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User dissatisfaction with a mental health application: Insights from Google Reviews

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Background: The increasing reliance on digital health solutions, particularly mental health applications, has the potential to revolutionise mental health management by offering accessible and scalable interventions. However, there are barriers to adoption and effectiveness.

Objectives: This study aimed to identify factors contributing to user dissatisfaction with mental health applications.

Method: A qualitative case study using more than 1600 Google reviews was conducted. A thematic analysis of user feedback was conducted, focusing on dissatisfaction, negative experiences and technical issues across application features, data management, health management, quality, user experience and well-being. The data were coded and analysed for patterns and co-occurrences among these categories.

Results: Application quality, user experience and technical reliability were the most significant factors influencing dissatisfaction. Common technical issues, including crashes and poor interface design, negatively affected user engagement and reduced the applications' effectiveness in supporting mental health management. Although some users reported improvements in well-being, technical challenges frequently offset these.

Conclusion: The findings emphasise the need for improved user-centred design, stable technical infrastructure and personalised features to enhance mental health applications. Addressing these issues can increase user satisfaction and the overall effectiveness of digital health interventions.

Contribution: This study contributes to the growing body of literature on digital health. It provides insights for improving the design and functionality of mental health applications. This assists in meeting user needs better.

Keywords: user dissatisfaction; mental health applications; customer reviews; application quality; technical issues.

Introduction

Mental health problems are becoming a significant global public health concern, creating increasing demand for more accessible and scalable treatment solutions. Factors such as the shortage of mental health professionals, service delivery inequalities and ongoing discrimination against mental health issues have resulted in substantial gaps in care throughout various regions (Wainberg et al. 2017). The world uses mental health applications as digital health solutions to enhance service availability and eliminate obstacles while supporting traditional treatment methods (Patel et al. 2023). The worldwide adoption of digital health solutions provides important context for South Africa (SA) because the nation faces severe mental health challenges, and digital interventions show promise as potential solutions.

In SA, 25.7% the population suffers from mental health issues, creating a growing demand for accessible and effective treatment options (Craig et al. 2022). The complex and crucial issues surrounding mental health in SA are because of specific regional characteristics and global inclinations (Shiraev & Levy 2020). The nation suffers from extensive pressure of mental disorders that are made severe by socio-economic inequality, the continuing effects of apartheid and high rates of violence (Pillay 2021). There is a significant treatment gap in South Africa because mental health services are understaffed and underfunded despite the critical demand (Davies et al. 2023).

To address these challenges, the South African government introduced the National Mental Health Policy Framework and Strategic Plan (2023–2030), which seeks to offer a holistic approach to mental health treatment (Firth et al. 2017). Despite these efforts, access to mental healthcare in

SA is unaffordable and challenging to achieve (Davies et al. 2023). Alternative approaches, such as digital mental health tools, have emerged as potential solutions because they address these ongoing problems (Patel et al. 2023).

The digital transformation of healthcare has led to the rise of mental health applications. These applications provide diverse services, including clinical care delivery, in-person therapy and post-treatment maintenance. Individuals struggling with mental health issues tend to refrain from seeing a doctor because of various factors such as pride, judgement, fear and doubt, among others (Law et al. 2023). To this end, if not treated properly, these health issues can negatively affect an individual's well-being (Melo et al. 2022). In this context, mental health applications provide a more convenient and confidential approach for individuals seeking help (Ko & Woo 2025).

Despite applications being designed to assist individuals with mental health issues, it is important to understand whether these applications are effective and have helped to address the issues they aim to alleviate. The challenge of the digital divide still exists in developing countries such as South Africa (Faloye & Ajayi 2022). Owning a mobile phone does not mean that individuals will download the application. Downloading a mental health application does not necessarily lead to improvement in an individual's mental health (Torous et al. 2018). Despite the abundance of mobile health applications on the Google Play Store and App Store, few have undergone usability and efficacy reviews (Alqahtani & Orji 2020).

Users encounter several challenges while using an application (Khamaj & Ali 2024). This presents implications for both developers and users (Malgaonkar, Licorish & Savarimuthu 2022). These challenges can include privacy concerns, content quality issues or accessibility issues (Tyagi et al. 2020). Mobile application review provides a plethora of information regarding the problems that users are experiencing. A review can contain a bug report, privacy concerns or a feature request (Malgaonkar et al. 2022). This helps the developers to understand the user's concerns. Users can also compare applications on these reviews before deciding which application to use.

While some studies have indicated that mental health applications may be useful in improving mental health conditions, they have also pointed to the high dropout rates as a significant barrier to the adoption and use of these applications (Alqahtani & Orji 2020; Borghouts et al. 2021; Connolly et al. 2021). Examining user reviews could assist in determining the causes of high dropout rates in these applications. The importance of user reviews cannot be ignored as they provide valuable insights into the users' perspective (Tyagi et al. 2020). These perspectives include technical issues, application effectiveness, user experience (UX) and the impact on well-being (Alqahtani & Orji 2020). By examining these reviews, developers can align the product with the diverse needs of the individuals seeking help, thereby improving mental healthcare delivery.

