

Worry and Rumination – Online Conversation Analysis

July 2017 – September 2017



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Worry and Rumination

An overview

With one in six people in the UK suffering from a common mental health issue (anxiety and/or depression), the need to better our understanding of the cause, symptoms surrounding these issues and possible treatments is clear.

A particular area of interest is worry and rumination because it affects a significant amount of people and has strong links to anxiety and depression. Efforts are being made to develop preventative apps and therapies that enable people to develop the skills they need to reduce worry and rumination.

To help inform these efforts, White Swan tracked all online mentions of worry and rumination along with related topics over three months (July – September 2017). There were three areas of focus: symptoms, situation in which these occurred and management strategies people utilise. Multiple layers of analysis were used on this social data. This included producing data science outputs, conducting analysis on Black Swan's proprietary tools and utilising qualitative coding to unearth themes and trends.



METHODOLOGY

Sources: Twitter, Blogs, Boards

Geography: UK (English language only)

Timeframe: 3 months (July – September 2017)

QUERY KEYWORDS

"worry a lot" OR "worried a lot" OR "worry all the time" OR "worried all the time" OR "worry about little things" OR "worried about little things" OR "worry about the little things" OR "worried about the little things" OR "worry about everything" OR "worried about everything"



Key findings and recommendations

1

Symptoms are the most talked about element of Worry and Rumination – involved in 9 out of 10 conversations we analysed. This demonstrates the importance of positioning treatments around the symptoms and helping people recognise the symptoms that can be treated

2

Emotional symptoms are paramount. People worry about those that they love and their relationships with others are a cause of anxiety. These symptoms can impact on the relationships themselves and lead to further worry and rumination

3

People most frequently talk about themselves, in a situation that occurs all the time. Whilst people worry about others, they often talk about what this means for them. There appears to be a need for treatment to help rationalise the concern people feel for others

4

Management strategies are varied but prayer is the stand out. Prayer is discussed as a means to deal with a worrying situation or the symptoms of worry/rumination itself. Religious accounts are successfully driving the conversation

5

More actionable strategies focus on exercise and eating well. People talk about and seek advice around exercise, diet and healthy living more generally in relation to mental well-being

6

Cognitive behavioural therapy is seen as an effective treatment strategy but awareness is low. Some report difficulty in applying the techniques and others are concerned with the cost and accessibility of the therapy. The findings suggest two possible use cases for an app based programme: a) to provide an accessible alternative to therapist administered treatment b) to compliment therapy through more regular coping strategy reinforcement



Conversation Composition



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Overview: sizing the conversation

Conversation volumes around worry and rumination are substantial, with over 500,000 conversations in the last three months across Twitter, Blogs and Forums

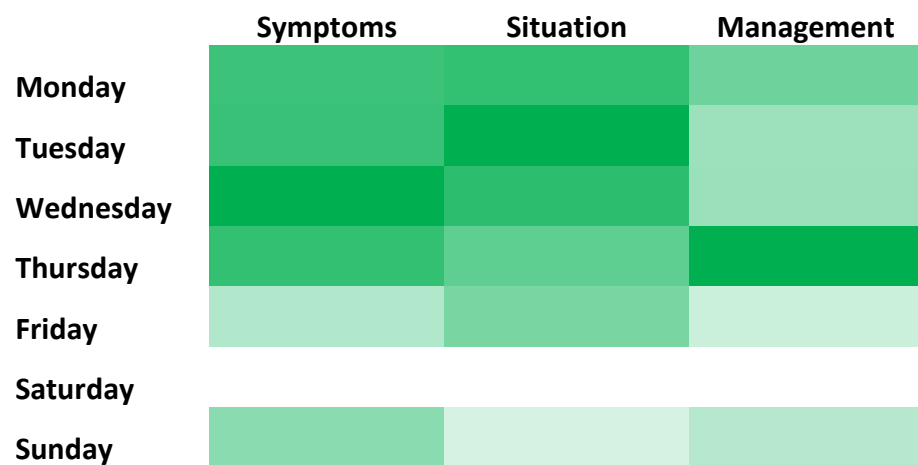
The majority of the conversation is focused on worry and rumination symptoms with around two in five mentioning the situation and only one in five comments discussing management

Total volume of conversation	523,090		
Twitter	419,745 (80%)	Symptoms	482,287 (92%)
Forums	91,788 (18%)	Situation	217,649 (42%)
Blogs	11,557 (2%)	Management	88,464 (17%)

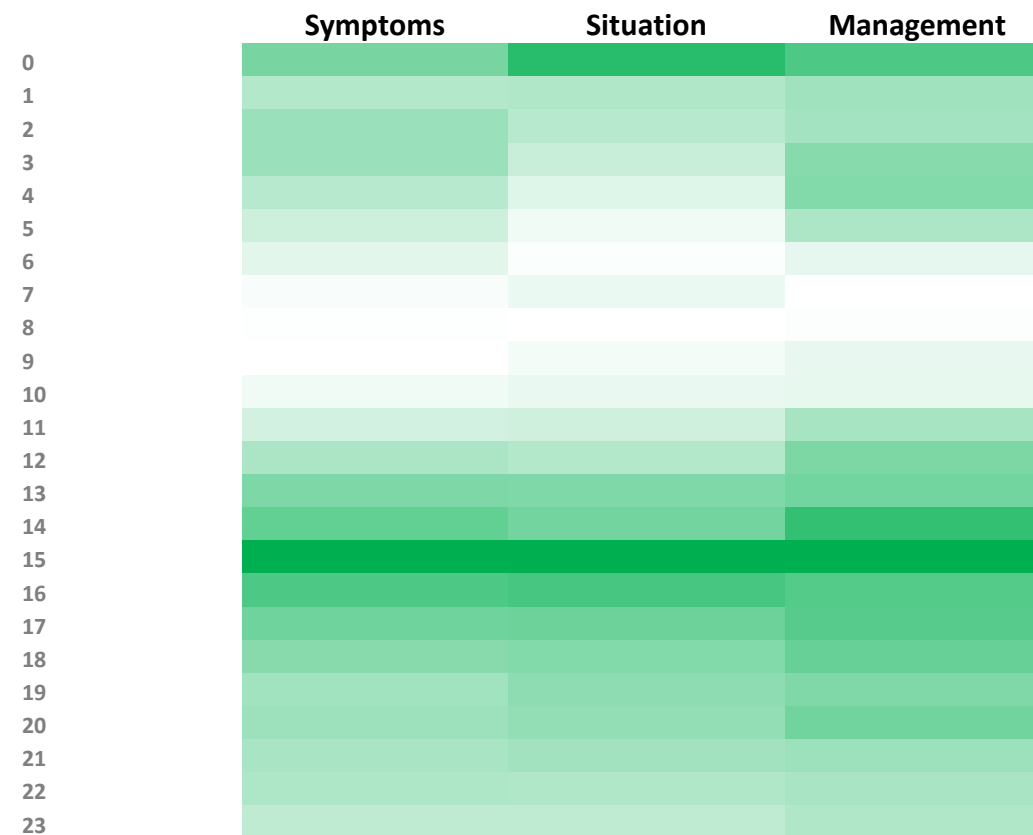
Time of day/day of the week: conversation profile

Conversation around symptoms, situation and management peaks in the middle of the week with mid-afternoon being the most popular time to discuss worry and rumination. There is also a spike in discussion around mid-night and comparatively little conversation happening over the weekend

