The Future Challenges

Young People and Mental Health:

MiHUB

The Future Challenges
Young People and Mental
Health Resilience

An executive summary of learning and outcomes from the MiHUB project (part of the Future Challenges programme):

This summary is based on independent evaluation conducted by Wessex Academic Health Science Network (WAHSN) and feedback from the programme team and stakeholders. December 2021.

Executive summary

Context

[The Future Challenges Programme](#) has been a central part of the West of England AHSN's remit to support innovation in health and care, delivered as part of the commission from the Office for Life Sciences to aid the adoption and spread of promising innovations. MiHUB utilises ProReal Ltd's avatar web-based interactive technology and was selected by an expert panel of assessors due to its potential value to improve outcomes for young people and to support the key priorities of the local health providers. The West of England AHSN co-designed the project with the innovator, clinical commissioning group (CCG), Local Authority, school and evaluator in order to plan a project which explored the potential value of the innovation for young people's mental health resilience in a secondary school setting.

Currently, around one in 10 children/young people in England has some form of clinically diagnosable mental health problem, while half of all mental health conditions are established before the age of fourteen. The NHS Long Term Plan commits to a significant expansion of services for children and young, including the creation of Mental Health Support Teams (MHSTs) in schools. School-based prevention projects have the potential to reduce mental health burden and advance public health outcomes and the school environment provides an ideal context to deliver these.

The intervention

MiHUB is a self-help technology designed to help young people with self-reflection and coping skills. Developed by UK tech company ProReal Ltd, the technology uses 3D virtual worlds in which young people use avatars and symbols to create visual representations of everyday challenges. MiHUB has 10 self-help exercises on a range of social and emotional topics which the students in this project wanted covered (e.g. relationship difficulties, worries about assessments, feeling low, being kind to myself, etc). Short videos are also available. No identifiable data is saved on the browser or on the device and no user credentials are required to use MiHUB. This design was adopted to provide users with complete confidence that their data was private and confidential.

The MiHUB intervention activities were originally planned in 2 phases: a developmental phase with students aged 11-14 (across school year groups 7-9 n=75) and then a pilot with the same year groups but with a larger sample (n=400). After the onset of Covid-19 project activities needed to be modified in line with pandemic restrictions, therefore a smaller sample participated (n=250 in year 8) with modified implementation within the context of the *Skills for Life* initiative, which is integrated within the Personal, Social, Health and Economic (PSHE) education curriculum and as an additional resource for students to use independently at school or at home.

Evaluation

A detailed logic model informed a real-world mixed-methods formative and summative independent evaluation, collecting both qualitative and quantitative data. The primary objective was to ascertain the extent to which the MiHUB project helped students 'feel good and function well' as well as improve their mental wellbeing, resilience and coping strategies. Secondary objectives aimed to identify the patterns of engagement of students (benefits and limitations) and to assess the extent to which the MiHUB project could become routine practice within the school. Informed consent was received from students, their parents or guardian and school staff.

Impact of Covid-19 on the MiHUB delivery model and evaluation

The Covid-19 pandemic had an extensive impact on both the project and evaluation due to government mandated lockdowns and extensive school closures. After the onset of Covid-19 in early 2020, activities were modified in line with pandemic restrictions affecting school timetables and routines, and this naturally caused interruption to data collection. The pilot phase two was hosted but with a smaller sample, no comparison group, and was delayed by seven months. The school decided that reflective sessions during tutor-time after the start of the pilot roll-out would not be included as part of the delivery model.

Data collection & analysis

As initially planned, primary outcome data was collected (n=143 pre and n=66 post with a matched sample of n=40) using a validated measure of wellbeing (WEMWBS) and an innovation specific outcome measure for MiHUB reflective and coping skills (a specific skills survey linked to the key aims of the ProReal technology). Secondary outcome data was collected from students by way of discussions, surveys and a structured focus group. Staff provided feedback in both phase one and phase two. Quantitative survey data was analysed numerically using SPSS 26.00 software for descriptive statistics and statistical analysis. Qualitative data was analysed using thematic analysis, Force Field Analysis, and the RE-AIM framework. Data from each phase were affected by Covid-19 circumstances, resulting in incomplete data, which has impacted our findings.

