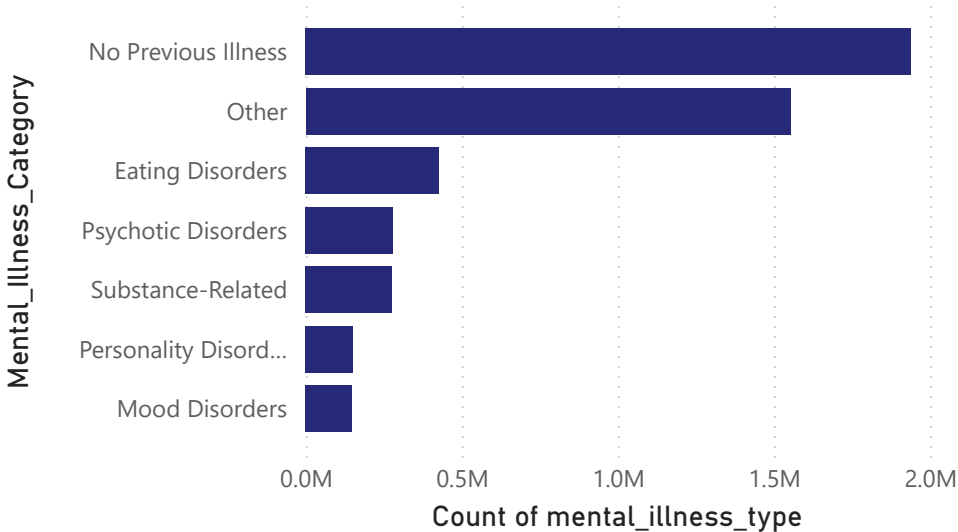


- ✓ **Identify Emotional Trends:** Detect how different demographics experience mental health issues.
- ✓ **Highlight High-Risk Cases:** Spot negative sentiment spikes that could signal a need for intervention.
- ✓ **Track Emotional Shifts Over Time:** Measure how sentiment evolves in response to external factors.
- ✓ **Enhance Support Accessibility:** Pinpoint underserved regions or demographics needing more support.

- sentiment\_category, L...
- ^ ☐ Negative
  - ✓ ☐ Australia
  - ✓ ☐ Brazil
  - ✓ ☐ Canada
  - ✓ ☐ China
  - ✓ ☐ France
  - ✓ ☐ Germany
  - ^ ☐ India
  - ✓ ☐ <18
  - ✓ ☐ 18-29
  - ✓ ☐ 30-44
  - ✓ ☐ 45-59
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  - ✓ ☐ Japan
  - ✓ ☐ Mexico
  - ✓ ☐ Russia
  - ✓ ☐ South Africa
  - ✓ ☐ Uk
  - ✓ ☐ Usa

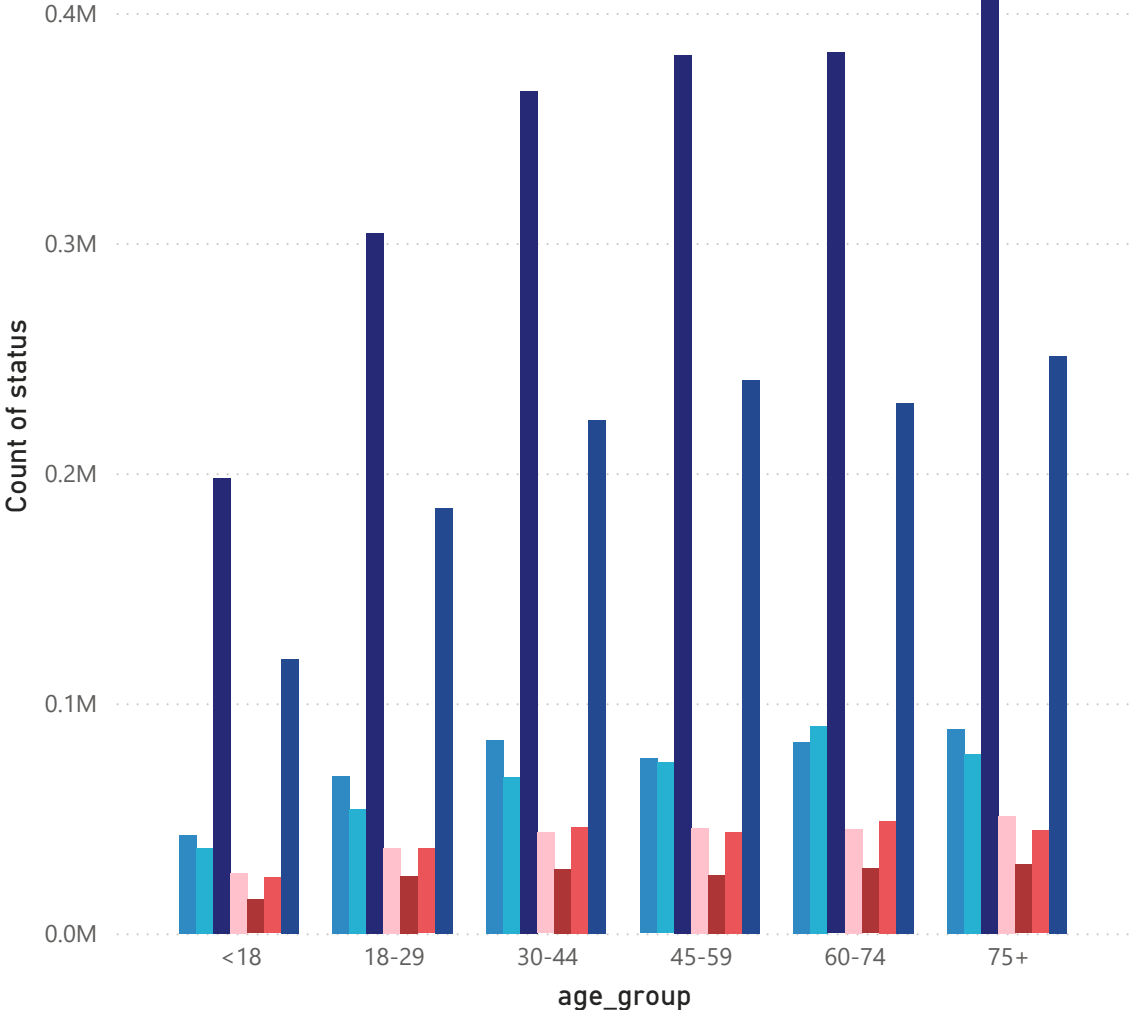
# Sentiment Intelligence: Patterns Across Dimensions