Conversation by day of week

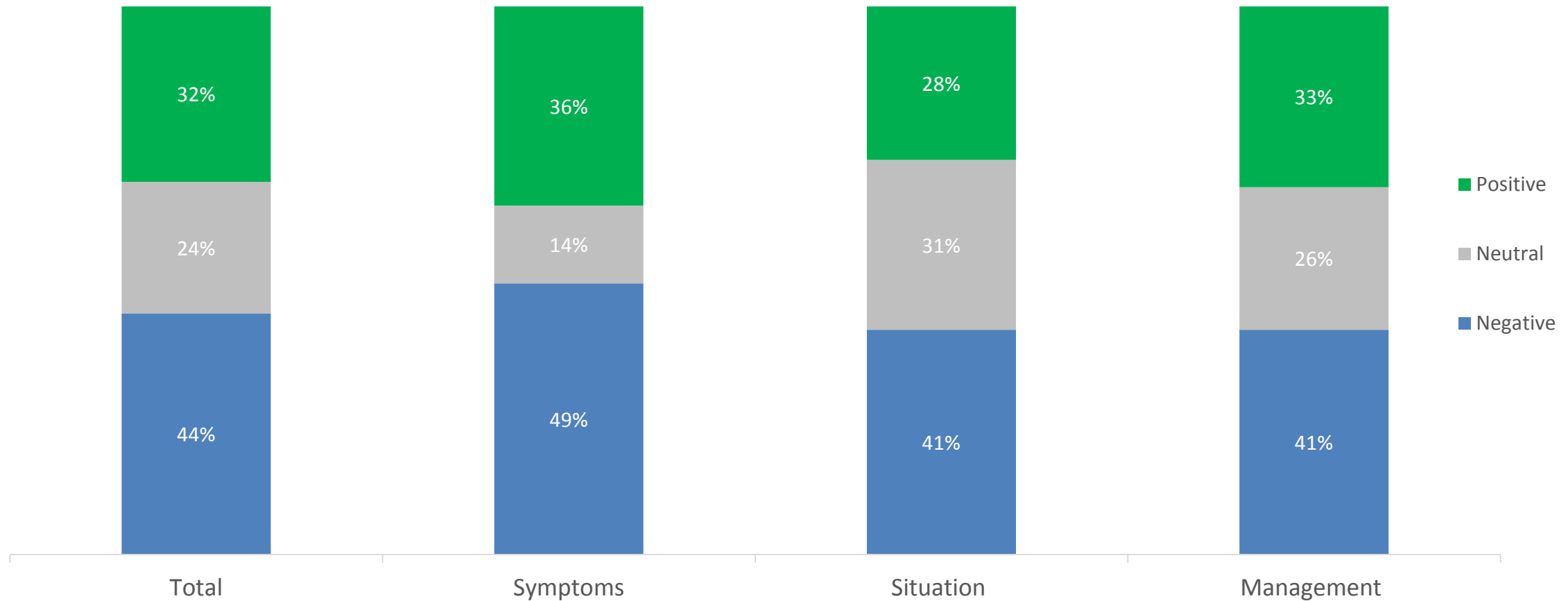


Conversation by time of day



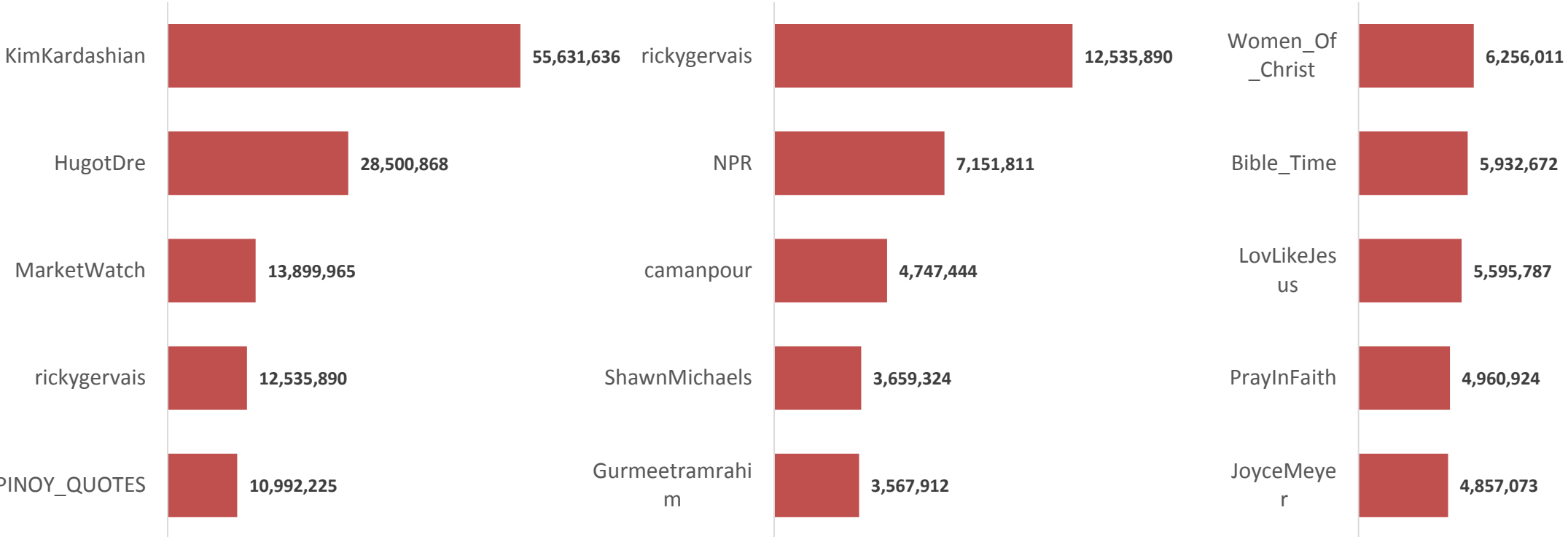
The tone of conversation

Whilst a large proportion of the conversation is negative in sentiment, particularly when symptoms are discussed, the majority of the conversation is actually positive or neutral in tone



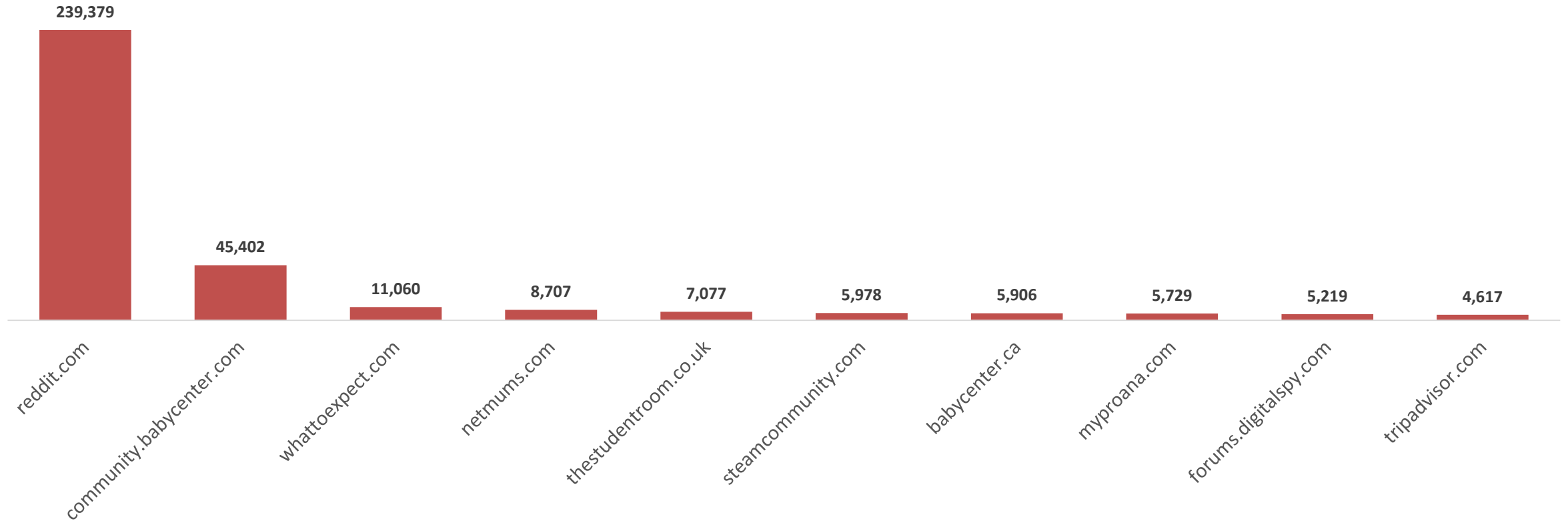
Top Influencers: who is driving the conversation

Worry and rumination conversation is led by an assortment of influencers. Kim Kardashian drives conversation around symptoms whereas Ricky Gervais is more influential when it comes to different situations. Handles related to religion are particularly prominent which reflects the importance of prayer as a management strategy



Top blogs/forums/domains: where do people talk

Forums feature heavily amongst the top domains which demonstrates that people turn to peers to seek help and advice for their worry and rumination. Parenting sites feature heavily, with people discussing pregnancy and child related anxiety. Reddit, the general forum sees the most activity but other dieting forums are also popular



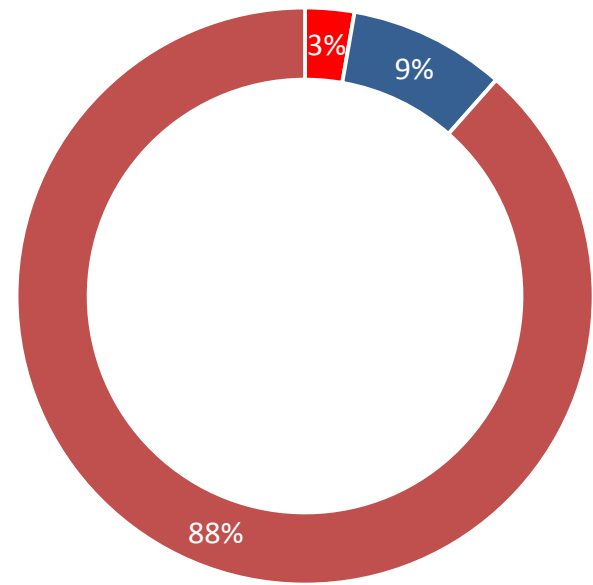
Worry and Rumination conversations



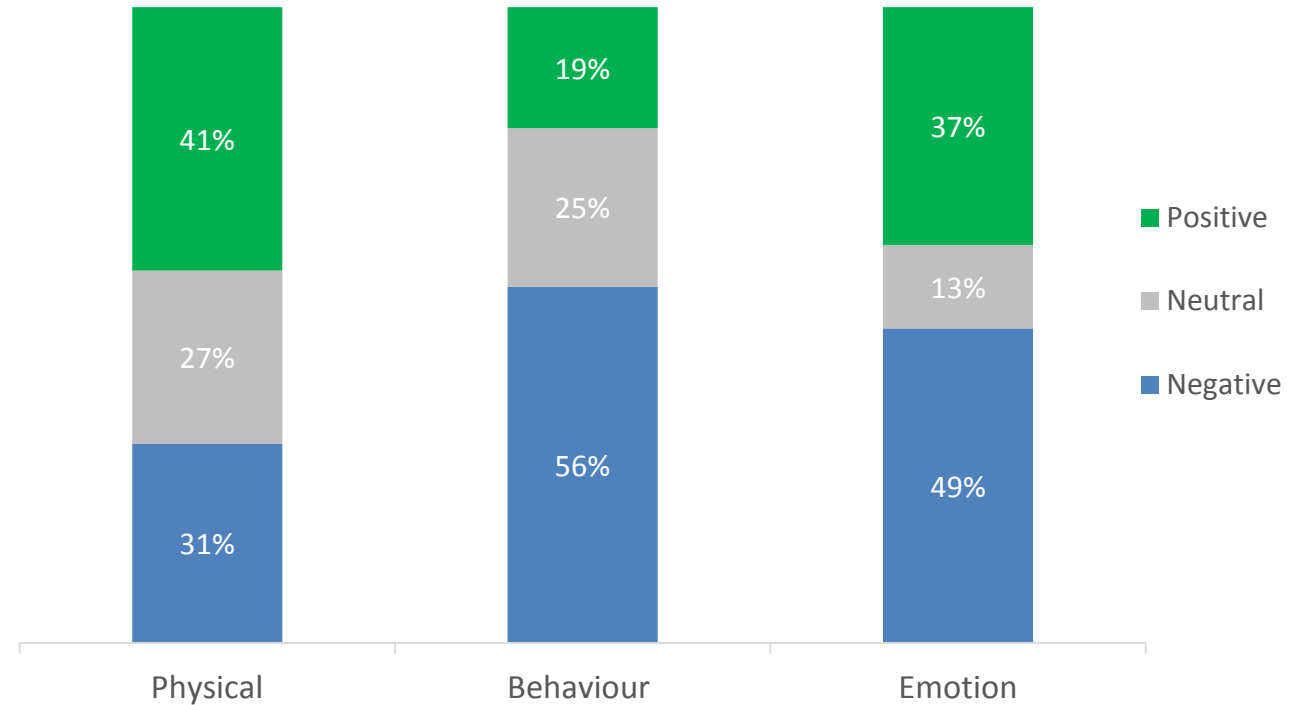
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Symptoms overview

The vast majority of symptoms mentioned are emotional rather than physical or behavioural. It would appear that behavioural symptoms have the most negative impact with physical symptoms discussed least negatively