Although there are a plethora of studies that have examined application features, privacy issues and user engagement problems (Borghouts et al. 2021; Tyagi et al. 2020), the studies focusing on dissatisfaction from the perspective of user reviews remain scarce. This indicates an evident gap in the literature, as user reviews offer information about what users need help with and what stops them from engaging with mental health applications on a long-term basis. This gap needs to be addressed as it enables developers to enhance their mental health application design and functionality.

Therefore, this study seeks to address the research question: What causes user dissatisfaction with mental health applications? The objectives of this study are the following:

- *To identify factors contributing to user dissatisfaction with mental health applications and*
- *To provide recommendations to address these factors.*

Literature review

In the field of digital mental health, mental health applications have tremendous potential as interventions for prevalent mental illness (Linardon et al. 2019). However, their widespread adoption requires thorough evaluation of how they are designed, implemented and experienced by users (Torous et al. 2021). Users need better guidance to select appropriate mental health applications from the numerous options available in the market. This review is organised into four sections: (1) evolution, growth and impact of mental health applications; (2) barriers to digital mental health adoption in South Africa; (3) UX in mental health applications and (4) conceptual insights and identified research gaps.

Evolution, growth and impact of mental health applications

Mental health disorders are quite common in SA, and this constrains the social and economic development of the country. Anxiety and depressive disorders are the most common mental health conditions worldwide, with an estimated one in eight people suffering from them. South African estimates are higher: in 12 months, one in six adults met the diagnostic criteria for depression and anxiety (Sorsdahl et al. 2023). Among sub-Saharan youth, Jörns-Presentati et al. (2021) estimated that 27% experience depression and 30% anxiety during adolescence. It is also predicted that these figures will continue to rise because of various factors, such as social inequality, trauma and limited access to care (Pillay 2021). The treatment gap in SA remains critical because only 9% of the people with mental illness receive proper care (Docrat et al. 2019).

The introduction of mental health applications provides a unique opportunity to improve the accessibility and quality of mental care services. Several mental health applications are being designed and used because of the widespread use

of smartphones (Torous et al. 2021). Early applications such as Headspace, Calm and PTSD Coach delivered mindfulness, stress management and educational content about mental health (Firth et al. 2017). The following generations of mental health applications brought artificial intelligence (AI)-generated chatbots and symptom monitoring features (Woebot, Wysa and Bearable), which deliver customised interventions while linking users to expert professionals (Fitzpatrick, Darcy & Vierhile 2017; Haque & Rubya 2023; Inkster, Sarda & Subramanian 2013). The tools differ in their specific applications, yet they share a common aim of enhancing accessibility, affordability and anonymity in mental healthcare.

The benefits of such tools include their accessibility, availability for those reluctant to attend in-person therapy sessions, ability to provide educational content and self-monitoring features (Bucci et al. 2019; Martinengo et al. 2022). The effectiveness of these applications relies on three essential elements, which are user participation, system reliability and trust in data handling (Alqahtani & Orji 2020; Torous, Cerrato & Halamka 2019). These factors directly influence user retention and determine whether the application is perceived as supportive or frustrating.

Barriers to digital mental health adoption in South Africa

The adoption of mental health applications has shown rapid growth in high-income countries, yet SA shows restricted usage and effectiveness of these tools (Faloye & Ajayi 2022). The digital gap continues to exist because smartphone ownership does not automatically lead to application usage and reliable network access (Faloye & Ajayi 2022). The majority of mental health applications function best for Western markets because they fail to account for the unique socio-economic characteristics of South African users who speak different languages. Issues such as high data costs prevent users from maintaining their engagement with digital mental health tools (Pillay 2021).

SA deals with an increasing mental health crisis because of its social inequalities, rising unemployment and high community violence rates (Docrat et al. 2019; Pillay 2021). The 2023–2030 National Mental Health Policy Framework reveals an ongoing shortage of mental health professionals and uneven service coverage that affects rural populations most severely (Firth et al. 2017). The current healthcare environment requires digital mental health solutions to address accessibility problems while making treatment more affordable. The uneven distribution of technological resources and insufficient digital literacy skills prevent SA from achieving the full potential of digital mental solutions (Faloye & Ajayi 2022).

Several local initiatives demonstrate potential but remain fragmented. The Vula platform assists referrals among healthcare providers, while initiatives such as Mindful Revolution and Health Connect are piloting online counselling (Health Connect 2023; Mindful Revolution 2023; Vula Mobile 2023). The majority of mental health applications in SA, including Headspace and Calm, were created for Western users without proper adaptation to local languages and cultural settings (Bucci et al. 2019). The lack of digital mental health tool localisation makes users feel less connected to the content, which results in higher rates of user dissatisfaction (Faloye & Ajayi 2022).

The barriers identified in SA reflect the main user dissatisfaction factors reported across the literature, which include system reliability problems, usability issues, information quality, privacy concerns and affordability. System reliability suffers from unreliable internet connections and faulty device operations, while users experience poor outcomes because of their low digital literacy skills and system usability problems (Faloye & Ajayi 2022). The use of generic content that lacks personalisation and weak protection regulations in the region creates privacy concerns among users. Expensive subscription fees with high mobile data costs create significant barriers for low-income users to access digital mental health services (Naslund et al. 2020).