Count of mental\_illness\_type by Mental\_Illness\_Category

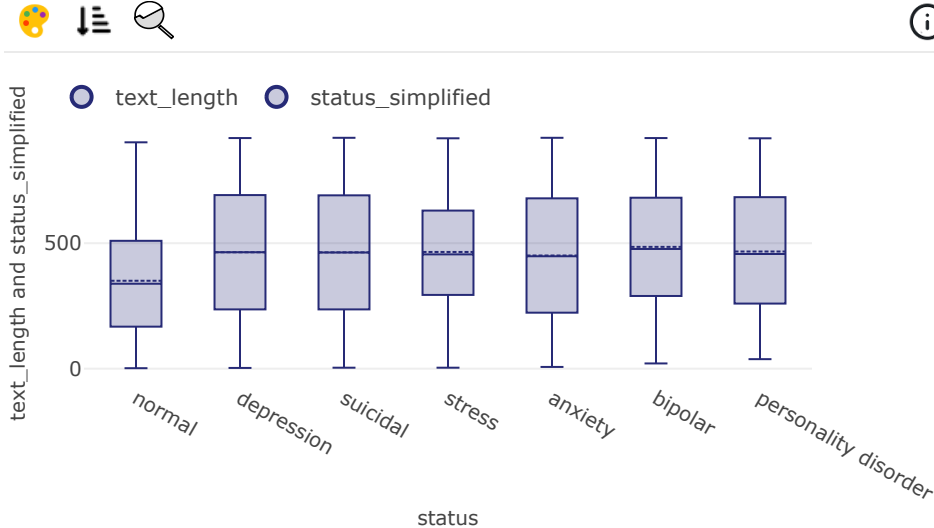


Count of status by age\_group and status

status ● anxiety ● bipolar ● depression ● normal ● personality disorder ● stress ● suicidal



status, text\_length and status\_simplified



sentiment\_category, L...

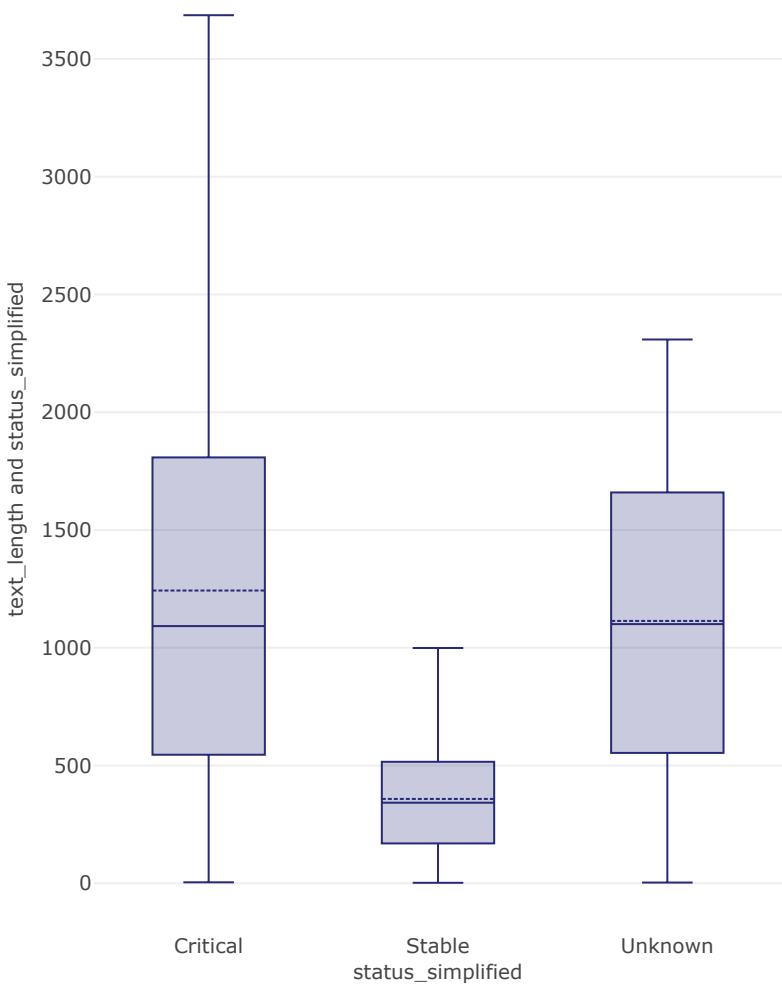
- ^ Negative
- ✓ Australia
- ✓ Brazil
- ✓ Canada
- ✓ China
- ✓ France
- ✓ Germany
- ^ India
- ✓ <18
- ✓ 18-29
- ✓ 30-44
- ✓ 45-59
- ✓ 60-74
- ✓ 75+
- ✓ Italy
- ✓ Japan
- ✓ Mexico
- ✓ Russia
- ✓ South Africa
- ✓ Uk
- ✓ Usa