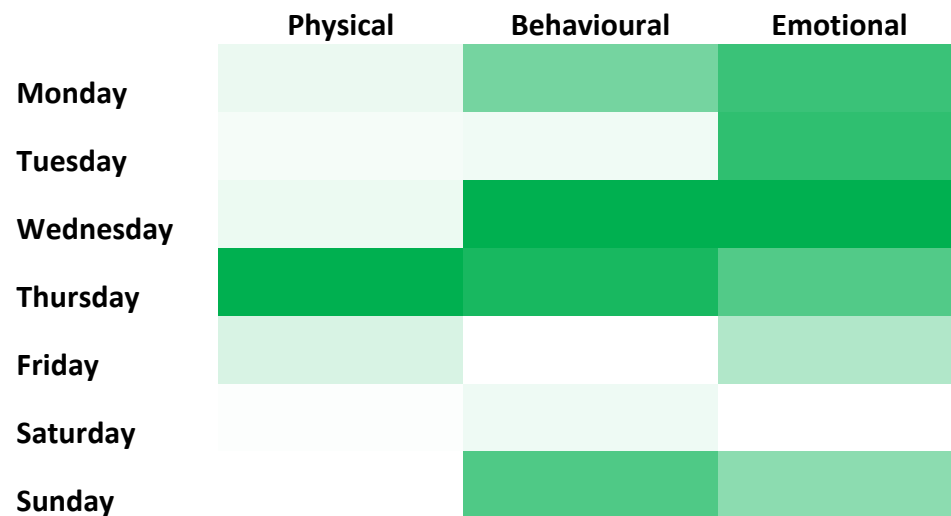
■ Physical ■ Behavioural ■ Emotional



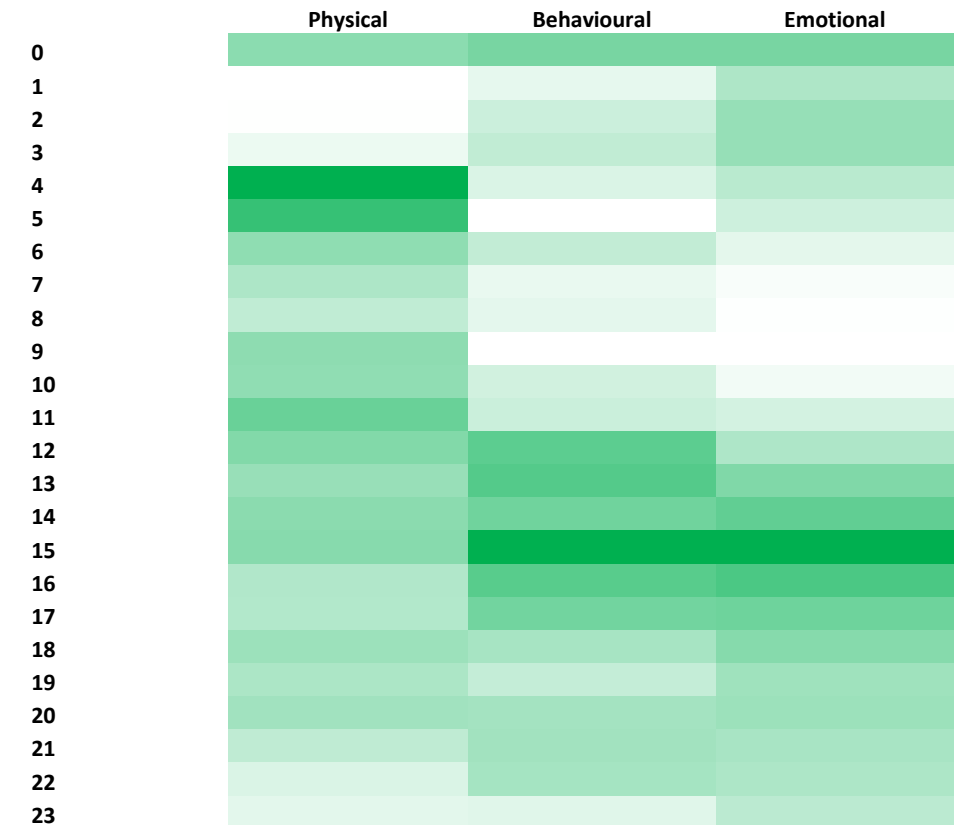
Time of day/day of the week: symptom conversation profile

Physical symptoms are most often discussed on a Thursday in the early hours of the morning whereas behavioural and emotional symptoms are more often discussed on Wednesdays and in the afternoon. Perhaps physical symptoms are disruptive to sleep, hence the spike in conversation in the early hours

Conversation by day of week



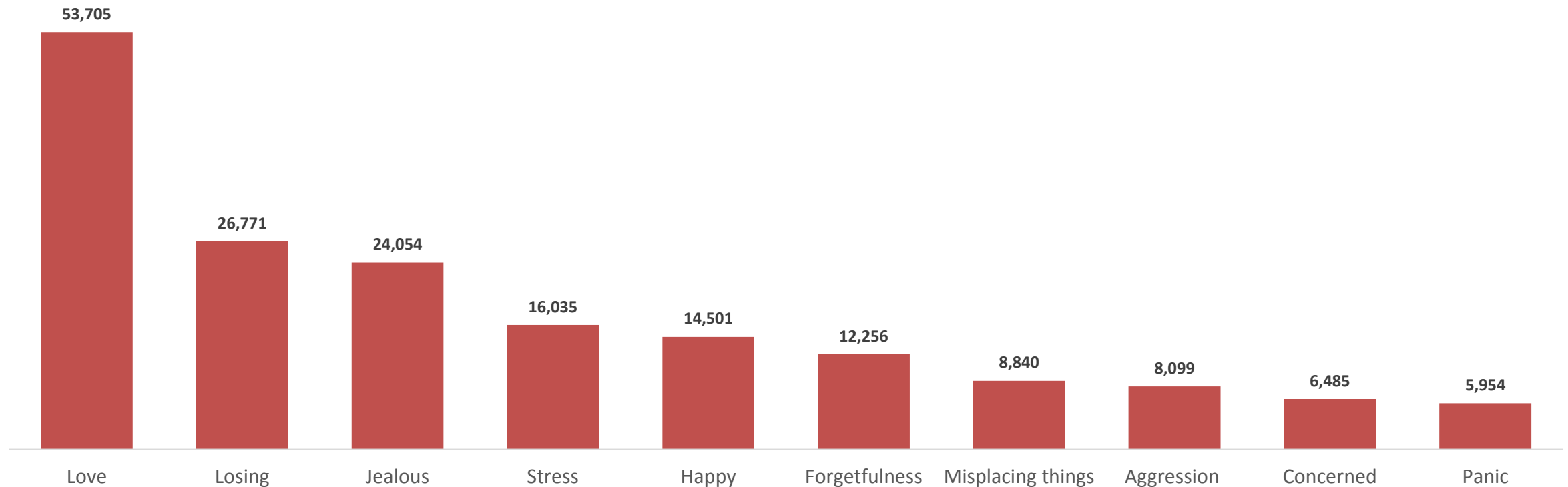
Conversation by time of day



Top symptoms

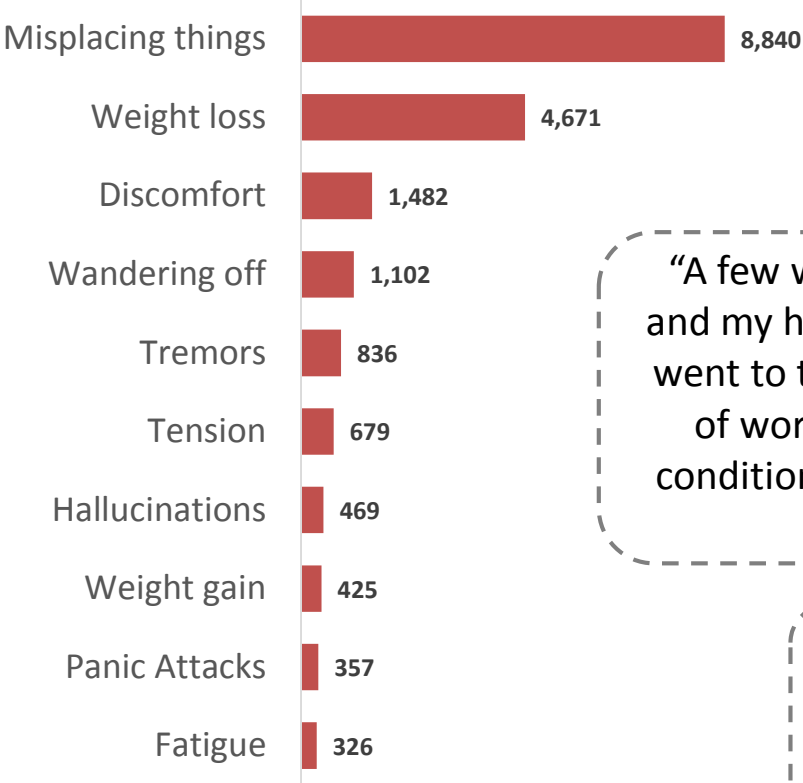
Overall the emotion of Love is discussed most frequently followed by the behavioural symptoms of Losing and feelings of Jealousy. Love is predominately mentioned in relation to worrying about those you love. People also worry about losing the people they love and report feelings of jealousy which also cause worry and anxiety

Top 10 symptoms overall



Physical symptoms

Some of the more severe physical symptoms discussed are panic attacks, tremors, racing heart rate and hallucinations



“I don't know what my triggers are except for a few; every time I am meeting a new doctor or therapist I have full on anxiety and panic attack”

“I had my first panic attack in awhile. I woke up in the night with horrible heartburn and trouble breathing. My bpm went up to 135 and I had to take an Ativan. I dealt with an hour or so of shaking legs.”

“A few weeks ago I had a panic attack and my heart was racing so fast I almost went to the hospital. Having these kind of worries me. My dad has a heart condition if it matters. Should I get this checked out?”



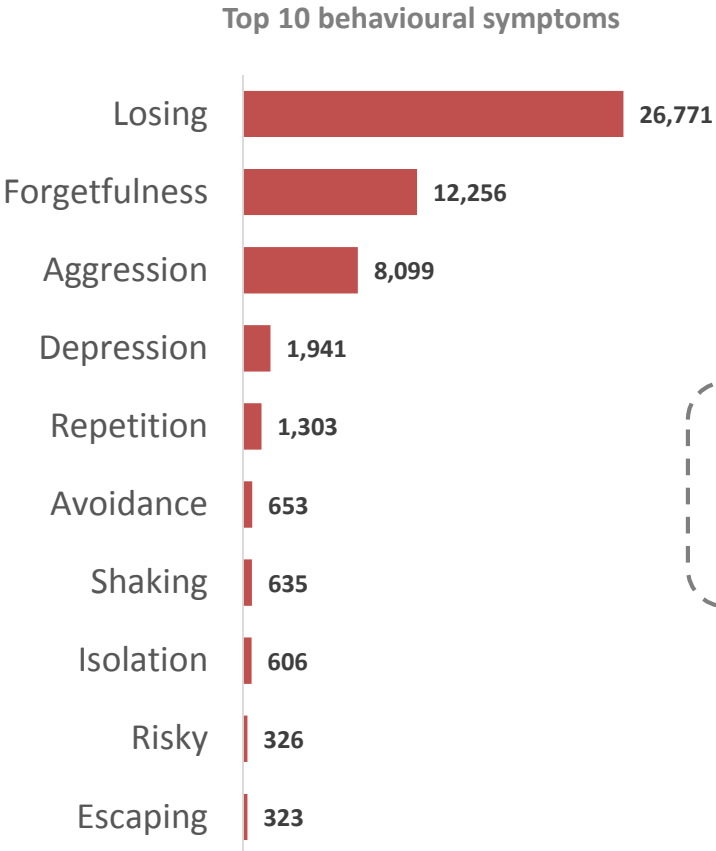
“I'm a 35 year old male with anxiety and stress. I worry a lot and this gives me tremors”

“I keep feeling the hallucinations. I keep on getting angry. I get anxious around other people and I'm always by myself”

“I have severe anxiety. I worry about everything, I have chest pain so I worry I have cancer. I get so anxious I get panic attacks”

Behavioural symptoms

The known links between anger and worry/anxiety, along with depression and forgetfulness are reflected in the conversations observed online



“I've been overthinking and fixating on things for six months now, and to be truthful, I don't remember what it was like to not have anxious thoughts running through my head.”

