Delivering A Digital Mental Health Service in Australian Secondary Schools: Understanding School Counsellors’ and Parents’ Experiences

Bridianne O’Dea1,2,3, Catherine King1, Melinda R Achilles1, Alison L Calear3 and Mirjana Subotic-Kerry1

1Black Dog Institute, University of New South Wales Sydney, Randwick, NSW, Australia. 2Faculty of Medicine, University of New South Wales, Kensington, NSW, Australia. 3Centre for Mental Health Research, Australian National University, Canberra, ACT, Australia.

ABSTRACT

This study examined school counsellors’ and parents’ experiences of a school-based digital mental health service (Smooth Sailing) that screened students’ mental health and provided automated psychological care. The Smooth Sailing service was offered to 4 secondary schools in New South Wales, Australia, for a 6-week trial period with 59 students taking part. The participating school counsellors (n = 4) completed a semi-structured interview to explore their experiences. Parents of students who had consented to being contacted (n = 37/59) were invited to complete an anonymous online survey about their child’s participation. Six parents completed the survey. The school counsellors expressed overall support for the service and cited the ease of service use, its ability to identify students at-risk, and the provision of psychoeducation to students as clear benefits. They identified some barriers to the service, such as parental consent and suggested strategies to improve uptake and engagement, such as incentives, more frequent screening and use with older students. Parents also reported positive experiences with the service, expressing appreciation for mental health screening in schools and a new system to connect them and their child to school counselling services. Taken together, these findings provide initial support for delivering the Smooth Sailing service in secondary schools.

TRIAL REGISTRATION: This trial was registered with the Australian and New Zealand Clinical Trial Registry (ACTRN12617000977370).

KEYWORDS: Adolescent health services, mental health services, school health services, internet, counsellors, parents

Background

Adolescence is a crucial period for the development of anxiety and depression.1 Secondary schools have responded by implementing a range of interventions to identify, support and reduce these mental health problems among adolescent students.2-4 To date, research on such interventions has focused on measuring changes in behavior and symptoms5-6 and the barriers to implementation.7,8 There is a wealth of literature outlining the various factors that influence the translation of mental health interventions into schools.9,10 Schools remain limited in what they can offer without gaining support from key staff and parents.11,12 As school-based interventions become digitised, technical accessibility and a greater need for in-person provider support have compounded existing barriers.13 Unsurprisingly, school counsellors and parents remain crucial gatekeepers to the successful implementation of digital school-based mental health interventions.

The current study aimed to examine school counsellors’ and parents’ experiences of a new digital mental health service (Smooth Sailing) piloted in Australian secondary schools. Based on the health system principles of stepped care,14 the Smooth Sailing service uses an automated web-based platform to screen students’ symptoms of anxiety and depression. The service then links students to online, self-directed psychological interventions or in-person care with school counsellors. The service aims to identify students in need of mental health support, provide care that is scalable and evidence-based, and foster positive attitudes to help-seeking among students. The service is underpinned by Rickwood et al’s15 help-seeking model whereby a digital platform is a preferential delivery mode that encourages young people to appraise and express their mental health needs, and increases the availability of appropriate and accessible help.

School counsellors play a key role in the Smooth Sailing service as they provide in-person care to students with severe symptoms or suicidal ideation. In past trials of similar interventions, school counsellors have reported a lack of confidence in the thresholds of automated screening tools and have raised concerns about liability and workload.16,17 Counsellors have also reported a preference for indicated rather than universal screening, curriculum-aligned interventions and interventions supported by in-service training.18 Delivering Smooth Sailing...
in the school setting allows service providers to capitalise on the ready access between school counsellors, students and their families. Thus, understanding school counsellors’ experiences are central to determining the feasibility and acceptability of this new type of service model for addressing mental health problems among youth.

While parents are not active participants in the Smooth Sailing service, they provide consent for their child to participate and can enforce positive attitudes towards help-seeking. Parents’ openness towards school-based, digital mental health interventions are likely to influence the uptake of Smooth Sailing. Parents have agreed that schools are well placed to recommend computer-therapies to students in need, although some parents have preferred these to be offered alongside professional care and that more parental education is needed to support their use. Some parents have also been concerned that school-based mental health screening may perpetuate mental health stigma among students. However, the accessible, private and universal nature of the Smooth Sailing service model aligns with parents’ preferences for mental healthcare. In contrast, young people have been reluctant to seek their parents’ consent for mental health interventions due to a desire for privacy and autonomy, alongside fear and worry about parental reactions. Therefore, parents’ perceptions and the dynamics of the parent-child relationship may have a significant impact on the overall acceptability and feasibility of the Smooth Sailing service.