Given these barriers, there remains little empirical evidence on how South African users evaluate and experience digital mental health tools. User-generated reviews about digital mental health tools help researchers identify specific cultural and contextual factors that cause dissatisfaction, which can guide the development of better digital mental health solutions.

User experience in mental health applications

Existing studies have investigated various UX aspects, which include interface design and ethical and privacy concerns (Haque & Rubya 2023; Tyagi et al. 2020). The literature suggests that user sophistication levels depend largely on technical reliability (Borghouts et al. 2021). The research by Alqahtani and Orji (2020) indicated that system failures, bugs and performance issues result in high dropout rates, while Borghouts et al. (2021) emphasised that inadequate post-launch assistance damages user trust. The study by Connolly et al. (2021) confirms that system reliability and stability play a vital role in keeping users active.

Apart from reliability, the two essential factors influencing UX are interface design and usability (Nieminen et al. 2022). Users experience frustration when interfaces lack proper design because they struggle with data entry and navigation (Tyagi et al. 2020). Nieminen et al. (2022) and Van der Schyff (2023) support user-centred design methodologies that involve end users throughout the entire development process. The alignment of application features with actual user requirements can lower user dissatisfaction.

The quality and personalisation of information are also constant problems that users encounter (Martinengo et al. 2022; Pieritz et al. 2021). Users seek content that matches their medical needs, cultural background and treatment objectives

(Berry, Lobban & Bucci 2019). Studies indicate that interventions that are too generic or poorly designed lower user engagement (Pieritz et al. 2021; Sweeney et al. 2021). Users experience higher satisfaction when applications offer personalised recommendations, progress tracking and adapt to emotional states (Martinengo et al. 2022). Mental health applications that do not offer personalised solutions lead to user dissatisfaction because they cannot fulfil user requirements.

Data privacy and ethical issues have received increasing attention in recent years (Haque & Rubya 2023). The research conducted by Coghlan et al. (2023) and Haque and Rubya (2023) shows that mental health application users remain concerned about their data being predicted by these systems. Users are often unaware of how their data are stored or shared, creating mistrust that can discourage ongoing use. The study by Imran, Hashmi and Imran (2023) shows that AI-powered chatbots have promising capabilities, but they introduce new ethical challenges regarding data transparency and emotional safety. These findings indicate that trust in data handling is a prerequisite for user retention.

Monetisation and access also affect user satisfaction levels (Chan & Honey 2022). Users become dissatisfied when applications become unavailable because of subscription requirements or paywalls (Chan & Honey 2022). This situation becomes more critical in SA because users must deal with expensive mobile data costs, which impact their ability to maintain application usage (Faloye & Ajayi 2022). The literature indicates that monetisation strategies, such as premium gating and restricted free trials, create negative perceptions about fairness and accessibility, leading users to abandon the application altogether (Borghouts et al. 2021).

Conceptual insights and identified research gaps

The literature shows that user satisfaction with mental health applications depends on technical reliability, interface design, content relevance, data security and affordability. However, findings across studies are inconsistent (Alqahtani & Orji 2020; Borghouts et al. 2021; Chan & Honey 2022; Martinengo et al. 2022). Rapid attrition and limited sustained use are highlighted by some (Alqahtani & Orji 2020; Borghouts et al. 2021), while others report strong management outcomes with application-based interventions (Firth et al. 2017; Linardon et al. 2019). These inconsistencies imply that sustained engagement is not guaranteed by technological capability alone.

With a focus on Western developed applications and homogenous user groups, the majority of studies have been conducted in high-income contexts (Borghouts et al. 2021; Torous et al. 2021). This geographic bias restricts the ability to comprehend how digital mental health tools work in environments with limited resources, like SA, where socio-economic, linguistic and infrastructure conditions vary greatly. Furthermore, the majority of the evidence currently available is based on developer-led assessments or brief trials that rarely accurately represent real-world experiences (Borghouts et al. 2021; Elkes et al. 2024).

These gaps highlight the necessity of context-specific insights into UX. This study addresses this by examining Google reviews of a mental health application to find recurrent patterns of user dissatisfaction among South Africans and to inform the design of more dependable, culturally sensitive and accessible digital mental health tools.

Research design and methodology

This research adopts an interpretivist paradigm as it provides a suitable framework for exploring the subjective experiences and perceptions of users interacting with mental health applications. Interpretivism facilitates understanding the complex, context-bound human interpretations embedded in user reviews, aligning well with the qualitative case study approach that seeks to capture the nuanced user voices on application usability and satisfaction (Babbie & Mouton 2001).

Bearable was selected as the single case because of its popularity and relevance within the digital mental health landscape. This is evidenced by the availability of a substantial volume of user-generated reviews (over 1600 Google reviews). This provided rich qualitative data for an in-depth case study analysis. Bearable is a representative mental health application with diverse features, including symptom and mood tracking, which are central to user engagement and satisfaction. These characteristics made it an appropriate and insightful case to examine issues of user dissatisfaction in a real-world context.