“I want to console those with loss, I end up with a panic attack, thinking what if I am next?”

“I have some much anger, worry & stress in my heart”



“Anyone else got this fear of repeating themselves? I feel like I repeat the same thoughts in my head a lot”

“Three years ago, I was so angry, hateful and worried about everybody”

“I've had a lot of problems at work since my anxiety and depression last Nov. I have become forgetful, confused and worried all the time”

Emotional symptoms

Love tends to be mentioned in relation to worrying for the people that you care for. Jealousy also appears to be closely linked to emotional relationships with others

Top 10 emotional symptoms



“I worry about my friends so much because I have a heart of gold – I end up feeling bad because of it”

“Don’t avoid going to gatherings...it will make your jealousy worse, because you will worry about them having fun without you”

“When you love someone so much, you tend to over think things”



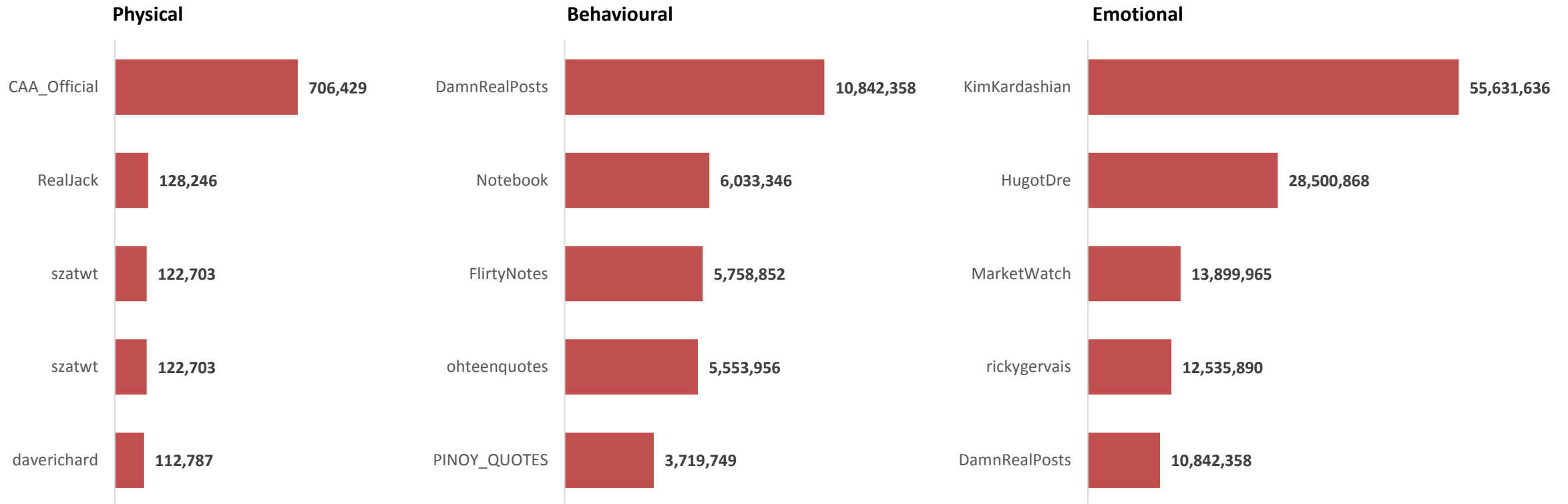
“I have jealousy issues and I can’t stand when he gets close to a friend who’s a girl...I get super worried”

“I suffer with mental health problems...I get very lonely and isolated because I have never made any adult relationships in life”

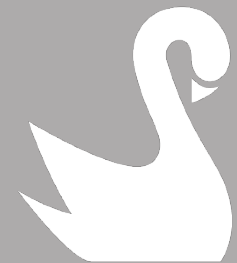
“I’m lonely, upset and I’m worried about everything. The world is collapsing and full of evil”

Top Influencers: who is driving the conversation

The physical symptoms conversation is led by music artists whereas emotional commentary accounts drive conversation around Behavioural symptoms. Kim Kardashian is leading conversation about Emotional symptoms



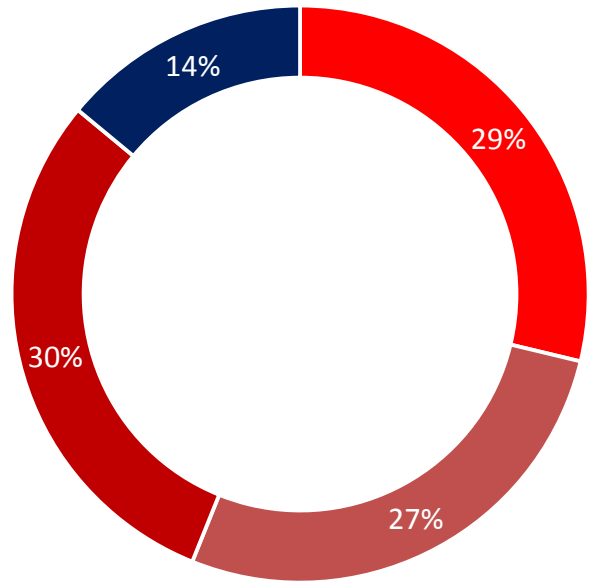
Worry and Rumination situations



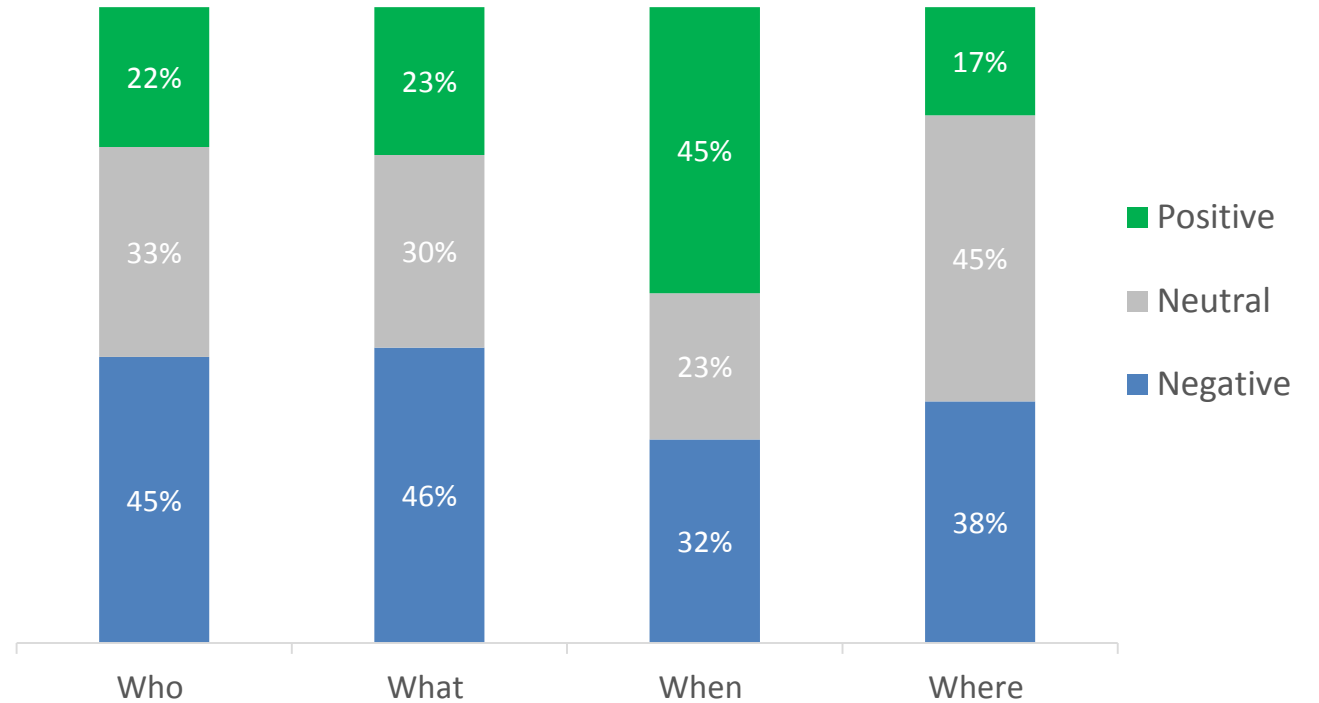
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Situations overview

The Who, What and When behind worry and rumination are discussed in equal measure and appear to be more important than the Where. The What is discussed most negatively whereas When the situation occurs is viewed least negatively