A six-week pilot study conducted in 4 secondary schools in New South Wales, Australia, explored the acceptability of the Smooth Sailing service among students (n = 59, 35 female, mean age: 14.57 years, SD: 0.89, range: 13-16 years, grades 8-9). At baseline, 18.6% of the students (n = 11/59) required in-person care from the school counsellors. Students reported that the service was easy and enjoyable to use; although, initial service uptake was low (46%, n = 59/126); with ‘disinterest’, ‘misplacement of consent form’, ‘reluctance to engage with school counsellors’ and ‘parental disapproval of participation’ reported as barriers to uptake. Little is known about the impact of the service on the school counsellors and parents of the participating students. Using a mixed-methods design, the current study aimed to explore school counsellors’ and parents’ experiences of using the Smooth Sailing service. By examining the experiences of these 2 key stakeholders and end-users, this study will identify the benefits and unintended consequences of this new type of health service. This will help to determine the likelihood of future uptake and maintenance of these types of services in in secondary schools.

Methods

Study design

This paper reports on a multi-methods pilot study that aimed to examine the acceptability and feasibility of delivering a digital, stepped-care mental health service in Australian secondary schools. A total of 4 secondary schools located in New South Wales, Australia, participated in a 6-week acceptability pilot trial of the Smooth Sailing service. Student outcomes (n = 59) have been reported elsewhere. The current paper reports on the perspectives and experiences of the school counsellors and the parents of students who took part in the pilot trial. The study was approved by the University of New South Wales Human Research Ethics Committee (#167424), the NSW State Education Research Application Process (#2016471) and the Maitland-Newcastle Catholic Diocese. All methods were performed in accordance with the approved protocol as regulated by the Australian National Health and Medical Research Council National Statement on Ethical Conduct in Human Research.

Recruitment, consent and participants

School counsellors: All school counsellors (n = 4) from the participating schools were invited to participate in a semi-structured interview about their experiences using the Smooth Sailing service. The interviews were conducted at the 6-week endpoint by researchers involved with the pilot study. The interview schedule (see supplementary material) assessed school counsellors’ demographics (age, gender, place of birth, Aboriginal or Torres Strait Islander descent) and aimed to examine their experiences by focusing on six broad themes: (i) the appropriateness of the service information and training provided to counsellors, (ii) attitudes and initial uptake of the service among students; (iii) perspectives of the appropriateness and usefulness of the mental health screening, (iv) perspectives on student engagement with the web-based psycho-education, (v) perspectives on school counsellors’ provision of care in conducting student follow-ups and (vi) the impact of the service on school counsellor workload (see Figure 2). Interviews were conducted in person or by telephone depending on the availability of the counsellor. School counsellors were provided with a copy of the Participation Information Sheet and Consent Form (PICF) prior to taking part in the interview. Verbal consent was obtained from school counsellors at the commencement of the interview using an approved verbal consent script. All interviews were recorded with this consent process preceding the questions. All interviews were transcribed with the consent process noted. No reimbursements were given.

Parents: Parents were informed about the Smooth Sailing service and the associated research using the student PICF. All students who wished to use the Smooth Sailing service were required to gain the signed consent of 1 parent or guardian. The PICFs were distributed to students and their families by the participating schools. When providing consent for their child to participate, the signing parent was asked to nominate their interest in completing a short anonymous online survey.
about their child’s involvement in the service. At the 6-week endpoint, parents who had provided their contact details received 1 email invitation to complete the online survey. This invitation included a link to the online survey and the parent PICF. Consent was provided online prior to the survey questions. The survey assessed demographic information (age, gender, place of birth, Aboriginal or Torres Strait Islander descent) and parents’ (i) motivations for allowing their child to participate in the service pilot trial, (ii) concerns about the service requirements, (iii) observation of any changes in their child’s mood or behavior during the service pilot trial, (iv) contact from their child’s school due to mental health concerns identified by the service, (v) likelihood of future permission to use the service and (vi) overall experience. No reimbursements were given.

