Feeling Good with Positive Mental Training for Schools

Evaluation Report



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Future Ready Fund Grant Winner

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Overview of Innovation

Feeling Good with Positive Mental Training (PosMT) for schools aims to increase non-cognitive skills of resilience, self perception and motivation in Year 7/S1 pupils through an adapted version of the NHS accredited adult PosMT programme to a school environment. This nine week, tripartite, integrated programme consisted of:

- 1. Teacher training, to optimise delivery of the programme (face to face or via online modules).
- 2. Specifically adapted PosMT audio tracks for **daily whole class listening.**
- 3. Creative and interactive group activities during weekly **teacher-led 50 minute class**, to increase engagement, maximise peer learning and reinforce key learnings and techniques related to the audio themes.

Summary of Evaluation Plan

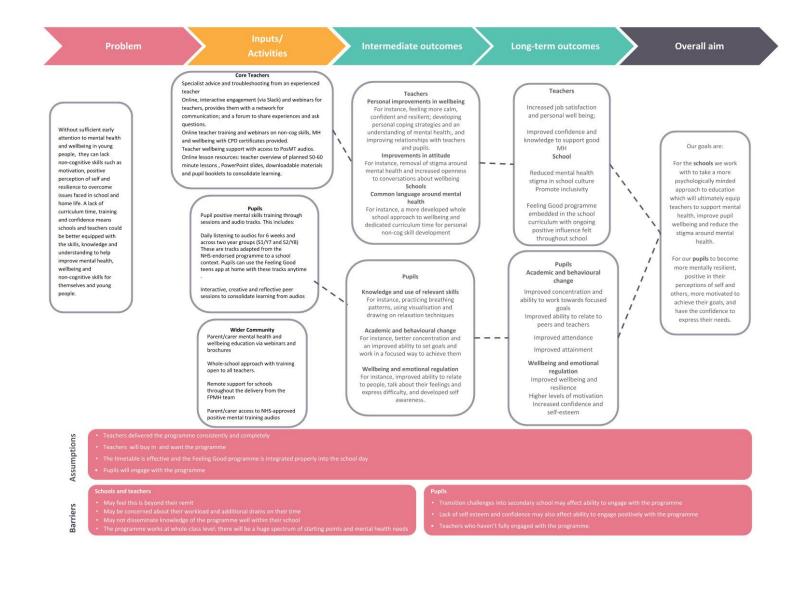
A waiting list control group design was used within a mixed methodology evaluation plan. This used quantitative assessment through changes in pre and post standardised scales, along with thematic analysis of pupil responses to written open ended questions and selective teacher and pupil interviews in one school.

Validated questionnaire tools assessed key intended outcomes of the PosMT programme, as identified in the Theory of Change. The following questionnaires were used:

- Resilience and coping
 - Children's Hope Scale (CHS)
- Perceptions of self (including Self-Esteem & Self-Efficacy)
 - Well-being (SWEMWBS)
 - Social anxiety scale for adolescents (SAS)
 - Child Outcome Rating Scale (CORS)
- Motivation, Goal orientation and Perseverance:
 - Academic efficacy subscale (PALS)

We sought to work with schools with high deprivation. Seven state funded schools, four in Scotland and three in England, participated in the pilot with a total of approximately 1393 Year 7/S1 secondary/high school school pupils participating.

Theory of Change



Summary of Findings

This evaluation primarily aims to address the question: **Does Positive Mental Training for Schools help develop Y7/S1 pupil's non-cognitive skills of resilience, positive perception of self and motivation?**

Outcome measures did not show any statistically significant changes in the intervention schools compared to the control group. This may have been influenced by limitations to sample size due to Covid-19 disruptions. There was substantial variation betweens schools and measures. Much of this was attributed to differences in programme implementation and small number of participants due to research disruption.

Positive trends were observed. The most positive impact of the programme was on the Children's Hope Scale (CHS) a measure of resilience and coping skills, suggests that **the intervention was able to maintain resilience during the challenging move to Y7/S1,** as oppose to controls who experienced a drop in resilience and coping (that was approaching statistical significance p = 0.0558).

This finding was supported by thematic analysis of the section 7 questions, which found that 84% of respondents were able to give **concrete examples of positive benefits** from participating in the programme. These confirmed the Theory of Change and were categorised into:

- Wellbeing and emotional regulation feeling calm and relaxed; reduced stress, increased confidence
- Knowledge and use of relevant skills
- Academic and behavioural change better concentration

Further evidence for increased resilience, coping and wellbeing was revealed by qualitative interview analysis. More specifically pupils found that the programme **increased feelings of relaxation/calm**, **reduced stress and increased focus.** There was variation in pupil engagement. This may be helped in the future by an improved induction to the programme to both teachers and pupils.