Data collection

The dataset comprised all 1680 user reviews of the Bearable mental health application publicly available on the Google Play Store as of 02 October 2023. No filtering was applied by sentiment, date or rating to ensure an inclusive representation of both positive and negative UXs. Inclusion criteria required reviews to be in English and specifically pertain to the Bearable application's features and usability. Reviews lacking substantive content or containing personally identifiable information were excluded to protect user anonymity and maintain data quality. This comprehensive sampling allowed for robust thematic analysis reflective of the broad user base.

Data analysis

Data were analysed using ATLAS.ti software. The inductive coding process involved two qualitative researchers who systematically reviewed the textual data over a period of approximately 4 weeks. AI-assisted coding was conducted using the AI coding capabilities integrated within the ATLAS.ti qualitative data analysis software. The AI model employed supported automated identification of potential codes and recurring patterns within the dataset.

These AI-generated codes served as an initial coding frame, which was then evaluated and modified by the human coders to better fit the contextual nuances of the user reviews.

This was followed by iterative discussions between the researchers to reconcile discrepancies and refine code definitions. Themes were finalised through consensus meetings, ensuring that the developed themes authentically represented the data and maintained consistency across coders. This rigorous approach strengthened the trustworthiness and credibility of the thematic analysis.

The combination of AI assistance and human interpretation enhanced coding accuracy and dependability. The process allowed for efficient processing of the large volume of data while maintaining qualitative rigour.

Ethical considerations

No ethical approval was needed as only publicly available online consumer review data were used in this study. Names and any identifying information were eliminated from the reviews to ensure anonymity.

Using Google reviews has limitations, such as the possibility of bias in user evaluations and the inability to extrapolate results for all mental health applications. However, the bigger sample size of qualitative data provides insightful data to highlight challenges faced by users of a particular mental health application.

Results

A word cloud was generated first to identify common words used in Google reviews, as seen in Figure 1. The larger the word, the more frequently it was used.

The 15 most common words are indicated in Table 1. Track, tracking and symptoms were the most used words. Other prominent words indicated positive feedback and that some

TABLE 1: Word cloud frequencies.

Word	Length	Count
can	3	785
track	5	618
bearable	8	586
use	3	519
love	4	420
symptoms	8	411
great	5	390
health	6	389
like	4	385
mood	4	383
tracking	8	359
easy	4	346
response	8	337
free	4	330
data	4	311