**Smooth Sailing service**

Outlined in Figure 1, the Smooth Sailing service uses validated mental health screening questionnaires to measure students’ symptoms of anxiety (Generalised Anxiety Disorder scale; GAD-7) and depression (Patient Health Questionnaire; PHQ-9). The service uses students’ total scores to allocate them to a step of care, with treatment intensity matched to symptom severity. The service is consistent with Australian clinical practice guidelines and other stepped care models for depression and anxiety. Self-directed, web-based, psychoeducation is provided for students with nil to mild symptoms and self-directed, web-based Cognitive Behavioral Therapy (CBT) is provided for students with moderate symptoms. All students with severe symptoms and/or thoughts of death or self-harm trigger an email notification that is sent to the school counsellor outlining the students’ service identification code, their symptom scores and instructions on timely follow-up. All students are monitored using fortnightly symptom check-ins (brief 2-item versions of the GAD-7 and PHQ-9) sent via email or SMS, alongside reminders to use the service.

In the current study, all students required signed parental consent to take part in the Smooth Sailing service. Prior to implementing the service, the schools and counsellors were provided with a ‘Service Information and Training Pack’. This included the requirements of the service pilot (ie, maximum of 30 students from grades 8 or 9, onsite school counsellor), a school guide to the service (ie, service overview; sample verbal script for promoting the service to students; frequently asked questions). School counsellors were also provided with a Quick Reference Guide (2-pages) and a detailed Duty of Care and Risk Management Protocol (10-pages) that instructed school counsellors on how to respond to the student notifications and follow-ups. School counsellors were also provided with a concise list of local mental health supports to help facilitate external referrals. Researchers visited the schools to deliver the service to the consenting students during class time. Student registration involved accessing the service website, completing the online consent procedure and screening measures and using the remaining time to browse the recommended modules and activities. Afterwards, the researchers met with the school counsellors to review the email notification system. This involved
matching the confidential student service identification codes listed in the email with the student names list. The Smooth Sailing service did not mandate the type of care that school counsellors were to provide; however, the counsellors formally agreed to facilitate the in-person follow-ups in a way that aligned with their professional codes of conduct, duty of care and school policies. Two days after the visit, the research team contacted the school counsellors to confirm that the follow-ups were completed. To respect students and school counsellors’ right to privacy and confidentiality, the pilot trial did not require the school counsellors to disclose the specific nature of actions taken for each student after a follow-up was initiated.

Data analysis

For the school counsellor interviews, thematic analysis (Braun & Clarke, 2006) was chosen as the qualitative method to identify the patterned meaning across responses. This method is considered robust (Braun & Clarke, 2014), while also being accessible and flexible (Nowell, Norris, White, & Moules, 2017). The first stage of analysis commenced with familiarisation of the dataset. The transcription of the school counsellor interviews was conducted by an external transcription company. Two researchers then read the dataset repeatedly before progressing to the second stage of analysis involving the

Figure 2. Key themes related to school counsellors’ experiences of Smooth Sailing.
identification of codes independently. A third researcher then consolidated the findings. To support the validity of the analysis, higher-order codes and final themes were determined by consensus among the researchers (Patton, 1999; Tracy, 2010). The themes are outlined in the results. For the parent survey, data was exported from the Key Survey platform to IBM SPSS Version 22 for analysis. Basic descriptive statistics were calculated for the survey responses. Due to the small number of free-text responses accompanying each item, thematic analysis was not conducted; however, direct quotations have been included to provide more context and insight about the sentiment of parents’ experiences of the pilot trial.

Results

School counsellors

All school counsellors involved in the pilot study (n = 4) completed the semi-structured interview. Overall, the school counsellors reported positive experiences with the Smooth Sailing service and agreed that they would recommend it to other schools and counsellors. Figure 2 presents a summary of the findings with more detail outlined below.

Service information and training for school counsellors: All school counsellors commented that the instructions on how to use the service provided by the research team were clear and easy to follow. Three counsellors mentioned that they reviewed the service information before the trial commenced, stating that they ‘had a look’ (SC3) or did so ‘only briefly’ (SC2). One school counsellor mentioned that they ‘didn’t have time to explore the service as much as I could have’ (SC2) and another expressed a greater desire to ‘see the kinds of questions that led to whether students were in the severe or moderate range’ (SC1). All school counsellors said they felt supported by the service team and appreciated the open communication and easy access to information: ‘I could contact you very easily by email or by phone’ (SC3).

