Starling Summary

Forum Design Features

Starling is a sub-forum of a large social networking site. It provides support and resources for people in the UK experiencing mental health challenges. The forum is publicly available. Those wishing to post must sign up to the social networking platform, which anyone can do. The forum is presented as a series of threads, with each thread containing an original post which any user can comment on. Threads can be created either as text, images, or users can simply post a link to another website or resource. The list of threads on the forum are sorted by those that are currently popular but can also be sorted by newly created and those which are controversial. Popularity is influenced by a user-based voting system. The wider platform provides mechanisms to show gratitude or reward good posts. This reward system includes the ability to gift badges to other users for particularly helpful posts. Many of these rewards are paid for gifts.



Users can "subscribe" to the Starling forum, meaning posts from the forum will appear when they log on to the wider social networking website. Anyone who has signed up to the platform can post in the forum. The Starling main page contains a sidebar stating the standard rules of the forum as well as pointing to the wider community rules of the platform. Links to related forums are also included at the bottom of this sidebar. The main page has a master post pinned to the top of the posts list. This contains a comprehensive list of resources including websites, helplines and organizations that might be useful to those coming to the forum for support. Feedback from users on how the forum is run is welcomed, and it is common for polls to be run on how new forum rules should be implemented or modified. The platform also provides a search function where posts from the whole platform can be searched for using keywords. These searches can be filtered to look at specific forums like Starling and even links to specific sites or posts from individual users can be searched for. Posts that become popular within Starling may appear in other "feeds" on the platform, to users who are not subscribed to the Starling. This may lead to other users becoming aware of the forum through seeing popular posts that were recommended to them.

Although anonymity of users and usernames is typical on the platform, it is not required. Users can reveal as much or as little of their personal information as they choose whilst on the platform. The only personal data that is collected from individuals when signing up to the platform is their email address to verify their account. The social networking site collects usage data, content information, and location data if using the app on mobile. Usage of this data is covered in the user agreement that users must accept when joining the platform. Although the platform does not make any specific claims about meeting web accessibility standards such as WCAG, it does make claims about its commitment to ensuring the site is accessible to all and welcomes feedback on specific issues related to accessibility.

Moderation

Starling is moderated by three unpaid volunteers who moderate the forum as active members of the community. The moderator's role is to be visible and empathetic to the people posting on the forum. The moderators do not have any specific training or experience but do have lived experience which helps them to identify different problems that may arise when users are discussing their mental health. Beyond this their role is to ensure that the rules of the forum are applied appropriately and sensitively to ensure that the community functions smoothly.

The moderators are typically active on the forum daily. Their tasks involve moderating posts and responding to other users. There is no specific amount of time required to be spent each day, but the moderators estimate they spend on average between one and three hours per day on the forum. The moderators bring different skills to the role, for example, one moderator is experienced in applying logical and technical skills to resolving issues on the forum and applying the forum rules, whilst another moderator is more skilled in being empathetic and identifying problems that might arise from applying the forum rules too vigorously. The moderators often provide support where they feel they have pertinent knowledge or experience of the issues being discussed or where the user seeking help has not gained sufficient support or response from other peers.

Several tools can be used to assist moderators in their moderation tasks. One is the moderator queue, where all user-reported or automatically removed posts are listed for a moderator to review. Users in the forum can report posts they believe have broken the community rules, while posts may also be automatically removed by the platform's spam filter. In the moderator queue, a moderator can review whether to delete the content or approve it. Users who persistently break the posting guidelines may be warned via direct private message, given a temporary suspension or 'muting', or banned from posting. The platform provides information and guidelines to help moderators use these tools. Posts that have received a low ranking may also be hidden automatically by the platform.

There are no specific rules or procedures in place for identifying and managing risk on the forum. When moderators feel they have identified risk they will do what they can to manage it within the context of the forum. This may include signposting the user to appropriate services or support, removing the posts if the moderator feels it is inappropriate or potentially triggering, or privately messaging the individual if the moderator feels it would be appropriate.