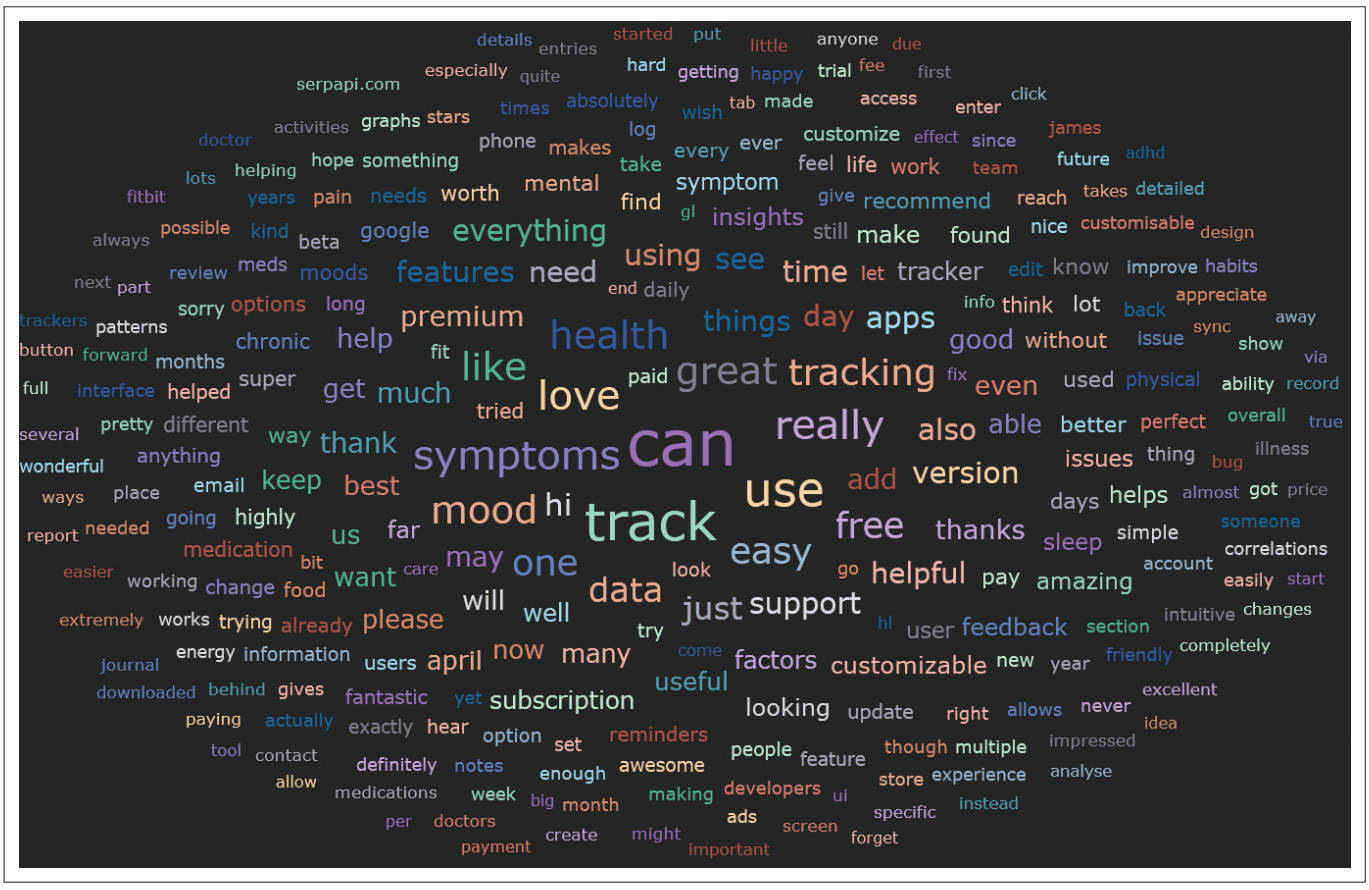


FIGURE 1: Word cloud.

users benefit from using the application: love, great, health, like, easy and free.

Words, such as health, tracking, easy and response, focus on UX, application quality and technical stability. These words indicate that usability and reliability are prerequisites for mental health applications.

User experience

User experience emerged as a dominant theme, cited 848 times (9.89% of all mentions). This finding underscores that navigation, ease of use, visual design and overall usability are drivers of user satisfaction. A user noted, 'It is so useful and fairly easy to navigate', while still suggesting enhancements like time-specific food tracking and widgets. However, poor UX led to frustration, negative reviews and application abandonment. Poor design negatively affects UX. This is exemplified by a critique highlighting an 'odd UI (user interface)' and aggressive subscription prompts: 'the fairly often prompts… actually drive me away'.

The next step identified the 15 key themes from 8574 quotations, as shown in Figure 2.

Negative experiences formed a broader emotional category (196 mentions, 2.29%), capturing feelings of betrayal, stress or outright anger triggered by poor application performance. Reviews like 'Awful. Purchase required to access features' and 'Uninstalled' reflected disappointment. Long-term users felt core functionalities were abruptly paywalled ('It used to be really good. But now you have to buy premium to do pretty much anything'). Some expressed outrage at perceived bait-and-switch tactics, demanding 'ZERO stars' when promised free access evaporated. While a minority acknowledged value despite flaws ('a bit slow, but… absolutely worth it'), these exceptions underscored how broken trust dominated the emotional narrative. Negative experiences stemmed from cumulative failures, technical instability, opaque pricing or feature erosion. This is transforming the application from a supportive tool into a source of distress.

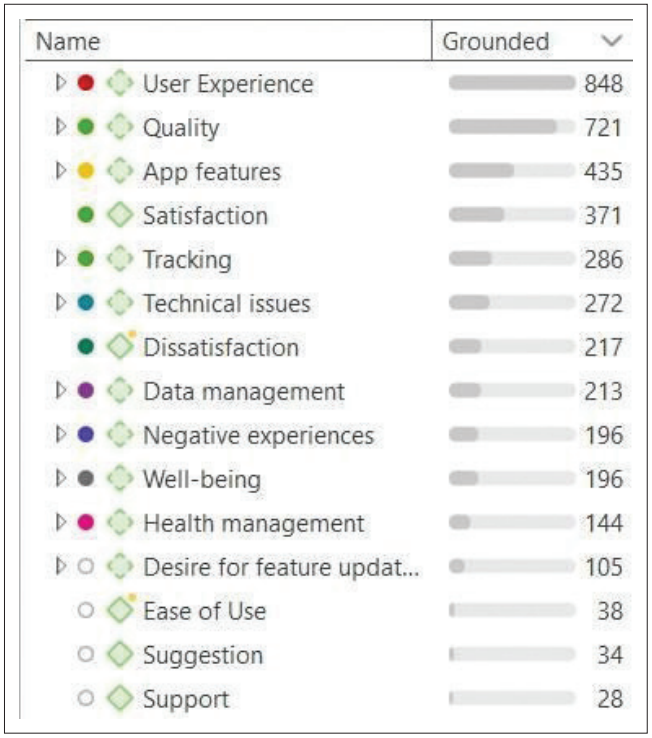


FIGURE 2: Thematic analysis.

Quality followed as the second key theme, appearing in 721 mentions (8.41%). This encompassed users' perceptions of the application's performance, reliability and trustworthiness. Frustrations arose when core functionality faltered, as seen in a user's review: 'Had trouble signing in, even when I was set up it was a bit confusing to use. So many unnecessary things I could not remove'. These issues can erode confidence in the application.