Student uptake: The school counsellors’ experiences confirmed the challenges associated with engaging students in this new type of service. One school counsellor stated, ‘I’d like a greater level of participation and more kids having the opportunity to access’ (SC3). School counsellors felt that parental consent was a barrier as ‘the uptake was very low compared to what we would expect’ (SC3). School counsellors proposed targeting older students who may not require parental consent or utilising an opt-out parental consent process: ‘...students in Year 9 are a bit older and can make those decisions for themselves rather than have to have parental consent’ (SC3) and ‘we may see more uptake with an older class’ (SC4). One counsellor suggested using online consent processes rather than paper forms to reduce the reliance ‘on teachers reminding students to bring them back in’ (SC4). The counsellors recommended embedding ‘rewards or incentives’ for student participation. They also felt that students were more interested in the service when it was presented by a member of the Black Dog Institute service team, rather than a school staff member. Counsellors felt that additional resources such as information and presentations from the Institute would help the school to ‘get a bit more excited about what you’re doing and how our schools can actually help’ (SC4).

The school counsellors also suggested providing parents with ‘more information about the service to emphasise that it is not additional schoolwork for students’.

Mental health screening: School counsellors commented favorably on the ability of the service to reach students who are not proactively seeking help ‘it’s a useful tool for picking up some of those kids who do go unnoticed ... a lot of those internalising symptoms’ (SC1) and ‘especially for those students that tend to fly under the radar’ (SC1) and ‘there’s an awful lot of kids out there we’re not reaching who aren’t accessing any help’ (SC3). Some felt that the screening questions may have been confusing or ambiguous such that students rated themselves inaccurately ‘Checking to make sure they’re really reading the question, all those sorts of things and not just doing things randomly’ (SC3). One school counsellor also believed that the notification for suicidal ideation may not always be accurate: ‘when you talk to them and you try and get to the nut of actually what they’re thinking it’s completely different from what that question is asking’ (SC4).

Engagement with web-based content: School counsellors perceived the web-based psycho-education content to be user friendly, age appropriate and easy to access. They felt the service provided ‘other supports out there for them as well as me, and then online, that they can do things for themselves as well’ (SC1) and that it was ‘building awareness and education around how to manage and how to identify stress and anxiety and possible depression’ (SC4). One school counsellor felt it was important for them to connect and engage students with the content. School counsellors suggested more interactive content ‘not just psycho-ed’ (SC4) and optimising it for mobile delivery ‘anything that’s on a mobile is going to have more interaction with it, probably more frequently as well’ (SC4).

School counsellors also felt that weekly rather than fortnightly reminders to use the service would improve engagement as well as embedding the service into the school curriculum. They also suggested promoting the program from the perspective of wellbeing, rather than mental health, to overcome any effects of stigma and further appeal to students’ desire for autonomy ‘there’s something about empowering or strengthening them ... to put that in their own hands sort of thing’ (SC2).

Provision of care in student follow-ups: All school counsellors reported that they adhered to the service guidelines and followed up with all required students at both time points. School counsellors reported that the email system used to notify counsellors was useful and valuable, with 1 saying: ‘given that some of the stuff that popped up was sort of serious, that was really helpful to catch up with a couple of the students’ (SC1).

Technical difficulties with the email system were experienced by 2 school counsellors, with 1 saying it caused ‘confusion’ and a student was followed-up unnecessarily. School counsellors felt that including student names, rather than the service identification codes, in the emails would make this process easier.
They also said it was helpful that students knew they were going to be followed up and students’ reactions were generally positive: ‘They realised it was just me having a check in with them because of what they’d put. It was a chance for them to just explain themselves I suppose and why they’d put what they had...’ (SC4). Three counsellors said some students were surprised to have triggered a follow-up notification. One school counsellor highlighted that they saw this as an opportunity to build a relationship ‘She in no way expected me and she wasn’t ready at all to engage in face-to-face counselling or service provision...she’s a really good example of how the screening worked because I was able to call up and check in how the course was going. Through that we very mildly started to develop a relationship...she’s now happy to come and see me which wouldn’t have happened before’ (SC2). Two school counsellors reported that they had engaged with students’ parents as part of the follow-ups and these parents’ reactions were positive: ‘The parent that I spoke to was so pleased to hear from me’ (SC3).

Service impact on school counsellor workload: All school counsellors reported that their workload was unchanged or slightly increased due to the service but remained manageable. They also indicated that they had no work-related stress or distress in relation to the service. One school counsellor highlighted that the 48-hour timeframe to respond to follow-up notifications was helpful for prioritising their caseload. Another mentioned that although a few extra hours were expended initially, it was worthwhile as: ‘it’s just one more way to raise your profile I suppose in the school of this is who I am, this is what I do’ (SC3) and ‘we can see overall if we can get it running well, it actually should decrease our workload, not increase it’ (SC3). School counsellors felt that the service did not add extra work, rather ‘it’s not lost time, it’s just, you just shift the way you’re using it and with whom’ (SC3) and ‘in terms of the short period those severe or who were suicidal then it created that additional initially in terms of how that looked over a number of weeks it doesn’t really add up a huge amount’ (SC2). One school counsellor felt that their ability to manage their workload may change if more students had participated: ‘if we’d had 200 students using the service, I think it would have been different...the level we had here was minimal so that was fine’ (SC4).