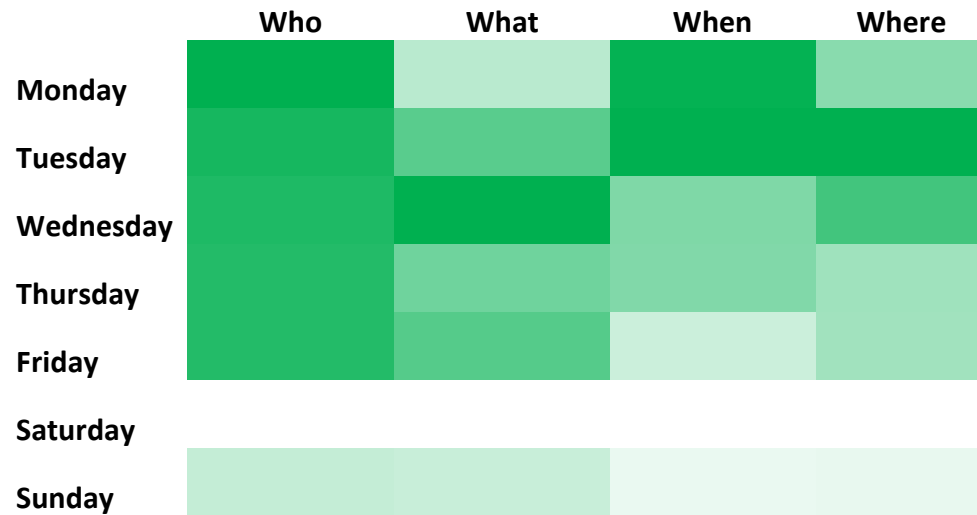
■ Who ■ What ■ When ■ Where



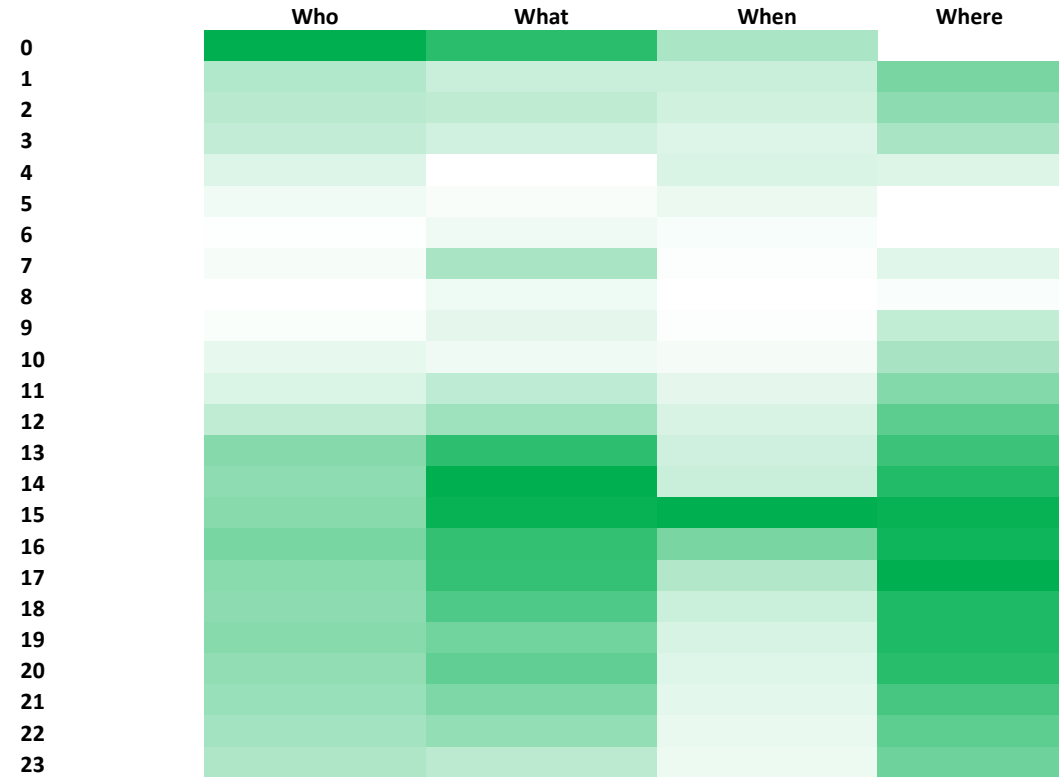
Time of day/day of the week: situation conversation profile

Whilst Who is involved is discussed throughout the working week, What, When and Where are most discussed between Monday – Wednesday

Conversation by day of week



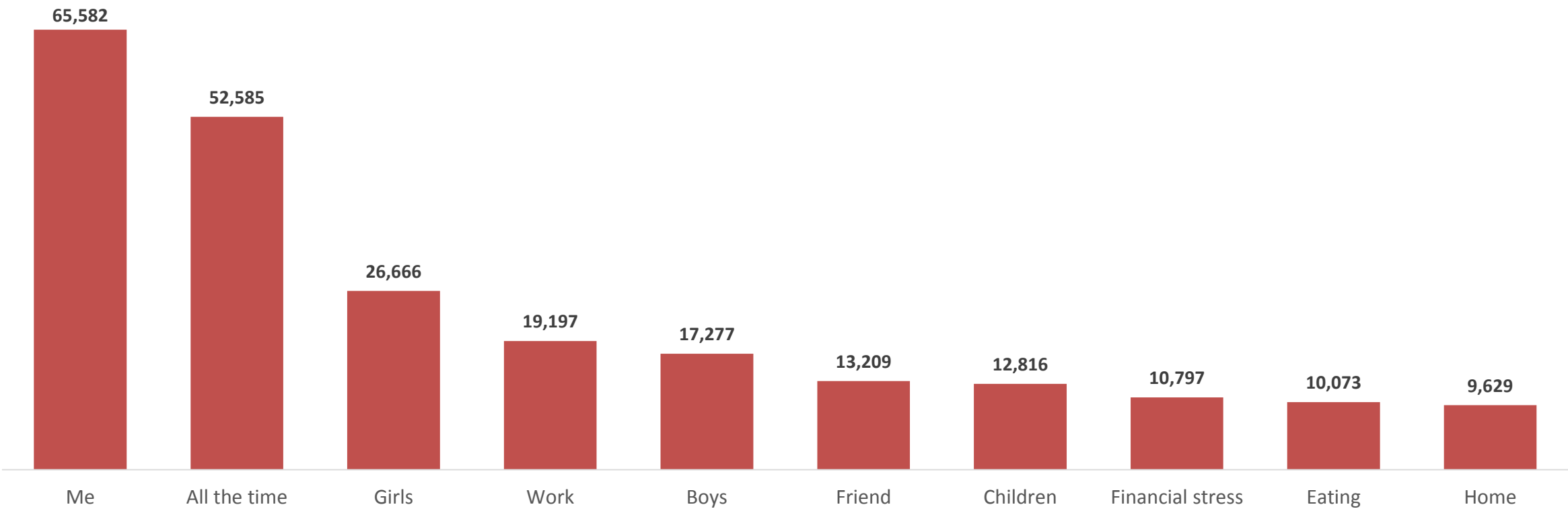
Conversation by time of day



Top situations

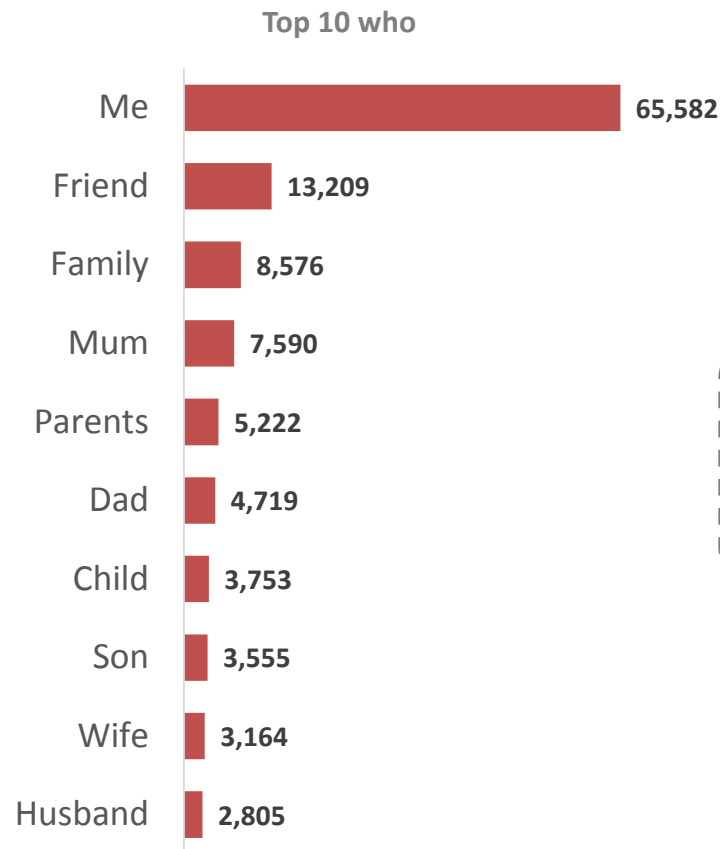
People most frequently talk about themselves and refer to situations that occur all the time. Relationships with others are also prominent as is Work and Financial stress

Top 10 situations overall



Situation: Who

The majority of conversation relates to Me with friends and family the next most discussed. People worry about what others think of them but also about how others are coping in their own situations



“I worry myself until I’m sick to my stomach and I hate it so much”

“I used to worry so much what other people thought of me and if they were talking shit”

“I’m being mindful of the fact that my friends have their own things to worry about”



“Times like this I wish all my family could stay in one place, hate having a split up family, makes me worry so much”

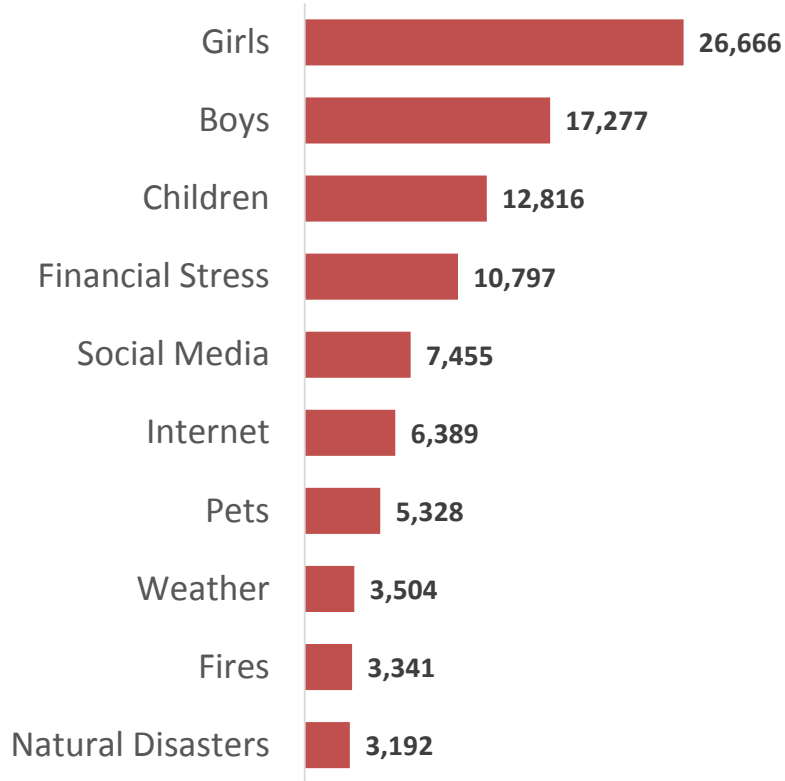
“My best friend is enjoying life instead of being so worried about everything else. It’s a miracle!”

“My mum has had shingles twice in the last 2 years...it makes me nervous. Poor mum is in so much pain from it”

Situation: What

Whilst some worry about money or providing for their family should something unforeseen happen, there is a clear line of conversation concerned with the way women are being treated. This would appear to cover both treatment from men and how women compare themselves to each other

Top 10 what



“Wonder how much women could have achieved if they didn’t have to worry about their own safety everywhere all the time”

“The less you worry and compare how other girls look and focus on yourself, you grow so much mentally”

“A lot of money eliminates a category of worry”



“I worry a lot about what would happen to my wife & children if I die. How will they pay rent or school fees?”