"It relaxed you before class, so instead of coming in all excited from your last class you have the time to get relaxed and ready for your next period" Pupil Participant



Section 2: Background

Description of the problem

As articulated in our Theory of Change (see infographic page 2) a key problem faced by young people today is a high prevalence of mental health problems.

- 50% of mental health problems start by the age 14 (Kessler et al., 2005)
- 10% of children and young people (ages 5-16 years) have a clinically diagnosable mental problem, yet:
- 70% of children and adolescents who experience mental health problems have not had appropriate interventions at a sufficiently early age (Children's Society, 2008)

Without adequate early attention to mental health and wellbeing, young people can lack noncognitive skills such as motivation, positive perception of self and resilience to overcome issues faced in school and home life. Positive Mental Training for Schools helps young people build these crucial skills needed at a young age by providing tools (evidence-based audio tracks and creative sessions) for positive personal development.

More specifically it is increasingly recognised that when children are exposed to adverse and stressful experiences, it can have a long-lasting impact on their ability to think, interact with others and on their learning. Studies into Adverse Childhood Experiences (ACEs) highlight that two thirds of adults have experienced at least one ACE; 1 in 5 have experienced 3; and approx 1 in 10 have experienced 4 or more. Being exposed to 4 or more ACEs is more likely to result in poorer physical and mental health, and poorer life prospects. While ACEs are found across the population, there is more risk of experiencing ACEs in areas of higher deprivation. Given the widespread nature of ACEs , and their cumulative effect, it is important to make available to all children the skills to help increase coping with stressful events through building resilience and positive emotions and positive perceptions of self.

Concept

Our idea was to adapt the evidence based adult orientated Positive Mental Training digital audio programme for a younger audience and to embed this within the school curriculum in a whole year group.

Through making this programme available to all pupils in the year, we hoped to reach the most vulnerable pupils, with the lowest self perception and resilience, in a non stigmatising way, giving them the opportunity to engage with the resources for positive personal development.

In order to embed the programme in the whole school we wanted to use the existing teachers to lead the daily class audio listening and the weekly taught creative sessions. We recognised that some teachers may feel less confident in their knowledge in this area, and so supported their delivery with teacher training and all materials and resources required.

Additionally to integrate further the PosMT approach within the school community we made available to teachers and parents the adult PosMT digital app- Feeling Good: positive mindset App and to the pupils a Teens Feeling Good App for home listening.

Origin

Positive Mental Training (PosMT) is the heart of our intervention. Evolving from sports psychology and incorporating reappraisal and visualisation techniques, the 12 audio tracks in the PosMT modular programme embed key skills required to cope and thrive by increasing positive feelings about self and others, resilience, self-efficacy, self-esteem, creativity and self perception. Repeated listening to a track is core to building these non-cognitive skills.

PosMT has been successfully used in the NHS, first as CDs and now in the Feeling Good App. Over 10+ years of research demonstrates the ability of these audios, in various populations (including clinical, student and teen mums), to aid recovery from stress, anxiety and depression and increase resilience, positive emotions, coping and self esteem. The implementation model within the NHS is to signpost to PosMT via existing clinicians, supporting this with professional training to increase skills and knowledge in this area.

We adapted the PosMT programme and approach to the younger audience in schools, creating a 9 week programme with 9 shorter age appropriate audio tracks, supported with content for teacher-led creative class sessions and teacher training.

Through recent student interviews, we have identified how to optimise the programme for younger users, including stigma-free communication, voice/music configurations and user interface refinements.

Section 3: PosMT for Schools Programme

The intervention was delivered as a 3 part approach consisting of:

- Teacher training
- Pupil daily listening
- Weekly taught sessions.

Teacher Training

Teacher training was offered by FPMH, in the form of in-person workshops or online modules. These were structured round the following elements:

- An introduction to FPMH and how Feeling Good with PosMT for Schools came about.
- Science and Evidence behind the programme.
- The need for the programme, an overview, resources and evaluation.
- A detailed overview of the taught sessions and Frequently asked questions (FAQ's).

Training workshops included active participation in class activities while the online module used video demonstrations of these. To evaluate the training, teachers were administered a paper self-report survey at the end of the training workshop.

Online Teacher Training

Remote, online teacher training was accessible via FPMH's website from December, for those teachers who could not attend the in-person training or those who felt they could benefit from supplementary learning in their own time. The online teacher training consisted of 4 units that were presented as video recordings and totalled 100 minutes.