# Text Anatomy: Structural and Lexical Insights

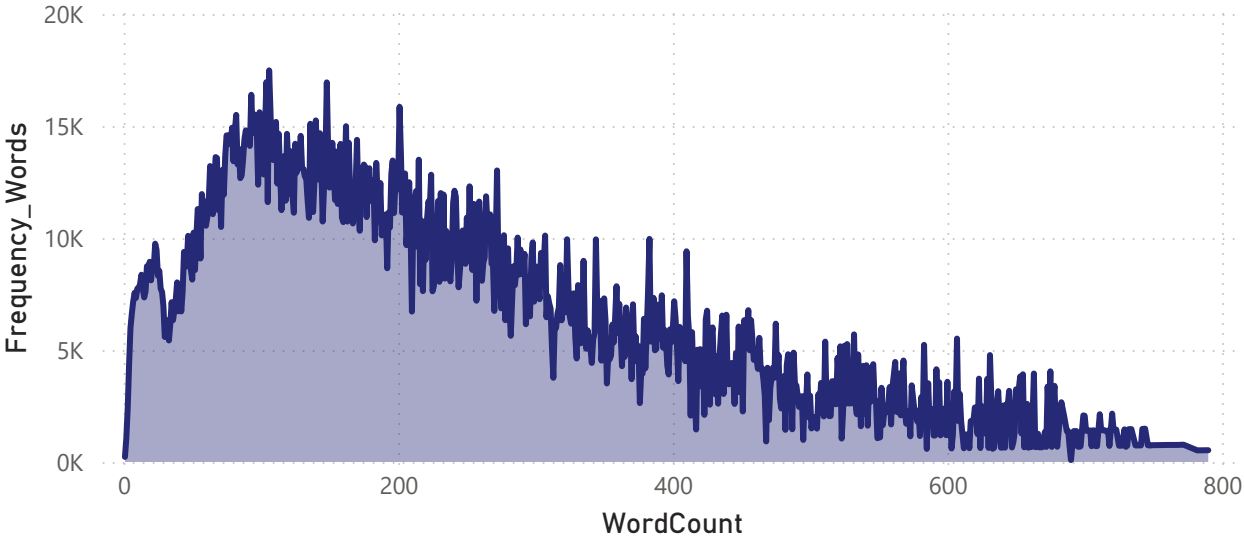
status\_simplified, text\_length and status\_simplified