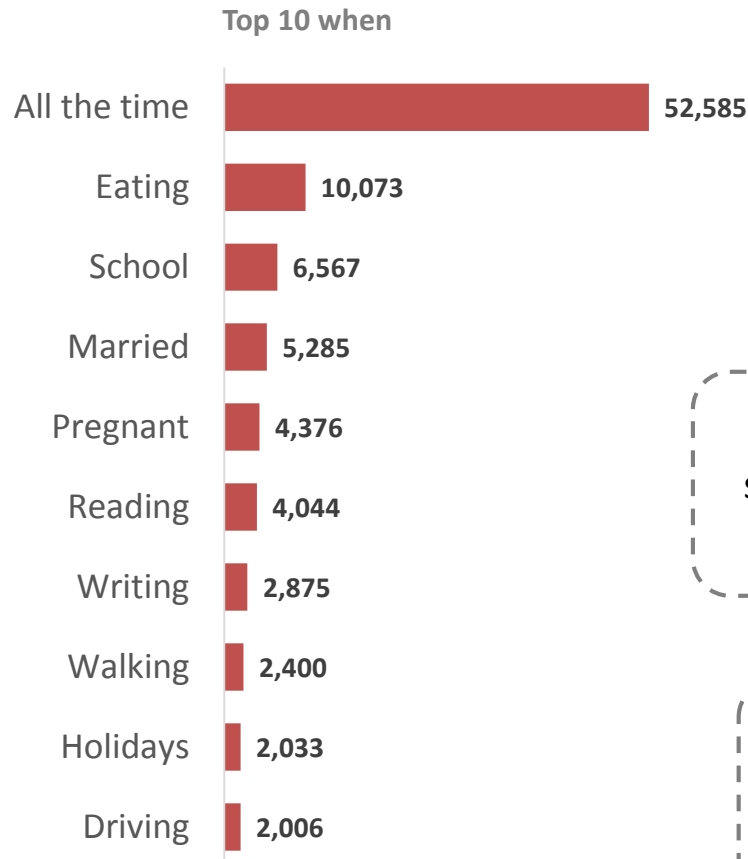
“Don’t worry that your kids won’t listen to you. Worry that they’re listening to you all the time”

“Women...please stop apologising for yourselves all the time. You don’t see men do this shit. It’s ok to just be and not worry all the time”



Situation: When

People experience worry and rumination all the time but highlight Eating, School, being Married or Pregnant as times of particular worry



“I am so glad my baby is eating well – three days ago I was really worried”

“Forever wishing my family was rich so I could just enjoy school like other kids and not have to worry about money so much...”

“All I do is worry all the time. I spend every minute of every day worrying”



“Now I’m worried all the time, I’m sad and there’s always something eating at me. I don’t sleep properly, I’m acutely unhappy”

“I’ve gained so much weight, my skin isn’t perfect, I worry all the time, what am I doing with my life?”

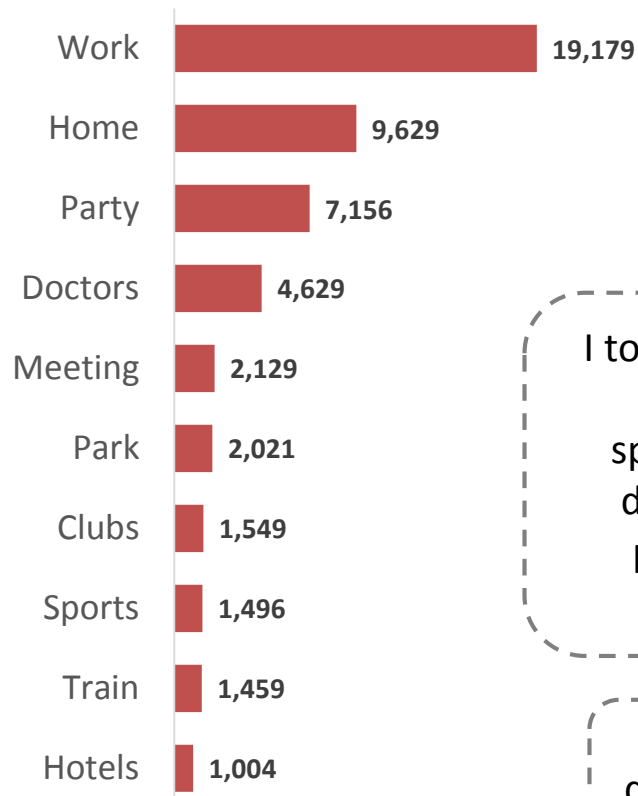
“Back to school time means a lot of families are worried about getting kids everything they need”



Situation: Where

Work is the stand out situation where worry and rumination is discussed. The home, parties and doctors are also frequently mentioned as situations that either cause anxiety or are effected by being worried/anxious

Top 10 where



“I suffer from anxiety, work makes me nuts, I am very lonely and unhappy”

“I am worried that me never going to hang out at peoples houses or going to birthday parties is ruining my friendships with people”

I took today off from work too to have an extra day to relax at home. Instead I spent every moment from sun up to sun down googling symptoms of an illness I pretty positively don't have instead of sitting outside like I wanted to.

“I feel broken, I can't be more worried about him. I made a lot of mistakes at work”

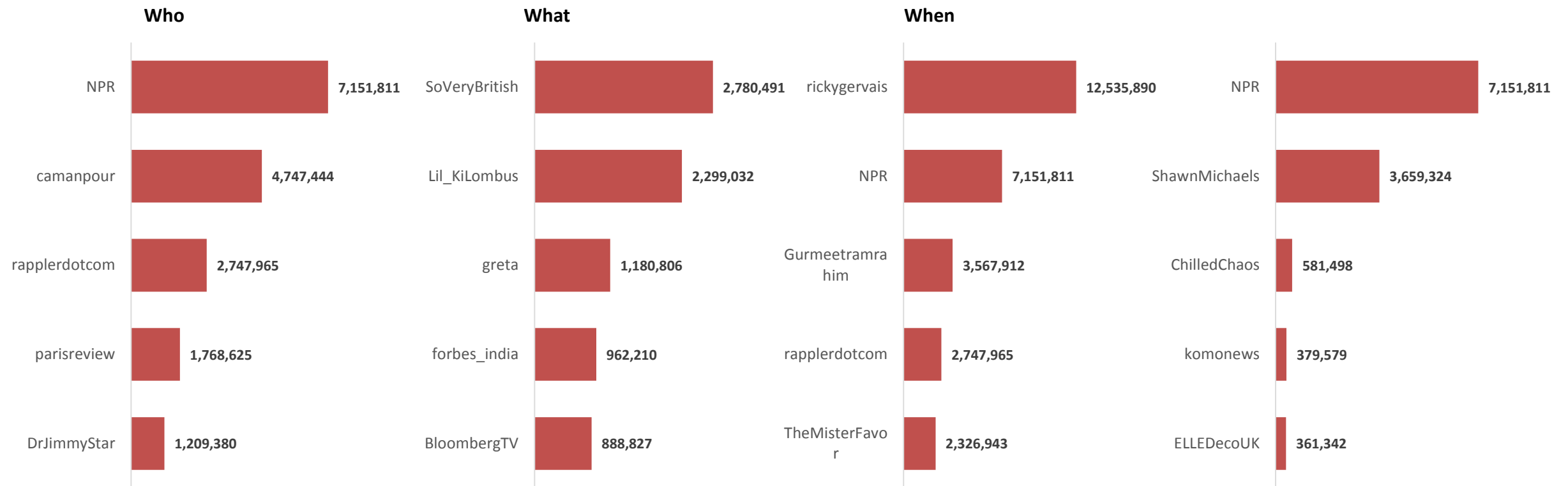
“Ok, so after a lot of stress and worry with the doctor and hospital visits my mind has been put at ease”

“For anyone who has #anxiety – my doctor just told me not to worry so much, so there's the answer we have all been looking for!”

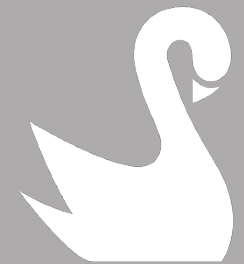


Top Influencers: who is driving the conversation

A combination of media channels, commentary accounts and celebrities are leading the conversation around worry/rumination situations



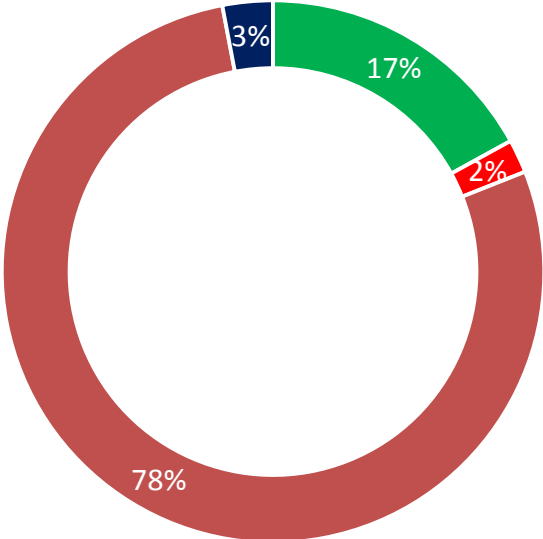
Worry and Rumination Management



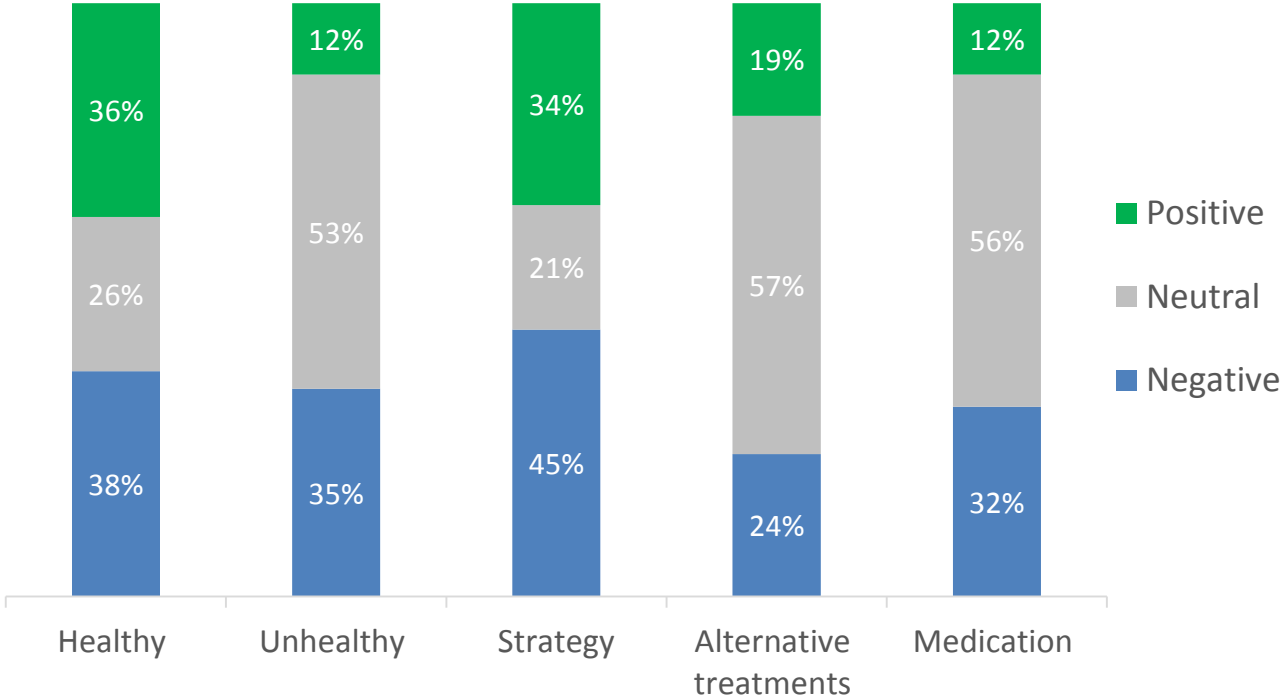
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Management overview

Strategies and healthy behaviours account for the majority of conversation around management of worry and rumination symptoms. Whilst the sentiment around these two is most positive there is a considerable amount of negative conversation – perhaps highlighting the difficulty in effectively managing these symptoms