In addition to the teacher training, our school liaison supported schools throughout the intervention with any questions or comments schools may have had.

Pupil daily listening

Over the 9 week programme, all the pupils in the class listened daily to a different Positive Mental Training (PosMT) audio-tracks each week. The tracks were specifically adapted from a proven NHS-endorsed adult programme to suit a school context. Adaptations consisted of a younger voice, shorter tracks and a slightly modified subject matter to relate to a younger audience.

Table 1 details the audio track names. PosMT audio-tracks incorporate breathing, positive reappraisal and visualisation techniques proven to help with stress management, resilience and self-perception.

WEEK	TRACK NAME	TRACK Length (minutes)
1	3 minute Mindfulness	3.00
2	Get Relaxed	6.20
3	Calm your Mind	5.50
4	Build your self- confidence	6.50
5	Stress Buster	7.30
6	Treasures from the Past	7.00
7	A Balloon Ride	5.40
8	Your Best Self	5.40
9	Skill Up	6.20

Table 1 to show details of the audio-track listening

Why daily listening

Audio-tracks were listened to sequentially across the 9-week programme. The first track was listened to daily for the first week, followed by daily listening to the second audio-track in the second week and so on for the total 9 weeks. This modular approach, enables learners to progressively build upon skills learnt from each week. In concert with the growing literature showing the relevance of habit formation principles to good health (Lally & Gardener, 2013; Rothman, Sheeran & Wood, 2009) consistency through daily listening was an integral component of the programme. An analogy can be drawn to the benefits of daily teeth brushing. By adhering to a regular mental training skills routine, one can foster good practice to build resilience, positive perceptions of self and motivation. Furthermore, the evidence base from adult studies on the Feeling Good programme shows that daily practice can create positive and lasting change such as increased coping and resilience patterns.

Weekly Taught Sessions

Weekly teacher-led classes (ranging from 40-50 minutes) reinforced key learnings from the audiotracks. Each week reflected a corresponding theme to the listening and consisted of interactive, creative and reflective peer activities. Teachers were given the materials necessary to lead these classes, which consisted of:

- Access to online powerpoint presentations and video demonstrations for class activities.
- Supplementary materials pack for each week's activities in an expandable binder, containing e.g. instruction sheets, coloured paper and games
- A printed A4 teacher lesson plan overview, detailing lesson plans for each week.
- Pupil booklet workbooks, A4, that pupils used each week to consolidate the class learnings.



Section 4: Methodology

Research Questions

- 1. Does PosMT for Schools improve resilience, wellbeing, perceptions of self and motivation in Y7/S1 pupils?
- 2. What was successful and what can be improved to facilitate impact and implementation?

Evaluation Design

Key to the implementation of the PosMT for Schools programme was evaluating its effectiveness. To answer the research questions a mixed methodology evaluation plan was adopted, which included:

1. A waiting list control group design involving:

a. Assigning schools to either intervention or control in the Autumn term, with those control schools then implementing the intervention in the Spring term. This ensures all schools ultimately are able to access the intervention but with one cohort accessing this first while the later cohort is used as the control group for the first. This design addresses ethical concerns around non-access to a potentially beneficial intervention while also allowing for more rigorous analysis than a simple pre/post comparison would enable. Control groups were assigned by location (i.e Scottish or English schools) and their availability to start the intervention at the same time as their matched counterpart.

b. Identifying and employing five standardised and widely used scales to assess the programme pre and post delivery for quantitative analysis. Two scales were selected from the SPECTRUM database, the other three were selected to link to the Theory of Change outcomes (see pg 2)

2. Open-ended pupil questions in the pupil post-questionnaire survey to further assess pupil experience of the programme, for thematic analysis.

3. **Selective interviews** with pupils and teachers in one school, to provide deeper sights into the experience of delivering and receiving the pilot programme, for thematic analysis.

4. **Weekly teacher feedback** was invited via a survey in google forms. As only a limited, small percentage (5%) of weekly teacher feedback forms were returned. They will not be included in this report but will be used internally to improve programme delivery.