Parents
Of the 59 participating students, 37 parents (62.7%, n = 37/59) agreed to be invited by email to complete the survey. All were invited and 6 went on to complete the survey (16.2% n = 6/37). All were female, born in Australia and the mean age was 44.3 years (SD: 3.21, range: 41-51). None identified as Aboriginal or Torres Strait Islander.

Overall, parents’ experiences with the service were favorable (see Table 1). One parent stated, ‘thank you for taking the time for our kids, I wish this was around when I was a child.’ (P4). When asked to select their reasons for allowing their child to use the service, almost all parents thought it would be beneficial for their child. Some parents agreed to participate because they were worried about their child’s mental health and felt the research was important. None of the parents reported any concerns about their child’s privacy and confidentiality, program content, degree of supervision provided by the school counsellors and school staff, or their child’s levels of distress. Most of the parents did not notice any change in their child throughout the service pilot trial. One parent reported that their child appeared to have deteriorated and that the service had ‘opened a can of worms about her [child’s] anxiety...whether this was good or bad is hard to determine...she was able to verbalise it better than in the past’ (P1). Two parents reported an improvement in their child’s ability to understand and articulate their thoughts and feelings, reporting that the service had ‘helped them to understand their thoughts a bit better’ (P2) and ‘my child has been more verbal about how she is feeling’ (P6).

Three parents were contacted by their school about their child’s mental health, and all reported that this was a positive experience. One parent (P1) reported that the school was very helpful, and the counsellor was very professional. Another parent (P4) reported that the counsellor explained that my child’s survey came back moderate for depression and asked if she could have a meeting with her, which I approved. I found the whole process excellent! Another parent (P6) reported that they were ‘relieved’ to hear from the school counsellor as it had ‘confirmed my own thoughts’. Two parents reported that their child had actively approached them about their mental health while participating in the pilot of the service.

All parents reported that they would be happy for their child to participate in the service again, with half wanting parental signed consent to be a condition of service use and the other half supporting the use of the service by their child without signed parental consent. One parent who wanted participation to be contingent on signed parental consent expressed the sentiment ‘No all good unless you [the service] know something I don’t, if you do I believe I should be informed I understand the need for privacy and protection but if it involves my child’s mental health than as a parent I should be informed’. (P3). One parent (P5) who was happy for their child to participate without signed consent stated ‘I am glad that mental health issues are being openly discussed. My child has not suffered from a mental health issue so far; however, I think it’s really important that he is aware so he can monitor himself and be a good friend’.

Discussion
The current study examined school counsellors’ and parents’ experiences of a new digital mental health service (Smooth Sailing). The experiences of both samples were generally positive, indicating initial support for the delivery of this type of service in Australian secondary schools. However, the findings must be interpreted with caution, given the small sample size. School counsellors reported that a major strength of the
service was the identification of students who were flying ‘under the radar’ or who had a clear need for mental health support but were not actively seeking help. This is consistent with the service outcomes found among students as many of the positive cases were previously unknown to school counselling services.\textsuperscript{24} The notification system embedded in the service helped school counsellors to prioritise their caseload and the service also improved their visibility among students and their parents. In contrast to past studies,\textsuperscript{7-10} the pilot trial of this service did not negatively impact school counsellors’ workload or work stress. However, the service was only delivered to 59 students across 4 schools. It is likely that the counsellors’ workloads will increase when the service is administered to larger numbers of students. The findings demonstrated that a digital platform like Smooth Sailing may have the capacity to improve the reach of school counselling services in secondary schools, but more support will be needed if the service is scaled up. Future trials may benefit from objective and specific measurements of counsellors’ time spent contacting parents, consulting with other teachers and school staff, and initiating mandatory reports of suicide risk. The follow-up of new cases may create additional work when compared to the follow-up of students already known to school counselling services. Future trials should measure and report