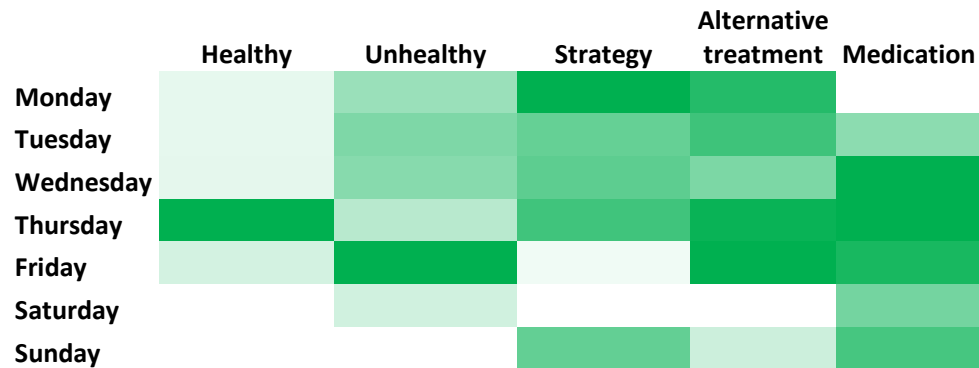
- Healthy
- Strategy
- Medication
- Unhealthy
- Alternative treatments



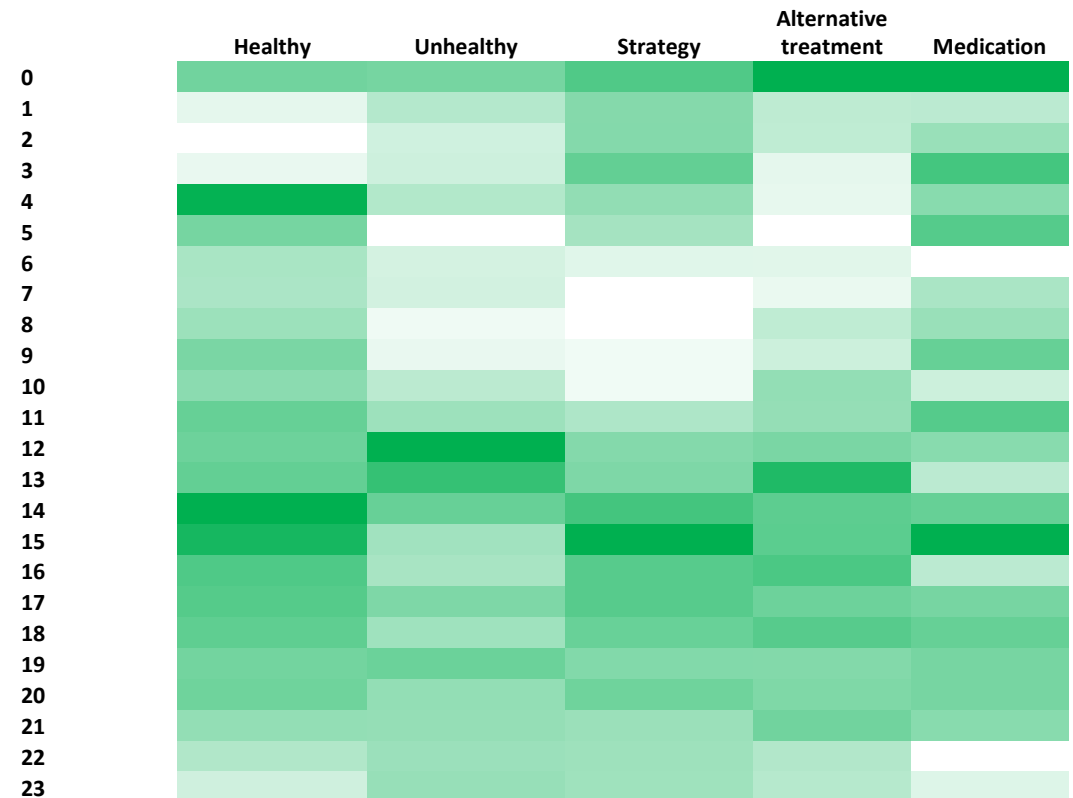
Time of day/day of the week: management conversation profile

Different management strategies are discussed throughout the week but conversation generally peaks between 12-3pm. Alternative treatments and Medication spike around mid-night suggesting these treatments might be associated with sleep

Conversation by day of week



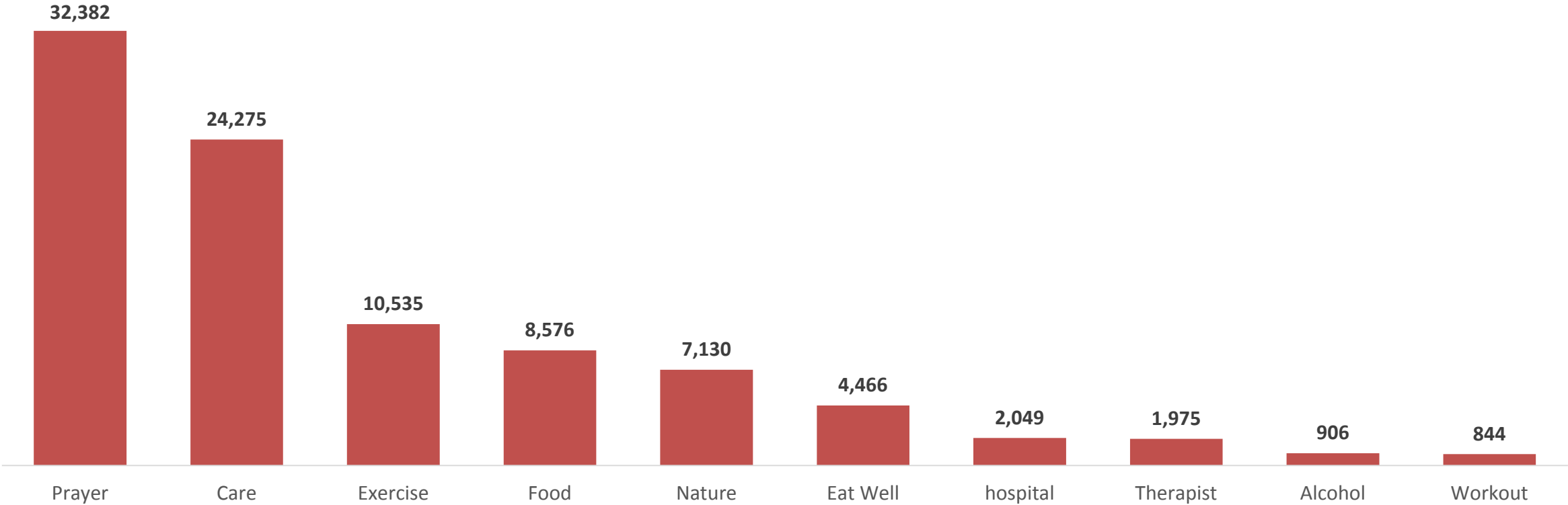
Conversation by time of day



Top management

Prayer is the most popular management strategy for dealing with worry/rumination. This is followed by Care, Exercise, Food and Nature

Top 10 management overall



Management: Healthy

Exercising and Eating well are the most discussed Healthy management strategies. People often use social social media for advice around these two and to discuss their progress with others

Top 10 Healthy



“As part of life we should exercise and meditate (and learn to go from beginning to more advanced forms of meditation as they could have a greater power to reduce stress/anxiety)”

“Exercise and diet is what helped last time but right now it's hard for me to do the simplest things due to anxiety”

“Exercise can help you to reduce stress and anxiety, so consider going for a walk if you're feeling stressed and anxious. You may be surprised at how helpful such a simple activity can be.”



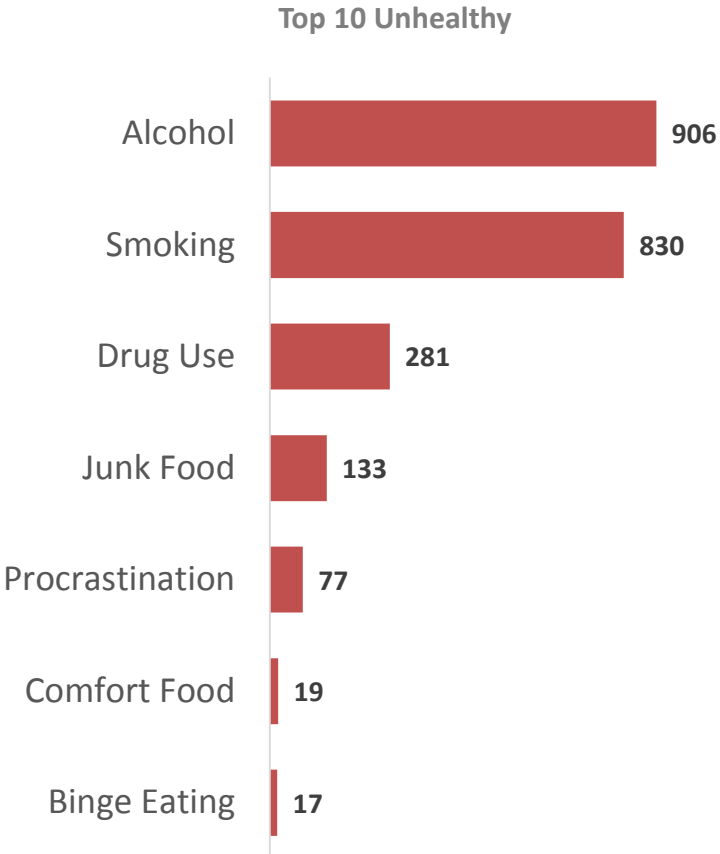
“Since being diagnosed, I've tried to integrate some holistic exercise into my life. Yoga, mindfulness have played a huge part in my mental and physical well being”

“I can hardly get a workout or meditation in, you people need to teach me how to worry about everyone else”



Management: Unhealthy

Volumes of conversations around Unhealthy management strategies are low, with alcohol most commonly discussed. Alcohol and cannabis are highlighted as being detrimental to mental health



“Address your mental health issues now. You need to be stable on your treatment, and that’s something you want to stay on top of. I would advise you not to consume alcohol”

“Every time we publish articles on alcohol, lots click. I think a lot more people worry about it than we realise”

“There have been multiple times where I’ve had to quit smoking weed because of the anxiety it gives me”

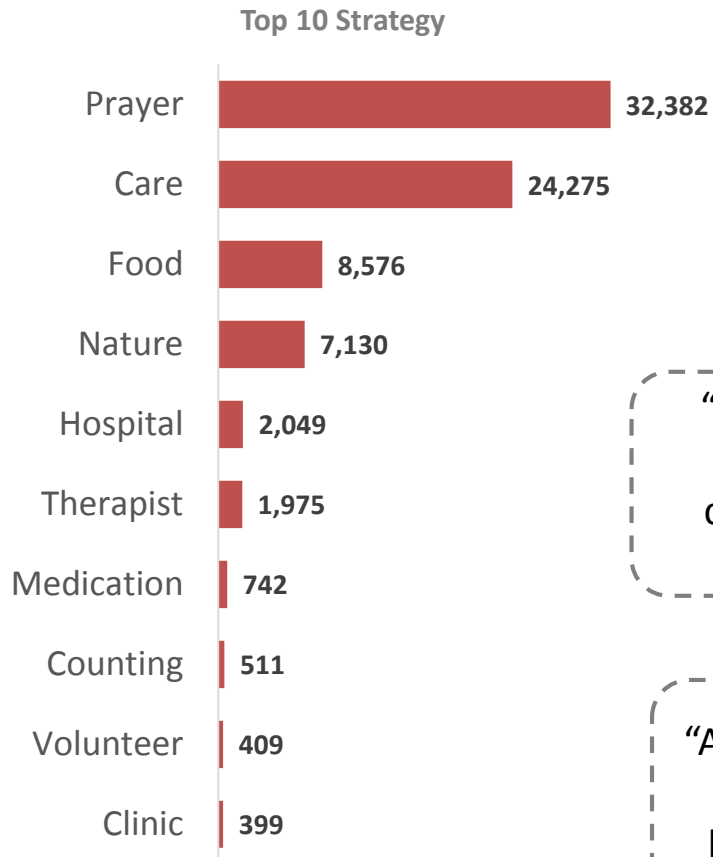


“I am a comfort eater. I eat instead of facing whatever is bothering me. It doesn't work of course, and I still have to deal with whatever the problem is plus being obese and type 2.”