Evaluation Timeline and Process

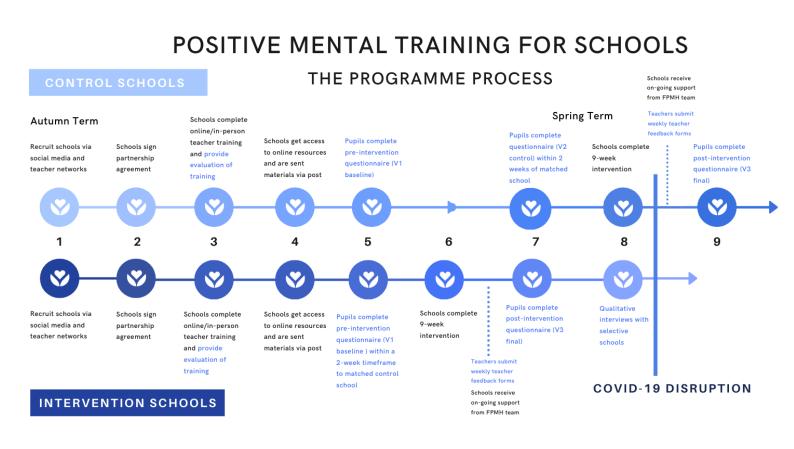


Diagram 1 showing the evaluation timeline and process of implementation

KEY: Words written in blue represent elements of evaluation

We worked with a third party evaluation partner, ImpactEd, who collected and analysed the pre and post pupil questionnaire surveys. Qualitative teacher and pupil interviews were conducted and analysed inhouse. Diagram 1 details the evaluation timeline and process of implementing the programme from a school's perspective.

Ethics

GDPR agreements were obtained from each school, in compliance with data protection regulations. Additional consent was obtained for the qualitative interviews.

Participants

We sought to work with low funding/high deprivation schools, to maximise the benefit to those pupils most in need.Schools were recruited via our Teacher Liaison Officer's Teacher First and social media networks. This resulted in working with 7 schools, 4 in Scotland and 3 in England, reaching approximately 1393 pupils, far exceeding our original target.

We chose to work with Y7/S1 pupils to help with difficulties transitioning from primary to secondary school. Research shows that at this time young people experience stress and adversities such as; losing friends; not having positive relationships with new teachers; not being able to cope with homework. Some researchers regard it as one of the most stressful experiences in a young person's life (Chung et al., 1998; Coelho and Romão, 2016). A negative transition has shown to correlate to poorer life outcomes (e.g psychological wellbeing and academic attainment) (Evans et al., 2018).



Assessments

Pre and Post Pupils Self-completed Survey

Five validated self report scales were drawn together in a survey to measure key outcomes as identified in the Theory of Change.

- Resilience and coping
 - Children's Hope Scale (CHS)
- Perceptions of self (including Self-Esteem & Self-Efficacy) :
 - Well-being (SWEMWBS)
 - Social anxiety scale for adolescents (SAS)
 - Child Outcome Rating Scale (CORS)
- Motivation, Goal orientation and Perseverance:
 - Academic efficacy subscale (PALS)

The post intervention survey was supplemented with open ended questions (section 7) about perceptions of the programme.

Interviews

Selective interviews were held In one school and consisted of three pupil focus groups with five to six participants in each (n = 16, 7: male, 9: female, ages 11-13) and five interviews with teachers (1: male, 4: females) took place. All participants attended or worked for a large mixed school with high deprivation (47.8% of pupils live in the 20% most deprived datazones in the country. The school is diverse with pupils of differing backgrounds and beliefs; 53% of pupils are EAL students and 35% BAME.)

Open-ended questions with added prompts allowed pupils and teachers to reflect on their experiences of the programme. The pupil interview schedule also benefited from the use of vignettes. Vignettes are short, 'concrete examples of people and their behaviours on which participants can offer comment or opinion' (Hazel, 1995) and allow actions in a specific context (in this case school) to be explored (Barter and Renold, 1999). Also, they enable participants to explain situations in their own terms, in a less personal and thus less threatening way (Barter and Renold, 1999). The vignettes were chosen with outcomes of the Theory of Change in mind (such as increased resilience, positive-perceptions of self and motivation).

Analysis

Pre and Post Pupils Self-completed Survey

A paired mean-comparison t-test was performed to identify whether there was a significant difference between the baseline and final scores across each group. A further difference-in-difference estimation was employed, which identifies if there is a statistically significant difference in the changes over time between the treated and control pupils.

Although variance was seen across participating schools, one school showed consistently more negative results for all measures, which considerably skewed results. We therefore decided to remove this school from analysis, as an outlier, supported by our knowledge that they implemented the programme in a different way.