| Table 1. Responses to the parent survey (n=6). |
|---------------------------------------------|
| What were your reasons for consent? |
| I thought it would be beneficial for my child | 5 |
| I was worried about my child’s mental health | 4 |
| I thought the aims of the research were important | 4 |
| I wanted to support the school’s involvement in research | 3 |
| I wanted to support the Black Dog Institute | 4 |
| My child told me they wanted to take part | 3 |
| Other (please state) | 0 |
| Did you have any concerns regarding your child’s participation in the service throughout the pilot? |
| No | 6 |
| Yes | 0 |
| Did you notice any changes (e.g., mood, stress, behaviour) in your child throughout the pilot? |
| No - I did not notice any change | 3 |
| Yes - I noticed an improvement | 1 |
| Yes - I noticed that they seemed worse | 1 |
| I am not sure | 1 |
| Were you contacted by your school about your child’s mental health throughout the pilot? |
| Yes | 3 |
| No | 3 |
| I am not sure | 0 |
| Did your child approach you about their mental health throughout the pilot? |
| Yes | 2 |
| No | 3 |
| I am not sure | 1 |
| If this service were offered to your child again, would you be happy for them to participate? |
| Yes, my child may participate but only with my signed consent | 3 |
| Yes, my child may participate without my signed consent | 3 |
| No, under no circumstances do I want my child to participate again in the future | 0 |
on this accordingly. School counsellors may also benefit from having a feedback mechanism or override function within the notification system that allows them to indicate whether the screening results were indeed genuine.

In the current study, the school counsellors were concerned about the levels of student engagement in the service. Consistent with past studies,20 the counsellors felt that the procedural requirement of active parental consent was a considerable barrier to uptake. This is consistent with the experiences of the students, as some forgot their consent form or did not have approval from their parents. This is a major constraint of using secondary schools as a service delivery setting for mental healthcare. In the current study, parents’ views about consent were mixed: parents respected their child’s desire to seek mental health support independent of their supervision but also wanted to be informed of their child's need for care. Thus, the service may benefit from utilising an ‘opt out’ electronic approach to parental consent to reduce the burden on schools, increase student participation, and respect parents’ desire to be informed. Alternatively, the service may benefit from greater administrative support32 and adopting a partnership-based approach12 with parents to jointly decide on the optimal communication channels and an incentive plan to encourage uptake in students.

The results of the current study further support the notion that parents play a key role in their child’s mental healthcare and that this can be fostered by participation in school-based mental health services.21 The findings indicate that a service like Smooth Sailing may provide parents with a valuable opportunity to discuss mental health with their child, particularly if they have had underlying concerns. However, these findings may not be generalisable given the low rates of parental participation. Service uptake may be increased by offering parents an educational component and service demonstration to improve their understanding of the service benefits, how they can support their child to use the service, and to upskill parents’ abilities to recognise and respond to mental health concerns.33-35 The utility of the service may be strengthened by embedding a feedback loop that enables parents to share their own observations about their child’s mental health and progress. To ensure privacy and support students’ autonomy, these additional components may be offered to the students who are identified as needing mental healthcare or after an initial discussion with the school counsellor. This may help to strengthen the effects of the service on students’ help-seeking behavior and attitudes by encouraging disclosure and building trusting relationships with adults.

Limitations

As outlined, this study is limited by its small sample size. The low numbers of parents willing to be invited to participate in the survey may indicate a disinterest in this type of research or a desire to preserve the privacy of their child. Despite the anonymity of the survey, parents may have had concerns about the confidentiality of information provided to the external researchers via an online survey. The findings may have also been influenced by selection bias, such that only parents who perceived the service to be beneficial or were contacted by their child’s school counsellor took part. Future studies would also be strengthened by utilising additional engagement strategies to increase the sample of participating parents, including SMS invitations, reminders and seeking recruitment support from the schools. Given that only mothers were represented in this sample, future studies may also benefit from involving fathers or other parental figures. Future trials would also benefit from recruiting a diverse range of schools to capture the experiences of school counsellors and parents with different levels of training and attitudes towards digital mental healthcare.

Conclusions

This study examined school counsellors’ and parents’ experiences of a digital mental health service that aimed to identify depression and anxiety among secondary school students and provide appropriate and timely care. Both school counsellors and parents reported positive experiences, although several barriers were identified and discussed. Overall, the findings provide initial support for the delivery of the Smooth Sailing service model in Australian secondary schools and highlight important considerations for future implementation.

Acknowledgements

The authors would like to acknowledge the oversight and support of the project steering committee including Nicole Cockayne, Associate Professor Josephine Anderson, and Professor Helen Christensen.

Authors Contributions

BOD – Conception, recruitment, data collection, analysis, interpretation, knowledge, authorship and editing.