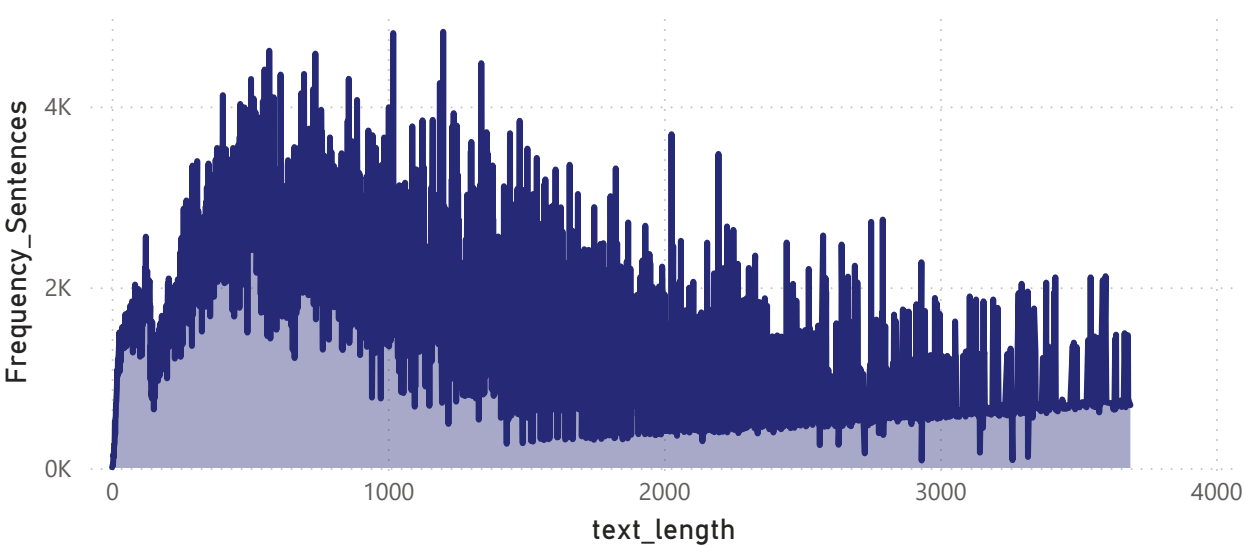
text\_length status\_simplified



Frequency\_Words by WordCount



Frequency\_Sentences by text\_length

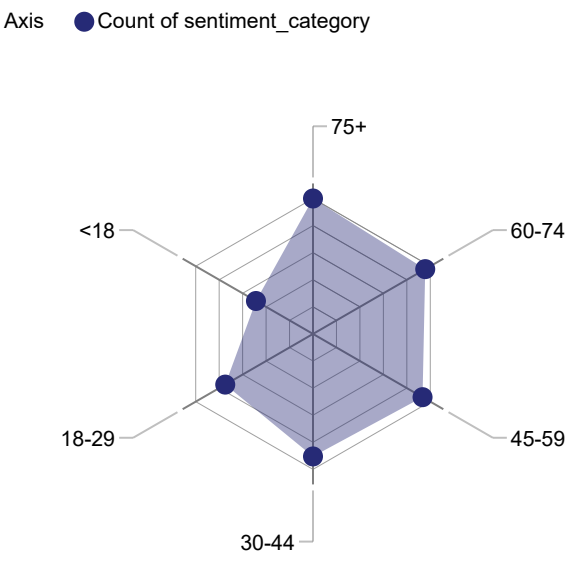


sentiment\_category, L...

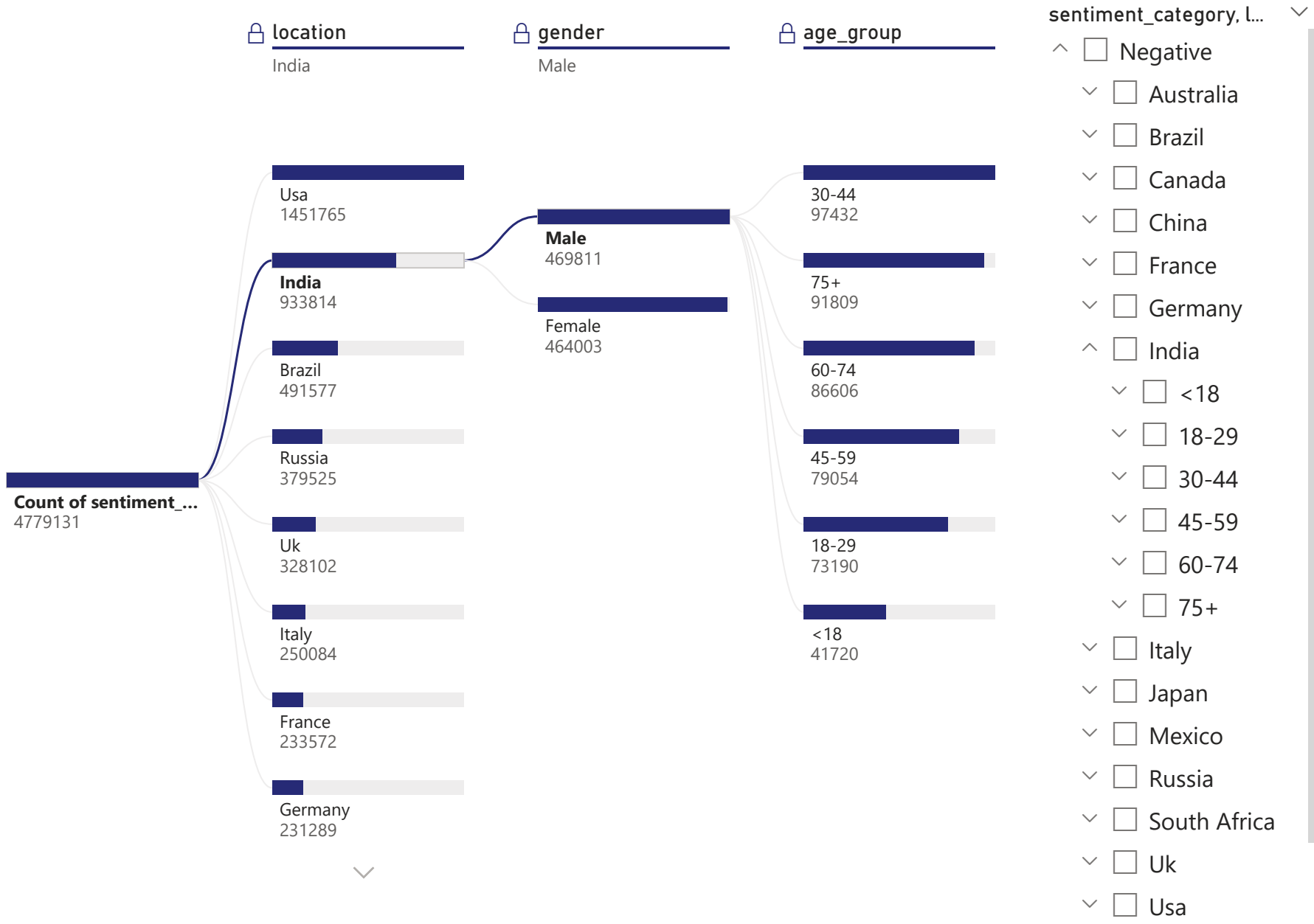
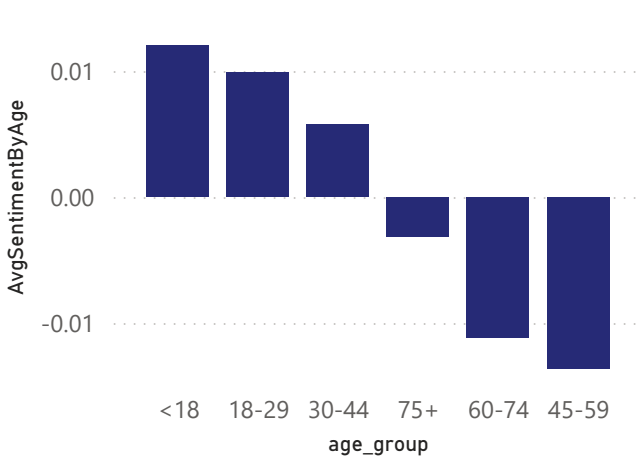
- ^ ☐ Negative
- ^ ☐ Australia
- ^ ☐ Brazil
- ^ ☐ Canada
- ^ ☐ China
- ^ ☐ France
- ^ ☐ Germany
- ^ ☐ India
- ^ ☐ <18
- ^ ☐ 18-29
- ^ ☐ 30-44
- ^ ☐ 45-59
- ^ ☐ 60-74
- ^ ☐ 75+
- ^ ☐ Italy
- ^ ☐ Japan
- ^ ☐ Mexico
- ^ ☐ Russia
- ^ ☐ South Africa
- ^ ☐ Uk
- ^ ☐ Usa