Project findings

> **Key learning:**
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> - MiHUB was deemed acceptable and worthwhile by students and staff, which is considered a strength, given school-based interventions can be found to have good outcomes but with low user-acceptability.
> - Students were engaged with the resource, were interested in making comments about it and most felt that it would be useful for either themselves or others.
> - The school also felt positive about the resource, they believed it complemented existing teaching and support, and asked to have extended access, beyond the trial period.
> - The project did not cause any known harm during implementation, which some anticipated may occur with unsupervised access at home.
> - While use of MiHUB (as an optional resource to be used independently) cannot be shown to improve mental wellbeing or resilience from our evaluation, it may provide an additional resource to engage young people in conversations and reflections about their mental health and related issues.
> - Potential staff concerns about safeguarding should be addressed early in implementation (students highlighted confidentiality as a benefit), with appropriate training to address any underpinning staff assumptions that an intervention may not work, as these will undoubtably affect implementation success.

MiHUB was deemed acceptable and worthwhile by students who identified benefits and limitations. Often school-based interventions (irrespective of impacts) are not found to be acceptable by young people or school staff, therefore the high level of acceptability demonstrated by MiHUB is a particular strength identified within this evaluation. Students described the intervention as fun and were engaged with the resource. They particularly valued the interactivity, creativity and autonomy associated with MiHUB. The school believed MiHUB complemented existing teaching and asked to have extended access beyond the test and learn phase. The interactive nature of the resource, which is customised during each visit by the user, may make it more attractive to return to repeatedly than a static information-based website and may have added to the high levels of acceptability by students.

The evaluation highlighted that low and average-coping student groups may benefit from additional targeted support to enhance or develop their coping skills in MiHUB.

Similarly, coping skills such as *telling others about difficult thoughts or feelings* was identified as an additional area that may need further targeting by the innovator and the school. Use of MiHUB, including beyond the school day, has the potential extend access to a mental health resource which includes links to helping agencies in school and beyond. There are some aspects of MiHUB that may be helpful in engaging young people with a resource that they enjoy using repeatedly and that can contain key messages about mental health and highlight helping services.

The ability to promote contact with the school pastoral support service or other local or national helping agencies is unknown, beyond a very small number of anecdotal reports and was beyond the scope of this evaluation; but at an individual level the evaluation was able to highlight that two students had acknowledged MiHUB as the catalyst in their decision to request additional pastoral and emotional support from school staff.

The evaluation identified that MiHUB was accessed 2,040 times over four months (approximately 17 times a day). Due to the anonymous nature of MiHUB, it is not known how many students accessed it and how often they did, but data from the student focus group (n=7) indicated an average frequency of three times. It is also important to note that the trial did not cause any known harm from use, which some anticipated may occur with unsupervised access at home.

Conclusion

School staff are critical actors in the implementation of school-based prevention programmes. Embedding innovations, such as MiHUB, within PSHE lessons aligns with guidance on teaching and policy on mental health & emotional wellbeing. Potential staff concerns about safeguarding should be addressed early in implementation (children and young people highlighted confidentiality as a benefit). There should be appropriate training to address any underpinning staff assumptions that an intervention is not going to work, as these will undoubtably effect implementation success.

Whilst the effects of Covid-19 were such that no meaningful conclusion could be drawn on quantitative improvements to student wellbeing due to MiHUB, the project demonstrated it can effectively be integrated into a wider school system of education and support related to mental health, which is acceptable to school staff and students.

Potential for the future and next steps

The MiHUB project has been an example of a multi-partner real-world validation and evaluation. It has provided an opportunity for a larger number of students to experience the MiHUB platform and its 10 structured self-help theme-based guides. Further evaluation should be undertaken focussing on reach, effectiveness (more data about its potential impact on the mental wellbeing and coping skills of students), adoption, implementation and maintenance of MiHUB.

This project has provided an opportunity for effective collaborative working across an Integrated Care System including NHS organisations, local authorities, and industry, resulting in key learnings

for future partnerships. The West of England AHSN Industry and Innovation Team will continue to support ProReal Ltd to further explore opportunities for:

- ○ Further evaluation of how young people use MiHUB
- ○ Cost-benefit evaluation
- ○ Different commissioning models for this type of intervention
- ○ Further refining the MiHUB value proposition and delivery model for schools