CK – Conception, recruitment, data collection, data preparation, analysis, interpretation, authorship and editing.

MRA – Data preparation, analysis, interpretation, knowledge, authorship and editing.

ALC – Interpretation, knowledge, authorship and editing.

MSK – Data preparation, analysis, interpretation, knowledge, authorship and editing.

Availability of Data and Materials

The qualitative data generated in this study are not publicly available due to the conditions of the governing ethics bodies. The anonymised quantitative data and additional access to the transcribed and anonymised qualitative data can be made available upon reasonable request to the corresponding author and with additional permission of the governing ethics bodies.

Ethics Approval and Consent to Participate

The study was approved by the University of New South Wales Human Research Ethics Committee (#167424), the NSW
State Education Research Application Process (#2016471), and the Maitland-Newcastle Catholic Diocese. All methods were performed in accordance with the approved protocol as regulated by the Australian National Health and Medical Research Council National Statement on Ethical Conduct in Human Research. The governing ethics bodies approved the procedure for use of informed verbal consent for the semi-structured interviews as it is consistent with the Australian National Statement. It was also selected as the appropriate method for consent to enable school counsellors to complete the interviews by telephone. This procedure required the use of an approved verbal consent script. Participants were read the verbal consent script prior to participating in the interview. This consent process was recorded and transcribed for record of consent. All interview participants received a copy of the Participant Information and Consent Form prior to the interview and received a copy to keep.

Consent for Publication

All participants have provided consent for the data to be published in this way. In accordance with the governing ethics bodies, the approved participant information and consent forms and procedures, as well as the approved project description, documented consent for participants’ data to be included in peer-reviewed publications.

ORCID iD

Bridianne O’Dea https://orcid.org/0000-0003-1731-210X

Supplemental Material

Supplemental material for this article is available online.