# Demographic Sentiment Dynamics

Count of sentiment\_category by age\_group



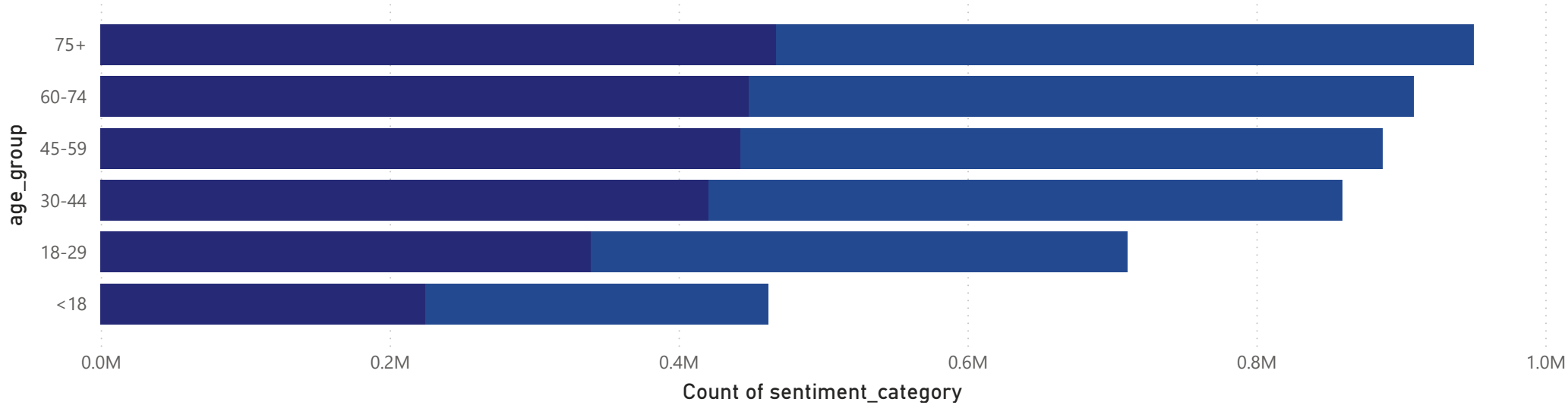
AvgSentimentByAge by age\_group



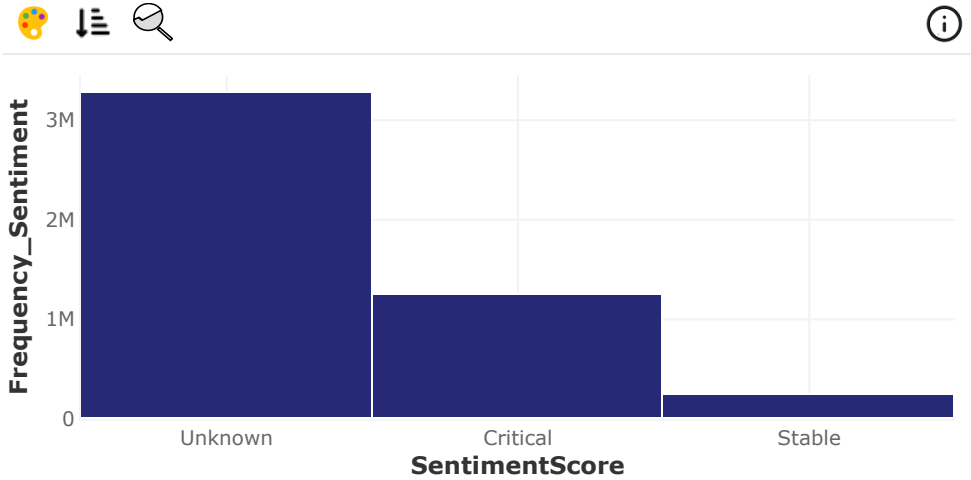
# Correlation Matrix: Sentiment Drivers & Interactions