Open-ended questions

Responses were grouped into three categories of responses: positive, neutral/negative and non-responses with further thematic analysis coding. The themes identified emerged naturally, but the focus of analysis was supported by the ToC outcomes, in particular, relating to the following factors:

- Knowledge and use of relevant skills: for instance, practicing breathing patterns, using visualisation and drawing on relaxation techniques
- Academic and behavioural change: for instance, better concentration, an improved ability to set goals and work in a focused way to achieve them and improved relationships with peers and teachers
- Wellbeing and emotional regulation: for instance, improved ability to relate to people, talk about their feelings and express difficulty, developed self-awareness and improved wellbeing and motivation

Interviews

Initially codes were organised into general themes based on saliency, their relevance to each other and whether they appeared across all focus groups and interviews (Buetow, 2010). After iteratively reviewing and refining themes, they were semantically organized (Braun and Clarke, 2006) and were labelled according to how well they described the overall concept (Boyatzis, 1998; Ali and Phipps, 2020).

Data Collection Procedure

Pre and Post Pupils Self-completed Survey

Self-report survey questionnaires were administered to schools either digitally via ImpactEd's platform service or in paper form, sent via post. Control schools completed surveys within 2 weeks of their matched school completing pre-intervention and post-intervention questionnaires. Control schools' post intervention survey did not include the open ended questions. A two week time frame was allocated with the understanding that schools may face logistical barriers (e.g timetabling issues) that could prevent control participants from completing questionnaires at the same time to their matched school counterpart.

To standardise the delivery of questionnaires pupils watched a short video prior to completion, explaining the format of the scales and that participation was voluntary and pupils could opt out of answering the questions at any time. Pupils completed the questionnaires in class with their teacher, and were told to ask their teachers if they had any questions. Paper questionnaires were collected by teachers and returned to FPMH by post for inputting onto a secure google spreadsheet prior sending to ImpactEd.

Return Rate of Self-completed Surveys

The return rate of the matched pre and post pupil questionnaires was 43% of the intervention schools and 45% of the control schools.

Interviews

All interviews ranged from 30 to 60 minutes in a private room allocated by the school and were digitally audio-recorded and were transcribed verbatim.

School Implementation

This section covers the practical aspects of delivering PosMT for Schools programme, such as teacher training, timetabling, data collection and standardisation.

Teacher Training

All participating schools opted for face to face training with ongoing access to online training modules.

Training was evaluated via self-report survey at the end of the training day/half day. It should be noted that the teacher training was not made compulsory for all teachers involved in the delivery of the audio-track listening and taught sessions, which may have resulted in the considerable variation between schools.

Feedback from Teacher Training

"Well-paced, well thought through. Accessible resources are well made"

" Very informative and useful!" "Excellent course and look forward to bringing it to our school"

"The programme is well structured and easy to use resources and videos"

Timetabling

Schools were expected to timetable daily listening to the audio- tracks daily and the weekly taught class, upon signing a partnership agreement, (see Table 2). All schools completed the 9 taught sessions once a week for 9-weeks with the exception of one school who completed the taught sessions every fortnight.

Programme Access

Teachers accessed the audio-tracks and the powerpoint presentations for the teacher-led taught classes via The FPMH's website, using passwords to unlock each week's listening.

Learners were given pupil booklets to complete in the class sessions. These also had instructions on how they could access the audio-tracks at home for free via the FPMH's website and about the Feeling Good Teens App once it was launched,

For those learners without access to phones/tablets at home, mp3 players loaded with the audio-tracks and instructions were sent to schools via post.

<u>School Community Access to the Feeling Good App</u> Teachers were also granted free access to the adult app (feeling Good: positive mindset) via codes, sent by email.

Table 2 showing programme timetabling in each school

SCHOOL	ALLOCATED TIME FOR LISTENING	ALLOCATED TIME FOR TAUGHT SESSIONS
A	English and Literacy	Health and Wellbeing
В	Tutor time, English , RE and PSHE	PSHE
С	Tutor time	PE
D	Form time	KAT (Key Adult Time)
E	Form time, PREP, PSHE.	PSHE
F	Personal Development Time	PSHE
G	Form Time	Humanities Lesson

Impact of COVID-19

School closures taking place as a result of the Covid-19 outbreak disrupted the study . None of the schools implementing the programme in the Spring term were able to return the post- intervention questionnaires, resulting in low numbers for statistical analysis and an underpowered study has been reported. Additionally school demographic data was not able to be obtained either.

However, the first cohort of schools were able to finish the programme and control group data is available for this cohort. This enables an overall impact analysis to be undertaken although with considerably less data than would otherwise have been the case. Of the seven schools participating in the programme, only four schools were able to complete follow up programme data. One of these schools was removed from analysis as identified as an outlier. Although we had initially planned analysis comparing Scottish against English schools, this was determined as being not appropriate for the data set in its current form given the attrition of schools due to Covid-19.