Language Data

Forum posts were collected from Starling in March 2023. All posts made to the forum back to its inception date of April 2019 were collected using the platform's application programming interface (API). There were 46,868 posts in the dataset, from 9674 threads, which totalled 4,820,253 words. The total number of users who were subscribed to the forum in March 2023 is 11,081 and there were posts from 6,258 (56.4%) users in our dataset (although unsubscribed users with accounts on the Starling platform can also post). In the 12 months, March 2022 to March 2023, 3,439 users subscribed and on average during the same period there were 54 posts per day from 30 different users. In this same 12-month period the average user posted 6.5 times and the mean response time between post and reply was 13 hours and 35 minutes, but the median response time was just 36 minutes. Figure 1 shows the average number of posts per hour on the forum. Posting activity seems to peak around 6pm and reaches a minimum at 4am, with a notable slump around lunchtime (1-2pm).

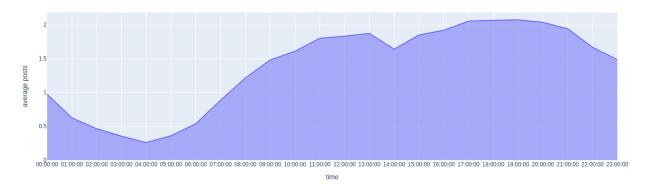
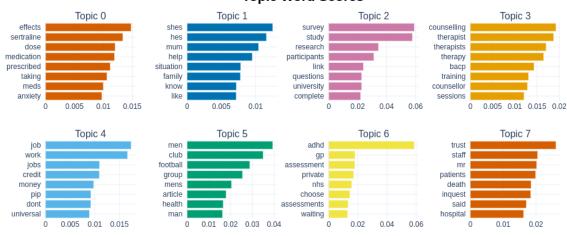


Figure 1 – Daily mean number of posts per hour

The most popular topics discussed in threads (see Appendix A) are displayed in Figure 2. In Topic 0 we can see that there is particular focus in the forum on discussions around medications and their effects. Topic 3 indicates discussions around help from therapists and other mental health professionals and Topic 6 contrasts this with conversations more orientated around access to healthcare and other services in general. We can see conversations around daily life seem commonplace on the forum with people talking about family and relationships (Topic 1) and work life (Topic 4). It is also interesting to see Topic 5 appearing, orientated specifically to men and various coping mechanisms that might by employed by this group to deal with mental health issues. Topic 2 seems to also indicate that the forum is commonly used as a place to discuss ongoing research in the field of mental health.



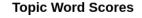


Figure 2 – Topic word scores generated by BertTopic

The distribution of these topics can be seen in Figure 3. Here we can see that Topics 1 and 4 are somewhat related as they both seem to involve threads focused on daily life. There are vague similarities between the other popular topics, but there are many threads discussing topics between these primary groups.

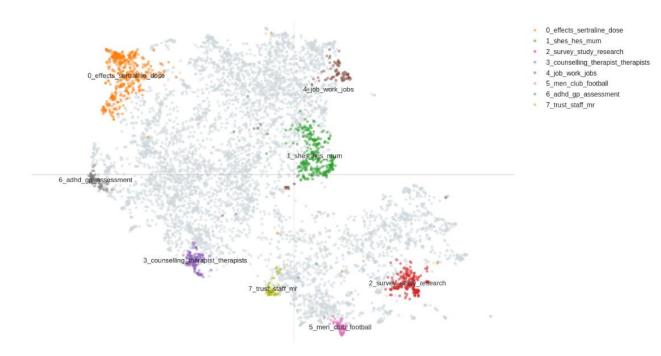


Figure 3 – Thread distribution by topic

Figure 4 shows the most relevant keywords (see Appendix B) when compared to the BNC (British National Corpus). Like the topic modelling analysis, we can see there is a strong focus in the forum on medications and access to therapy and other mental health services. Interestingly, unlike through the topic modelling shown above, we see other more emotive keywords emerge in this analysis. Use of keywords like struggling, scared and anxiety suggest people are in difficult circumstances and looking for help through peer discussions on the forum. Encouragingly we also see keywords such as thanks, helpful and hopefully appear, which might indicate that people are find some utility and draw some sense of support from using the forum.



Figure 4 – Keywords based on log-ratio score