“I feel so anxious and worried if I’m not stoned. Everything in my life revolved around the next tokes. It has become a shield for me to hide behind and not face the underlying problems in my life”

Management: Strategy

Prayer is often suggested as an effective means of either dealing with a worrying situation or with the worry/anxiety itself. Spending time outdoors or seeing a therapist are also highlighted



“I’m in a lot of pain but I’ve been through worse so consider me doing well. I pray a lot so God will help me”

“Don’t worry about anything, instead, pray about everything. Tell God what you need and thanks him for all his has done”

“Don’t worry, don’t stress, when God places you in certain situations it’s for a reason”



“I am going to see a therapist really soon but in the meantime can someone give me pointers on not worrying about things so much”

“A few weeks ago I had a panic attack and my heart was racing so fast I almost went to hospital. Having these kind of worries me”

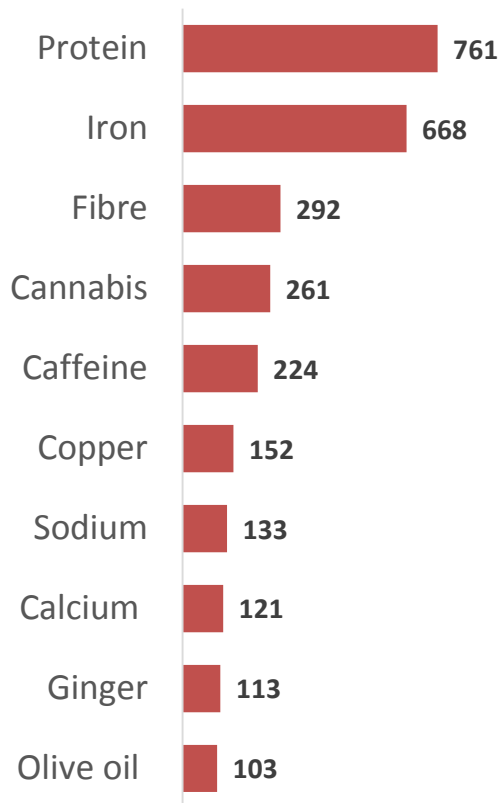
“The doctor told me that if everything went smoothly today, I’d be able to go outside tomorrow. It feel’s good, especially since it’s summer”



Management: Alternative treatments

Discussion of Alternative treatments is limited with people highlighting that caffeine may have negative side effects. Protein is discussed in relation to dieting and exercise and the potential antidepressant qualities of ginger are also mentioned

Top 10 Alternative treatments



“I weighed this morning and I was the same weight. I guess I had way too much sodium so I am going to try not have as much today”



“I suffer from Borderline Personality Disorder. I think cutting down on caffeine will help”

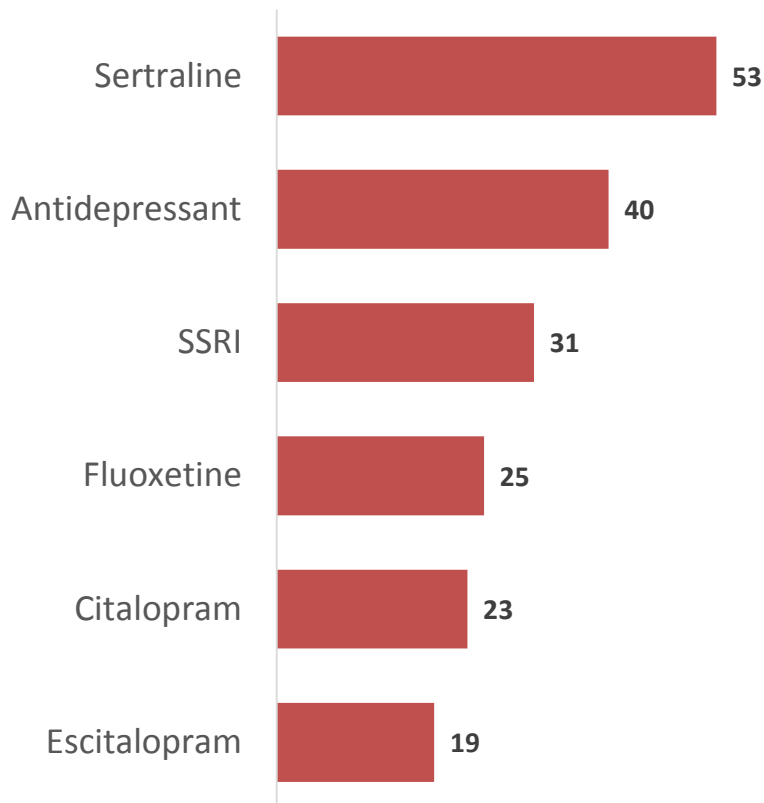
“I am having heart palpitations...I am a caffeine drinker but I don't drink it that often. I do believe I have anxiety”

“Can you elaborate on the MAOI effects of ginger? Ginger does have a ton of great medicinal qualities though so I am not too surprised”

Management: Medication

Medication is discussed much less than other management strategies. Conversations in this space revolve around the various positive and negative outcomes people experience

Top 10 Medication



“To control the anxiety my doctor recommended me going on Sertraline, which helped me pretty well for a while I felt in control and relaxed. Now I am trying to cut back because I hate the feeling of needing prescription drugs to feel normal”

“I have been on Sertraline since December. I didn't't have any side effects at all. I did increase my dose as it was helping with my anxiety but not my depression”



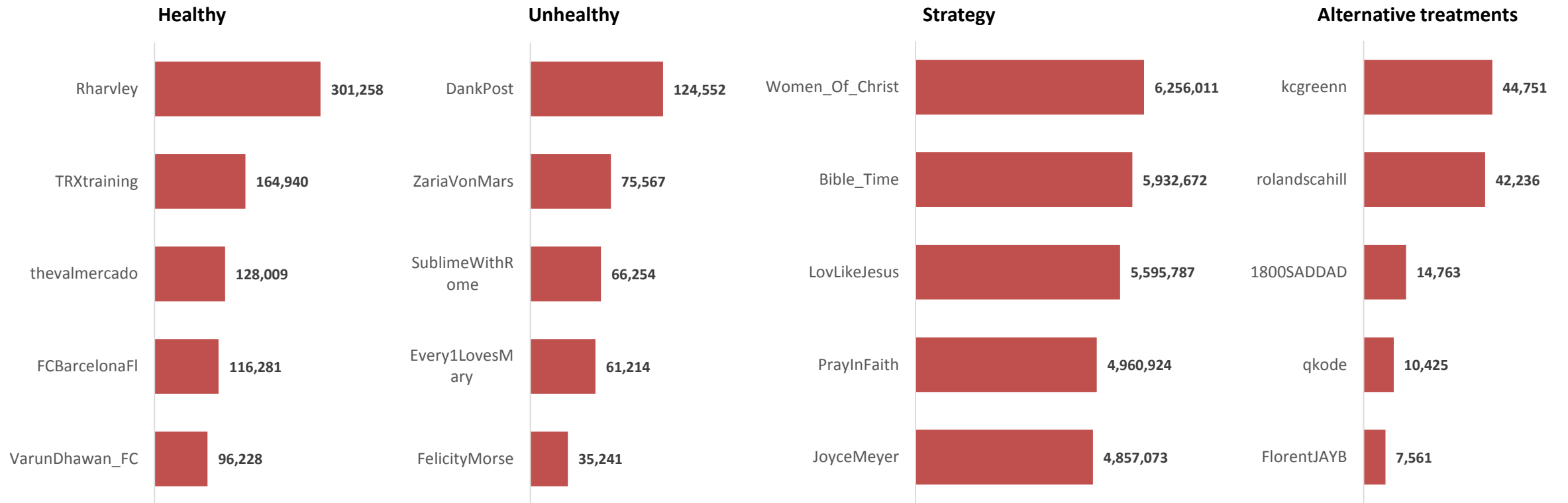
“Hi all, I was diagnosed with GAD back in Feb and I have been on Fluoxetine for 8 weeks now. I have felt so much better in myself but all of a sudden I am back feeling anxious again”

“I got prescribed Citalopram which is an antidepressant which is supposed to help my low mood and extreme anxiety. Ironically, my anxiety is prohibiting me from taking it, however, as I fear the side effects could be detrimental”



Top influencers: who is driving is the conversation

Exercise related accounts lead the Healthy conversation whereas Cannabis related accounts are more influential within Unhealthy management. Religious accounts are prominent under Strategy and a cartoonist is leading the conversation around Alternative treatments



Worry and Rumination: The potential of CBT



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The potential of Cognitive Behavioural Therapy



CBT is a talking therapy that enables people to manage their problems through challenging and changing the way that they think and behave. CBT has been found to be most effective in tackling anxiety and depression, but can also be useful for other mental and physical health problems. As is apparent from the conversations analysed, CBT is often used in conjunction with medication and there appears to be two distinct channels through which people access CBT; via a GP referral to a therapist or through self-help videos/sessions available online.

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The volume of conversations around CBT is low. It is ranked 20th amongst the management strategies identified. The majority of the conversation around CBT is positive with people recommending it to others. However, some have found it challenging to get access to CBT due to length weighting lists and cost barriers

“I highly recommend having a google about CBT, which can help challenge unrealistic worry”

“I felt the CBT course was brilliant, I learnt ways to deal with my anxiety and why I was feeling like this”

“CBT is great, I had some years ago and it really helps. And no side effects!”

“I felt a lot better once I had completed the course – I had more control over the way I felt and stopped having the physical symptoms”

“Does anyone else have trouble applying the ‘coping strategies’, using CBT”

“I tried looking into CBT but the cost is exorbitant! I feel so alone and it’s so hard to constantly feel these feelings”

“The wait for one on one sessions is so long on the NHS and I don’t have the money to go private”



For more information please contact
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