Limitations to Research

A number of factors influenced the research. Firstly the impact of Covid19, as discussed above, severely limited the resulting numbers of participants, which has meant the study is underpowered for statistical significance.

It should be noted that the teacher training was not made compulsory for all teachers involved in the delivery of the audio-track listening and taught sessions, which may have resulted in the considerable variation between schools.

The return rate of the follow up questionnaires was 43% of the intervention schools and 45% of the control schools. Clearly this attrition further restricts numbers of participant data even more, which is further confounded by the removal from analysis of one intervention school as an outlier.

It should be noted that participants volunteered to take part in the study, completing the questionnaires and being interviewed, meaning self-selection bias was introduced, limiting a true representation of participants in the programme (Heckman, 1990). In common with all survey methodologies, there may well be biases affecting responses (e.g.willingness to disclose feelings, even when answers are kept anonymous) which readers should bear in mind. It also cannot be ruled out the researchers position may have influenced participants' responses in the interview in some way. However converging evidence provided by ImpactEd, a third party partner, whereby pupils self-reported answers in a survey, supports/strengthens the findings in this study.

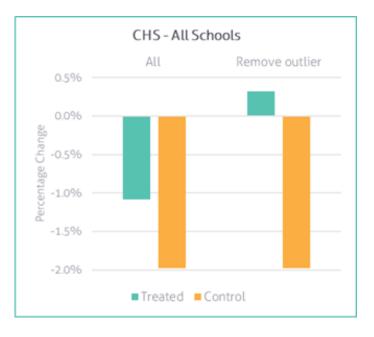
Section 5: Results

Pre and Post Pupils Self-completed Survey

No statistically significant change was seen in any of the questionnaire scores (CHS, SWEMWBS, CORS, PALS, SAS) between the intervention and control pupils. There were however positive trends.

The most positive impact of the programme was on the Children's' Hope Scale (CHS) a measure of resilience and coping skills, which showed treated schools increasing by 0.32% (non significant) and control schools decreasing by -1.08%, although this difference was not statistically significant, the decrease in the control schools was approaching significance p = 0.0558 (the convention being significance p < 0.05) with outlier removed. This trend suggests that the intervention was able to maintain resilience during the challenging move to Y7/S1, as oppose to controls who experienced a drop in resilience and coping.

When analysed further using the demographic data, resilience and coping for control males significantly decreased over time.



Graph to show percentage change for treated vs control schools

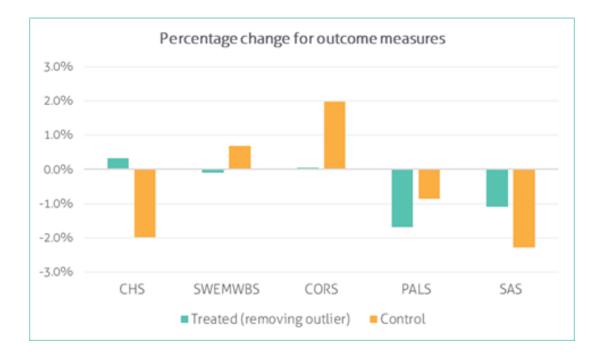
This trend was also seen in the wellbeing (SWEMWBS) score, with control males showing a large of -7.34%, whilst treated males decreased by -2.11; however neither of these results are statistically significant.

Benchmark comparison shows that both intervention and control pupils have on average higher levels of wellbeing compared with the national database for this age group.

The numbers of participant responses in subgroup demographic data was small, as shown in the table below. Analysis by these groups showed non-significant inconsistent trends, with the exception of males described above.

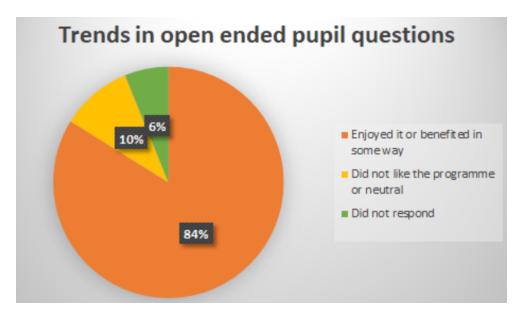
All treated	293
All treated female	86
All treated male	71
All treated PP	19
All treated non-pp	51
All control	245
All control female	16
All control male	35
All control pp	21
All control non-pp	30

Results across all measures can be seen in the graph below. This illustrates the variable results across outcome measures in the intervention schools relative to control groups.