Count of sentiment\_category by age\_group and gender

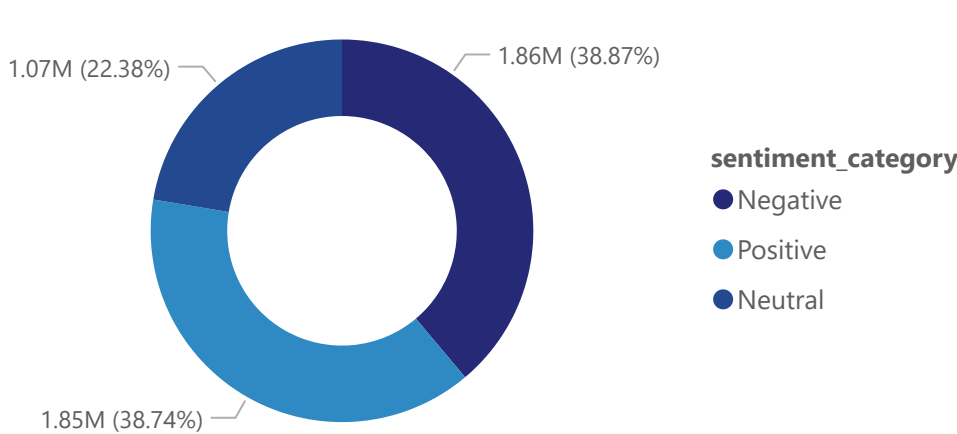
gender ● Female ● Male



Frequency\_Sentiment by SentimentScore



Count of sentiment\_category by sentiment\_category



sentiment\_category, L...

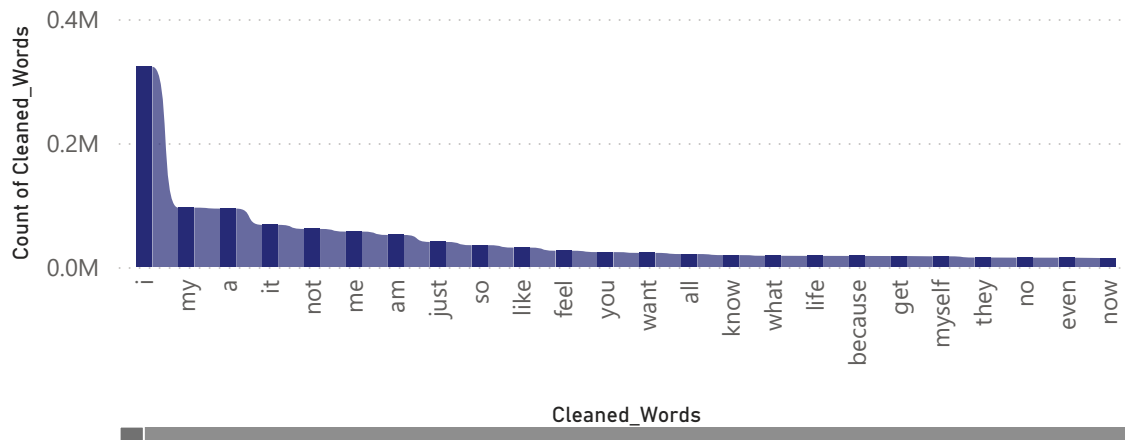
- ^ ☐ Negative
- ✓ ☐ Australia
- ✓ ☐ Brazil
- ✓ ☐ Canada
- ✓ ☐ China
- ✓ ☐ France
- ✓ ☐ Germany
- ^ ☐ India
- ✓ ☐ <18
- ✓ ☐ 18-29
- ✓ ☐ 30-44
- ✓ ☐ 45-59
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- ✓ ☐ Japan
- ✓ ☐ Mexico
- ✓ ☐ Russia
- ✓ ☐ South Africa
- ✓ ☐ Uk
- ✓ ☐ Usa

## Linguistic Insights: NLP-Driven Sentiment Signals


### Count of Cleaned\_Words by Cleaned\_Words
























## Count of Cleaned Words by Cleaned Words



Word	Sum of TF	Sum of IDF	Sum of TF-IDF
zzzzzzzzzz	0.14	4.65	0.66
zzzzzzz	0.15	8.70	0.64
zzzzz	0.13	8.70	0.58
zzzquil/benadryl	0.01	4.65	0.03
zzzquil	0.01	4.65	0.05
zzz	0.13	4.65	0.58
zyrtek	0.00	4.65	0.01
zyrtec	0.05	12.53	0.21
zyprexa	0.01	4.65	0.03
to			
zyprexa	0.00	4.65	0.01
maybe			
zyprexa	0.83	144.98	2.67
zyda	0.03	4.65	0.13
zy	0.04	4.65	0.17
zxz	0.03	4.65	0.14
zxljdctvdp	0.02	4.65	0.08
zx10	0.00	4.65	0.01
zwei	0.09	9.31	0.40
zwebel	0.09	4.65	0.42
zwak	0.00	4.65	0.01
zvm5u6tx	0.02	4.65	0.11
zvkcxsxmjx	0.02	4.65	0.11
zurich	0.14	4.65	0.66
Total	1,10,423.04	51,39,649.46	83,353.19

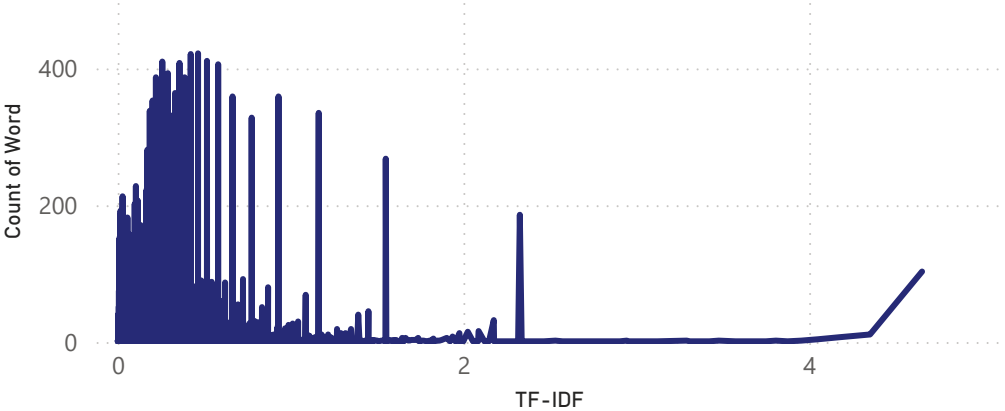
sentiment\_category, l... 