Application features

Application features constituted the third major theme with 495 mentions (5.77%). Users emphasised expectations around functionality, such as journaling, mood tracking, reminders or guided meditations. Users expressed disappointment when features felt limited, had errors or were misaligned with their mental health needs. Critiques often targeted specific feature shortcomings. One user detailed issues with symptom trend visualisation: 'Symptom categories do not mean anything… the daily averages are amalgams of completely distinct conditions… a mostly good day is washed out by an hour or two of bad symptoms'. This illustrates how technically flawed or conceptually misaligned features can negate the application's utility, regardless of other strengths.

User satisfaction and dissatisfaction

User satisfaction emerged as a mid-level theme, appearing 371 times (4.33%). This metric reflects whether the application met user expectations. It often stems from a combination of UX quality, feature delivery and responsiveness. Positive sentiment arose when users felt supported, exemplified by one who called the app 'a godsend' for its anxiety tracking, depression, sleep and other metrics. However, all these features felt overwhelming to some users at the start.

The free version offered limited functionality. Tracking functionality (286 mentions, 3.34%) is linked to satisfaction. Users valued tools for monitoring mood, symptoms and habits, often describing them as foundational to managing their health. Praise like 'Best symptom tracker I have ever used' underscored its importance for gaining actionable insights. Dissatisfaction was expressed when tracking lacked personalisation or meaningful analysis. 'Tracking things for the sake of tracking them with no other use is pointless'. Critiques targeted design flaws, such as oversimplified trend visualisations that 'wash out' a good day by focusing on peak symptoms. The absence of insights in free tiers

signalled exclusionary design to others. This gap between tracking potential and execution can define the user's satisfaction with the application.

Monetisation and user satisfaction

Satisfaction was negatively affected by the push to purchase subscriptions. Users perceived predatory monetisation tactics, difficult subscription cancellations ('Do not subscribe, it is not worth it and difficult to cancel') and aggressive upselling that disrupted the trial experience. One user recounted being subjected to a '5-minute questionnaire' only to face an immediate payment demand, deeming the 7-day trial insufficient for meaningful health assessment. Users dismissed the application as 'another hipster marketing victim', highlighting how monetisation strategies directly eroded goodwill. 'I cannot afford the cost… Truly a shame'. Dissatisfaction was explicitly mentioned 217 times (2.53%) because of unmet expectations or acute frustration. Others highlighted deceptive value propositions, criticising 'shockingly expensive' subscriptions unlocked only after users invested significant time inputting detailed data. This strategy is described as pressure selling masked by artificial discounts. This theme reveals how monetisation may fuel resentment and erode initial goodwill.

Technical issues

Technical issues were mentioned less frequently (272 mentions, 3.17%). However, it exerted a disproportionate impact on trust and usability. Bugs, crashes, lag and syncing problems, even when intermittent, negatively affected the UX. 'The app keeps freezing and crashing' highlights frustration. Technical instability compounded negative perceptions of value, especially when paired with subscription demands. Persistent glitches can erode long-term credibility; users questioned reliability if basic functionality faltered ('Had trouble signing in… confusing to use'). While not the top concern, these issues acted as critical failure points: a single crash could erase painstakingly logged data, transforming a supportive tool into a source of stress and distrust.

Data management and privacy concerns

Data Management Concerns (213 mentions, 2.48%) represented a signal of discontent. In a mental health context, where users share intimate symptom and mood data, privacy failures triggered intense distrust. Users accused applications of unethical data handling, citing violations like forced data sharing for basic access ('Cannot access app when refusing to share data, which is not even allowed in the EU') – a practice one branded as parasitic. Fears centred on non-transparent encryption ('None of their encryption claims can be validated'), mandatory cloud storage without offline functionality and suspicions of data misuse, amplified by allegations of suppressed criticism ('Somehow the developer got my previous review removed'). These concerns question the application's ethical foundation, leading to warnings: 'DO NOT trust this app!' When users felt their sensitive health data were exploited or insecure, the level of trust was diminished.

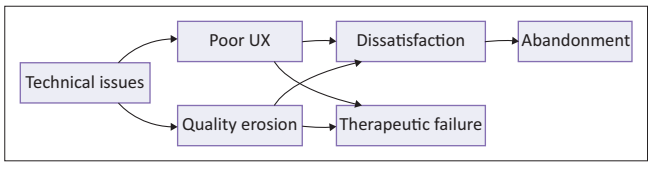
Well-being impacts

Well-being impacts are referenced in 196 user mentions (2.29%). While some credited the application with meaningful mental health support, these positive outcomes were frequently overshadowed by usability and functionality barriers. One user's detailed critique illustrated this tension: though acknowledging 'a lot of good features', they emphasised how cumbersome medication logging and a potentially broken sleep tracker ('you cannot just enter '1–3am, 4–9am…'). This misalignment between feature design and real-world health needs eroded the application's potential to deliver therapeutic value. When users struggled with confusing interfaces ('two places to enter times') or impractical workflows, their well-being goals remained unmet.

Long-term health management

Long-term health management emerged as the least cited theme (144 mentions, 1.68%), yet its presence signalled the application's highest potential value. Users who persisted reported benefits for chronic illness management. It was praised as the 'Best application for tracking chronic illness', highlighting seamless medication logging and customisable reminders. The actionable symptom-trend graphs revealed 'connections between increases in pain or mood changes'. Features like non-caloric food tracking are aligned with holistic health needs. However, such endorsements were scarce. While the application demonstrated capacity for meaningful health outcomes, its potential remained unrealised for users who abandoned it amidst earlier frustrations.