Open-ended questions

Thematic analysis revealed 84% of pupil responses reported some enjoyment or benefit in participating in the programme



Pupils reported benefits that link to the Theory of Change

The most prominent feature that the pupils identified was how relaxing or calming the activities and audio made them feel. Nearly two thirds of positive responses made some reference to the way listening calmed them down, was relaxing, provided a moment of quiet, was peaceful or prepared them for the day. Pupils also described drawing on relaxation techniques, being able to reduce stress and worry and an increased capacity to cope with such feelings and difficulties.

Pupils perception of the programme

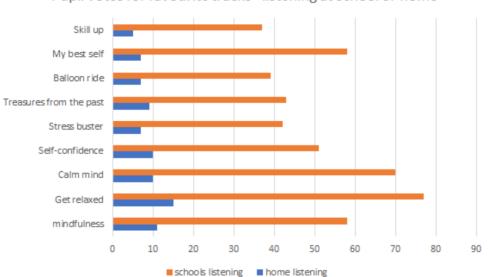
Pupils were asked to answer the following question on a scale from 1 (low) to 10 (high)"overall do you think the programme (audios and class activities was a good thing to do?' All schools tended to rate the programme a 5 or 6 (equating to OK) and the distribution was close to 50% in the 1-5 ranking and 50% above.

Table 3 showing ImpactEd's thematic analysis of the open-ended questions

Category 1: Enjoyed it or benefited in some way (n.218)		
Outcome that links to ToC	Evidence	Quotes
Well-being and emotional regulation – feeling calm or relaxed	The most prominent feature that the pupils identified was how relaxing or calming the activities and audio made them feel. Nearly two thirds of pupils made some reference to the way listening calmed them down, was relaxing, provided a moment of quiet, was peaceful or prepared them for the day. pupils drawing on relaxation techniques, being able to reduce stress and worry and an increased capacity to cope with such feelings and difficulties. they also found it helped reduce their worries.	"It was very relaxing and you could forget about all the bad stuff that has been happening in life" "The fact I now worry about things way less and feel more relaxed
Well-being and emotional regulation – reduced stress	Pupil described drawing on relaxation techniques and therefore being able to reduce stress and worry and an increased capacity to cope with such feelings and difficulties.	"It helped me calm down when I
Well-being and emotional – regulation – increased confidence	Building increased self-confidence came through for 6 pupils, with responses reflecting that they enjoyed how the programme boosted confidence.	
Knowledge and use of relevant skills	A subset of responses showed that pupils were learning how to do the techniques and could see how they could help them manage their stress	
Academic and behavioural change - better concentration	Ange - better Quite a few students appreciated the moment of calm before class as well but did not specify effects on and it before class as well bet did not specify effects on and it before class as well bet did not specify effects on and it before class as well bet did not specify effects on and it before class as well bet did not specify effects on and it before class as well bet did not specify effects on a specify effect	
Other	Other positive themes pupils reported included finding the programme fun, enjoyable and liking the audio tracks used.	NI/A
Category 2: Did not like the programme or neutral (n.26)		
Evidence		Quotes
Pupils often simply said they liked "nothing" about the programme. There was a small group of pupils with neutral feelings toward the programme as well. These were typically expressed as "I don't know" regarding what they liked about the programme (about 12 said this). 20 pupils who felt that the programme was a way to use up class time or a way to skive for 6 mins." On the contrary, one pupil disliked the programme because they felt it wasted time.		"In my opinion the audios didn't even do anything." "It was good to not have to learn for a bit"
Category 3:Did not	t Respond (n.16)	

Pupils perception of the audio-tracks

Pupils were asked about their favourite tracks. Interestingly these were very similar for those who listened at home (11%). The favourite tracks were body relaxation (get relaxed) and calming the mind (calm mind), both these tracks teach active techniques to achieve these results.



Pupil votes for favourite tracks - listening at school or home

Interviews

Overall young people and teachers predominantly reported outcomes related to stress management and wellbeing.

Beneficial Impact of the programme: Stress Management and wellbeing

- a) Feeling relaxed and calm
- b) Sense of embodied focus.
- c) Reduced stress.

a) Feeling Relaxed and Calm

During their responses, participants across all three pupil focus groups made reference to feeling relaxed and/or calm as a result of the programme. This sub-theme was the most predominant beneficial impact of the programme. Young people felt that the programme gave them time out of academic study, a moment of calm where they can close their eyes, relax and breathe. Pupils reported that the programme allowed them to both calm down from previous activities where they felt "excited", "upset" or "angry" and also to prepare themselves for the next lesson or day ahead.