-  ☐ Negative
  -  ☐ Australia
  -  ☐ Brazil
  -  ☐ Canada
  -  ☐ China
  -  ☐ France
  -  ☐ Germany
  -  ☐ India
    -  ☐ <18
    -  ☐ 18-29
    -  ☐ 30-44
    -  ☐ 45-59
    -  ☐ 60-74
    -  ☐ 75+
  -  ☐ Italy
  -  ☐ Japan
  -  ☐ Mexico
  -  ☐ Russia
  -  ☐ South Africa
  -  ☐ Uk
  -  ☐ Usa

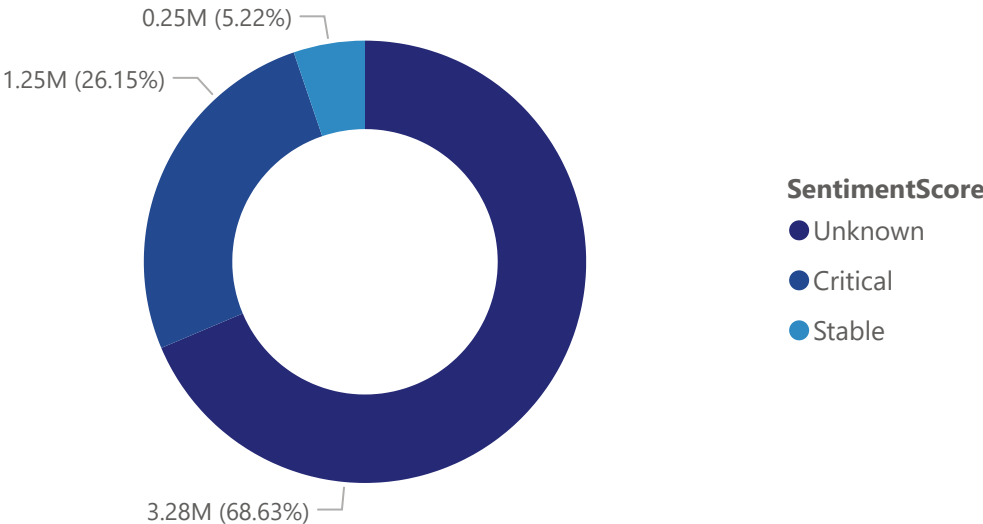


# Sentiment Polarity and Feature Influence

Count of Word by TF-IDF

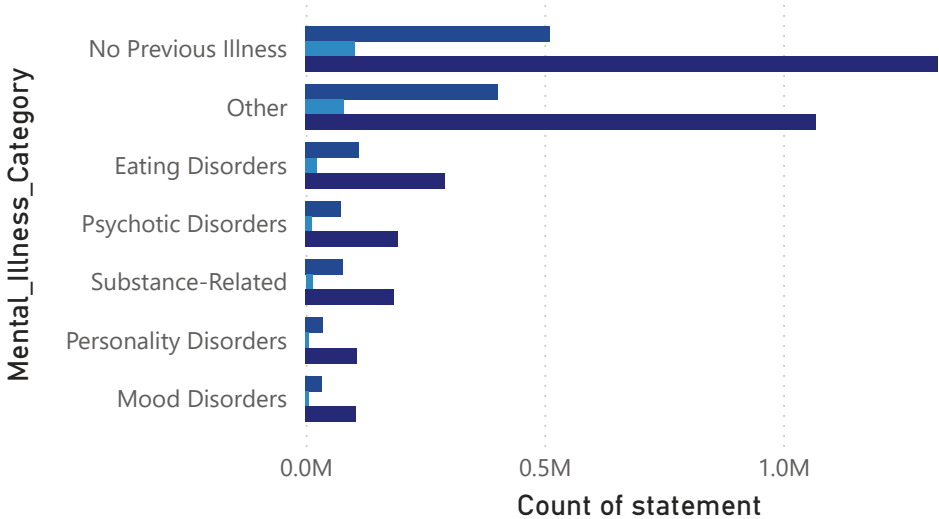


Count of statement by SentimentScore

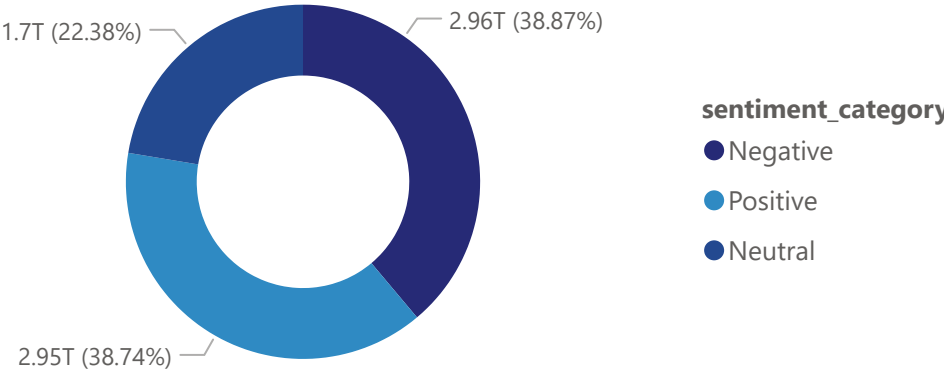


Count of statement by Mental\_Illness\_Category and SentimentScore

SentimentScore ● Critical ● Stable ● Unknown



Sum of Class Error Rate by sentiment\_category

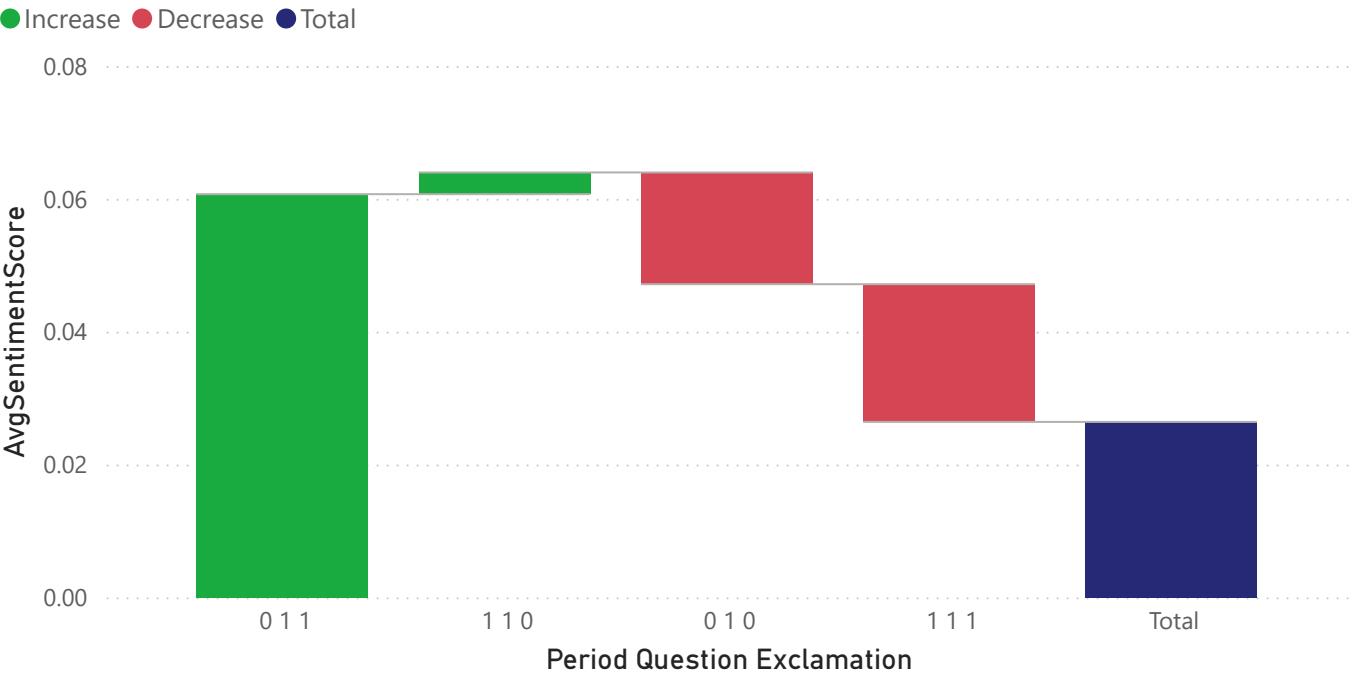


- sentiment\_category, L...
- ^ ☐ Negative
  - ^ ☐ Australia
  - ^ ☐ Brazil
  - ^ ☐ Canada
  - ^ ☐ China
  - ^ ☐ France
  - ^ ☐ Germany
  - ^ ☐ India
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  - ^ ☐ Italy
  - ^ ☐ Japan
  - ^ ☐ Mexico
  - ^ ☐ Russia
  - ^ ☐ South Africa
  - ^ ☐ Uk
  - ^ ☐ Usa