The co-occurrence analysis in Figure 4 illustrates how dissatisfaction, negative experiences and technical issues intersect with application functionalities. This method quantified how frequently these themes appeared alongside



UX, user experience.

FIGURE 3: Towards resilient design.

		Dissatisfaction 217	Negative experiences 196	Technical issues 272
App features	435	10	21	45
Data management	213	7	21	25
Health management	144	5	10	15
Quality	721	40	52	84
User Experience	848	20	43	99
Well-being	196	4	5	22

FIGURE 4: Co-occurrence analysis.

primary categories (e.g. UX, quality), identifying systemic pain points and user discontent.

Technical issues (272 mentions) emerged as the most pressing challenge. Their co-occurrence with UX (N = 99) and quality (N = 84) confirmed that crashes, lag or bugs degrade perceived value. Even well-designed features become liabilities when technical failures occur. App features (N = 45) or compromised data management (N = 25) coincide with complaints about lost logs or sync errors. Well-being resources (N = 22) were also hampered, proving that technical instability can affect therapeutic intent.

Dissatisfaction (217 mentions) arose mostly from failures in quality (co-occurrence: N = 40) and UX (N = 20). Users linked disappointment to unmet expectations: applications faltering on reliability, accuracy or intuitive design eroded trust. When core functionalities like app features (n = 10) or data management (N = 7) felt misaligned with mental health, it confirmed that feature limitations and privacy concerns affect disillusionment.

Negative experiences (196 mentions) showed even stronger ties to foundational flaws. Poor quality (N = 52) and subpar UX (N = 43) were primary catalysts, transforming usability issues into frustration. App features (n = 21) and data management (N = 21) frequently co-occurred with negative events, illustrating how broken features or opaque data practices generate user frustration. This finding validates user reports of feeling 'deceived' or 'overwhelmed'.

Figure 3 summarises the findings of the co-occurrence analysis to improve the design of mental health applications. This analysis reveals that technical instability catalyses user dissatisfaction, which cascades into abandonment of mental health tools. The findings demonstrate that quality and UX serve as the basis for user engagement. However, these foundations are unmet because of technical failures, poor design and opaque data practices.

Discussion

User dissatisfaction with mental health applications is caused by a combination of technical instability, poor UI design and a lack of personalised content that meets diverse mental health needs. These technical failures, such as crashes and lag, erode user trust and compromise the application's perceived value. Additionally, users express concern over data privacy and security, which further discourages ongoing engagement. Monetisation approaches that restrict access through expensive subscriptions exacerbate dissatisfaction, especially in low-resource contexts where affordability and data costs are significant barriers.

The persistent South African digital divide limits accessibility for many users, compounding the challenges of sustained application use. These interconnected factors collectively contribute to negative UXs and high dropout rates, underscoring the need for holistic improvements in mental health application design and implementation.

Technical issues and application usability

The study's identification of technical issues as a significant barrier is consistent with prior research, which highlights the negative impact of application crashes, bugs and performance problems on UX. Alqahtani and Orji (2020) noted that mental health applications available on the market have not undergone thorough usability testing, which can lead to high dropout rates. This finding is supported by Borghouts et al. (2021), who indicate that technical issues often deter users from continuing with mental health applications. The co-occurrence analysis in this study showed that technical issues were closely linked to user dissatisfaction. The finding supports Connolly et al.'s (2021) argument that reliable functionality is crucial for maintaining user trust.

User interface and experience

Poorly designed UI negatively affects UX (Tyagi et al. 2020). The user reviews identified difficulties in navigating mental health applications, highlighting the importance of designing user-friendly interfaces to improve engagement. User-focused teams involving mental health experts should be engaged during application development to ensure that the needs of diverse users are met (Nieminen et al. 2022).

However, the study also suggests that improving the UI alone may not be sufficient. Users indicated that even with a good interface, the content's relevance and the application's ability to meet their specific mental health needs were of greater importance. This points to a holistic need to balance UI with quality content.

Content quality and personalisation

Content quality and relevance emerged as another major theme from the user reviews. Users expressed a preference for personalised content that aligns with their specific mental health concerns, supporting the notion that mental health applications should not adopt a 'one-size-fits-all' approach. Martinengo et al. (2022) highlighted the value of personalised support in digital health applications. The authors noted that content tailored to individual needs enhances engagement and overall satisfaction.

Pieritz et al. (2021) also stressed the importance of offering content that adapts to users' progress and health status. This provides users with more relevant and impactful interventions. The present study reinforces these findings by demonstrating that users value applications that offer meaningful, personalised content.

Generic or irrelevant content can frustrate users but can also diminish the perceived value of the application. This is consistent with research by Sweeney et al. (2021), who found that mental health professionals support the notion that

personalised interventions are more effective in treating specific conditions.