REFERENCES

1. Pazs T, Keshavan M, Giedd JN. Why do many psychiatric disorders emerge during adolescence? Nat Rev Neurol. 2008;9:947-957.
2. Andermo S, Hallgren M, Nguyen TT, et al. School-related physical activity interventions and mental health among children: a systematic review and meta-analysis. Sports Med Open. 2020;6:25.
3. Schmidt M, Werhauk A, Verhaegh N, Putman K, Smeens S, Annemans L. Universal mental health interventions for children and adolescents: a systematic review of health economic evaluations. Appl Health Econ Health Policy. 2020;18:155-175.
4. O’Reilly M, Svirydzenka N, Adams S, Dogra N. Review of mental health promotion interventions in schools. Sex Psychiatry Psychiatric Epidemiol. 2018;53:647-662.
5. Feiss R, Dolinger SB, Merritt M, et al. A systematic review and meta-analysis of school-based stress, anxiety, and depression prevention programs for adolescents. J Youth Adolesc. 2019;48:1668-1685.
6. Werner-Seidler A, Perry Y, Callear AL, Newby JM, Christensen H. School-based depression and anxiety prevention programs for young people: a systematic review and meta-analysis. Clin Psychol Rev. 2017;51:30-47.
7. Mohammad AS, Panahi S, Sayyarfard A, Ashour A. Identifying the prerequisites, facilitators, and barriers in improving adolescents’ mental health literacy interventions: a systematic review. J Educ Health Promot. 2020;9:322-322.
8. Gee B, Wilson J, Clarke T, et al. Review: delivering mental health support within schools and colleges – a thematic synthesis of barriers and facilitators to implementation of indicated psychological interventions for adolescents. Child Adolesc Ment Health. 2021;26:34-46.
9. Maras MA, Splent JW, Reinke WM, Stormont M, Herman KC. School practitioners’ perspectives on planning, implementing, and evaluating evidence-based practices. Child Youth Serv Rev. 2014;47:314-322.
10. Langley AK, Nadeem E, Karaka SH, Stein BD, Jaycox L. Evidence-based mental health programs in schools: barriers and facilitators of successful implementation. Schol Ment Health. 2010;2:105-113.
11. Warwick B. Parental authority and education in the right to invite. Haref Educ Rev. 2014;84:53-71.
12. Blow-Hoffman J, Leff SS, Franko DL, Weinstein E, Beakley K, Power TJ. Consent procedures and participation rates in school-based intervention and prevention research: using a multi-component, partnership-based approach to recruit participants. Schol Ment Health. 2009;1:3-15.
13. Bergin AD, Vallejo EP, Davies EB, et al. Preventive digital mental health interventions for children and young people: a review of the design and reporting of research. NPJ Digit Med. 2020;3:133.
14. van Straten A, Seekles W, van’t Veen-Tazelaar NJ, Beekman AT, Cuypers P. Stepped care for depression in primary care: what should be offered and how? Med J Aust. 2010;192:330-333.
15. Rickwood D, Deane FP, Wilson CJ, Ciarciochi J. Young people’s help-seeking for mental health problems. AdvJDMH. 2005;4:219-251.
16. Hallsors D, Brodish PH, Khatapoush S, Sanchez V, Cho H, Steckler A. Feasibility of screening adolescents for suicide risk in “real-world” high school settings. Am J Public Health. 2006;96:282-287.
17. O’Dea B, King C, Subotic-Kerry M, O’Moore K, Christensen H. School counsellors’ perspectives of a web-based stepped care mental health service for schools: cross-sectional online survey. JIMR Ment Health. 2017;4:e55.
18. Eckert TL, Miller DN, DuPaul GJ, Riley-Tillman TC. Adolescent suicide prevention: school psychologists’ acceptability of school-based programs. Schol Psych Rev. 2003;32:57-76.
19. Heerde JA, Hemphil SA. Examination of associations between informal help-seeking behavior, social support, and adolescent psychosocial outcomes: a meta-analysis. Dev Rev. 2018;47:44-62.
20. Cavazos-Rehg P, Min C, Fitzsimmons-Craft EE, et al. Parental consent: a potential barrier for underage teens’ participation in an mHealth mental health intervention. Internet Interact Comput. 2020;21:100328.
21. Sweeney GM, Donovan CL, March S, Forbes Y. Logging into therapy: adolescent perceptions of online therapies for mental health problems. Internet Interact Comput. 2019;15:93-99.
22. O’Dea B, Leach C, Achilles M, King C, Subotic-Kerry M, O’Moore K. Parental attitudes towards an online, school-based, mental health service: implications for service design and delivery. Adv Ment Health. 2019;17:146-160.
23. Waid J, Kelly M. Supporting family engagement with child and adolescent mental health services: a scoping review. Health Soc Care Community. 2020;28:1333-1342.
24. O’Dea B, King C, Subotic-Kerry M, Achilles MR, Cockayne N, Christensen H. Smooth sailing: a pilot study of an online, school-based, mental health service for depression and anxiety. Front Psychiatry. 2019;10:574.
25. Spitzer RL, Kroenke K, Williams JB, Löwe B. A brief measure for assessing generalized anxiety disorder: the GAD-7. Arch Intern Med. 2006;166:1092-1097.
26. Kroenke K, Spitzer RL, Williams JB. The PHQ-9: validity of a brief depression severity measure. J Gen Intern Med. 2001;16:606-613.
27. McDermott B, Baigent M, Chanen A, et al. Clinical Practice Guidelines: Depression in Adolescents and Young Adults. Beyond Blue; 2010.
28. Rapee RM, Lyneham HJ, Wuthrich V, et al. Comparison of stepped care delivery against a single, empirically validated cognitive-behavioral therapy program for youth with anxiety: a randomized clinical trial. J Am Acad Child Adolesc Psychiatry. 2017;56:841-848.
29. van Straten A, Hill J, Richards DA, Cuypers P. Stepped care treatment delivery for depression: a systematic review and meta-analysis. Psychol Med. 2014;45:231-246.
30. Spence SH, Donovan CL, March S, et al. A randomized controlled trial of online versus clinic-based CBT for adolescent anxiety. J Consult Clin Psychol. 2011;79:629-642.
31. Callear AL, Christensen H, Mackinnon A, Griffiths KM, O’Kearnery R. The youthhood project: a cluster randomized controlled trial of an online cognitive behavioral program with adolescents. J Consult Clin Psychol. 2009;77:1021-1032.
32. Ji PY, Pokorny SB, Jason LA. Factors influencing middle and high schools’ active parental consent return rates. Eval Rev. 2004;28:578-591.
33. Ingoldsby EM. Review of interventions to improve family engagement and retention in parent and child mental health programs. J Child Fam Stud. 2010;19:629-645.
34. Yap MBH, Mahtrani S, Rapee RM, et al. A tailored web-based intervention to improve parenting risk and protective factors for adolescent depression and anxiety problems: postintervention findings from a randomized controlled trial. J Med Internet Res. 2018;20:e147.
35. Sweeney GM, Donovan CL, March S, Laurensen SD. Can we improve parent attitudes and intentions to access computer-based therapies for their children and adolescents? Child Adolesc Ment Health. 2017;22:155-162.