# Actions and Strategic Recommendations

- ✅ **Expand mental health resources** – Increase support in areas with consistently high negative sentiment.
- 🔍 **Identify negative sentiment drivers** – Analyze patterns to effectively address common issues.
- 💡 **Encourage positive language** – Use uplifting language in mental health outreach campaigns.
- ⚠️ **Monitor punctuation impact** – Adjust tone based on emotional cues in user statements.
- 🧠 **Enhance sentiment analysis models** – Improve accuracy using bigram and trigram analysis.
- 🗣️ **Use influential terms effectively** – Build targeted messaging around high TF-IDF words.
- 🔄 **Create a continuous feedback loop** – Continuously adapt strategies based on sentiment trends.

AvgSentimentScore by Period, Question and Exclamation



NeutralSentiment

0.22

NegativeSentiment

0.39

CriticalCases

0.26

Average of Class...

1.59M

Sum of Exclamation

484K

Sum of Question

5M

sentiment\_category, L...

- ^ ☐ Negative
- ✓ ☐ Australia
- ✓ ☐ Brazil
- ✓ ☐ Canada
- ✓ ☐ China
- ✓ ☐ France
- ✓ ☐ Germany
- ^ ☐ India
- ✓ ☐ <18
- ✓ ☐ 18-29
- ✓ ☐ 30-44
- ✓ ☐ 45-59
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- ✓ ☐ Uk
- ✓ ☐ Usa