Privacy and security concerns

Privacy concerns were frequently mentioned in the reviews, with users expressing apprehension about how their data were being used or shared. This is consistent with the literature on the importance of clear data privacy policies in mental health applications, particularly given the sensitive nature of mental health information (Coghlan et al. 2023). Users' fears regarding data security could discourage them from fully engaging with these applications, reducing their effectiveness in promoting mental well-being.

The current study's findings are further supported by the work of Haque and Rubya (2023), who highlighted similar privacy concerns in their research on mental health applications. They found that users often feel uncertain about how their data are being handled, which leads to decreased trust and higher dropout rates. Addressing these concerns by ensuring transparency and implementing stronger data protection measures could be key to improving user retention (Imran et al. 2023).

High dropout rates and user engagement

Despite the potential of mental health applications, the literature indicates that users struggle to maintain their interaction with digital mental health tools over the long term (Borghouts et al. 2021). Users frequently abandon them because of the challenges discussed above, technical issues, poor UI, irrelevant content and privacy concerns.

Accessibility and the digital divide

The digital divide is a persistent barrier to the widespread adoption of digital health interventions in low- and middle-income countries (Faloye & Ajayi 2022). Despite the potential of mental health applications to bridge gaps in mental health service delivery, without addressing issues of accessibility, particularly in rural or low-resource settings, these applications may not reach the populations that need them most (Bucci et al. 2019). Targeted strategies are needed to ensure that digital mental health tools are accessible to those with limited technological infrastructure (Torous et al. 2019).

The inability to use applications because of poor connectivity or a lack of digital skills also ties into the broader socio-economic inequalities that affect access to mental healthcare. South Africa's treatment gap is exacerbated by socio-economic inequality, and digital health tools, while promising, must be tailored to overcome these systemic barriers (Docrat et al. 2019).

Although this study utilised an inductive coding approach without a predetermined theoretical framework, the identified themes resonate with established conceptual models in UX research. Key dimensions, such as technical reliability, usability, personalised content and data security, align closely with recognised UX frameworks that inform user engagement and satisfaction. These models emphasise the importance of system functionality, user-centred design and trust for sustained interaction with digital applications. The findings not only echo prior empirical studies but also contribute to a growing understanding grounded in UX theory, providing a cohesive lens to interpret user dissatisfaction in digital mental health tools.

Addressing the key challenges highlighted in the user reviews, especially related to technical performance, UI design and content relevance could help reduce dropout rates. These issues are interrelated, as revealed by the co-occurrence analysis, indicating that improving one aspect (e.g. technical stability) could positively impact others (e.g. user satisfaction and content engagement), leading to more sustained use of these applications.

South African policymakers and regulators should establish frameworks that mandate transparent in-app monetisation practices, preventing aggressive subscription models that potentially exclude low-income users. Regulatory oversight on pricing and mandatory disclosure of data handling practices will promote fairness and enhance user trust. Data privacy regulations must be strengthened to safeguard sensitive mental health information, requiring developers to implement clear consent mechanisms and robust encryption standards. For app developers, integrating user feedback into design cycles is crucial to creating accessible, user-centred applications. Practical implementations include adopting fair monetisation strategies with reasonable free-to-use functionality, enhancing data security transparency and tailoring application content to reflect users' cultural and linguistic contexts. These efforts will address core causes of dissatisfaction and facilitate sustained engagement with mental health applications.

In the next section, this discussion will be integrated into the overall conclusion, emphasising how the research objectives were met and what contributions the study has made to the field.

Conclusion

This study examines the UXs and challenges associated with mental health applications, focusing on the prevalence of dissatisfaction, negative experiences and technical issues. By addressing the research question, the findings highlight areas of concern in digital mental health interventions and provide a roadmap for enhancing their design and effectiveness.

Technical issues were identified as a significant challenge, affecting UX and application quality. As demonstrated in the co-occurrence analysis, technical problems, such as bugs and slow performance, not only lead to negative experiences. It also erodes trust in the application's ability to deliver meaningful health outcomes. Technical issues undermine the effectiveness of mental health applications in supporting long-term health management. The study highlights that

while mental health applications have the potential to contribute positively to well-being, they must address technical barriers to ensure users can fully benefit from their features.

This study's use of a single-case qualitative analysis focusing exclusively on the Bearable mental health application constrains the generalisability of the findings. While Bearable offers diverse features and a rich volume of user reviews, other applications may present different usability challenges, monetisation models or privacy practices that were not captured here. Extending the research to multiple mental health apps would provide a more comprehensive understanding of user dissatisfaction across different designs and user populations. Future research should also consider longitudinal approaches to examine how user satisfaction and engagement evolve, especially in response to app updates or changing user needs. Such studies would enhance the field's ability to develop robust, user-centred digital mental health interventions that account for diverse contexts and temporal dynamics.

This study makes contributions to the field of digital mental health by systematically analysing user feedback. This study provides detailed insights into the specific technical and design failures that contribute to user dissatisfaction. These findings offer practical guidance for developers looking to improve mental health applications.

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Fazlyn Petersen: Conceptualisation, Data curation, Formal analysis, Writing – original draft. Sheethal Tom: Writing – review & editing.

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Data availability

The data that support the findings of this study are available from the corresponding author, Fazlyn Petersen, upon reasonable request.

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