"It was relaxing and something that you kind of looked forward to for the start of the week before going to a period of learning you get a wee bit of...time." Pupil Participant 1

All five teachers similarly noted pupils feeling relaxed and calm as a result of the audios. They reported that it gave pupils the time to be still and reflect on themselves to regulate their emotions. One teacher even reported the benefits of feeling relaxed and calm themselves. Table 4 shows evidence of feeling relaxed and calm as a result of the audios.

"I enjoyed it myself, just a wee kind of moment in the day to stop and just chill for a little while and then get on with the lesson [...] I did feel they were more calm [...] maybe it was me, because I felt more calm" Teacher Participant 4.

Table 4 showing subtheme of beneficial impact of the programme

Sub-theme a) : Feeling Relaxed and Calm	
Sub-meme a) . Feeling nelaxed and Galin	
Quotes	Participant
"it relaxed you before class, so instead of coming in all excited from your last class you have the time to get relaxed and ready for your next period."	Pupil 3
"whenever you get upset or angry, [the audios] just calm you down."	Pupil 7
"I liked noticing how relaxed you were when you tightened up your fist or doing one of those stretches that they got you to do and realising that you were relaxed. It was a fresh way to start the period, instead of coming in when you were still excited from the last one."	Pupil 8
"I did feel that there was just a feeling of kinda calmness there, which was quite nice and not a feeling I feel often in class."	Teacher 3
"Pupils find it difficult sometimes to calm themselves down. I think a lot of them find it difficult to regulate their emotions and [the audios] allow them to centre themselves and focus solely on themselves and be calm."	Teacher 5

b) A sense of embodied focus

Several pupils across two pupil focus groups referenced an increased sense of focus as a result of the audio-tracks. Young people reported that it helped them focus and get ready for the day and lesson ahead. Three of the five teachers also noted the benefits of the programme in terms of focus. They suggested the audio-tracks helped centre and ground the pupils for learning by being able to separate themselves from their surroundings. Two teachers mentioned they started using the programme on other year groups within the school because of the increased ability to focus in class

"it helped me in class [...] I felt focused, ready to go on with the day" Pupil 11.

"I actually did it with my second and third years they've asked to do it again [...] it was a nice way to focus them and calm them down" Teacher 2.

Sub-theme b) : A sense of focus	
Quotes	Participant
"it made me more focused because if I was hyper I wouldn't be able to focus on the lesson"	Pupil 9
"they seemed more focus, they were more calm."	Teacher 2
"it's that moment where there are no other voices and you can just focus on one person rather than everything going on around you, it's just enough to balance [pupils]."	Teacher 1
"I've got a couple of quite loud second and third year classes and I've been using [the audios] as a way to calm them down [] it is an amazing way to get them focused."	Teacher 5

Table 5 showing sub-theme of beneficial impact of the programme

c) Reduced Stress

Seven of the sixteen pupils reflected on their experience of the programme in terms of helping reduce or manage stress. Pupils felt that the programme helped them reduce stress by keeping them calm and giving them ways to lift their mood. Interestingly, no teachers specifically reported stress management but one teacher suggested the programme is beneficial in teaching a positive outlook to pupils.

"I used [the audios] when I'm stressed out [...] because it calms me down and I can give myself a small rest."

Sub-theme c) : Reduced Stress	
Quote	Participant
"If you were sad or stressed, then it would make you think about what would make you happy or what could lift your mood up."	Pupil 5
"when I listened to it, it was a calm, quiet voice so when I listened to it, I didn't feel stressed out that much."	Pupil 8
[In response to a vignette describing a person who was worried about an upcoming test. Participants were asked, what advice would they give to that person?] "maybe they could try listening to the stress buster [audio-track]."	Pupil 16
"if i'm nervous. I would listen to it before I do something that I am worried about."	Pupil 12

Consistency and Which Pupils Felt the Impact

In terms of how consistently this positive impact was felt throughout the programme four teachers noted that only a very small percentage of pupils did not engage with the programme (one teacher was not asked this question). Three out of the four teachers felt the benefits to stress management were consistent throughout with one reference to noticing a behavioural decline after the programme had finished (e.g coming into class more disruptively). The fourth teacher reflected on how consistently the positive impact was felt was dependent on the type of class and/or students. One of their classes took a couple of weeks to engage with the program but by the third week they became settled, whereas another class started settled but became less engaged by the end of the programme (see barriers to learning section). This is also demonstrated in how teacher four managed the daily listening, tailoring to the students' specific needs. For the class that struggled to settle with the audios initially, teacher four played the audios at the start to get them to a calm point, whereas the second class who managed to settle quickly, audios were played at the end as a reward before their next lesson.

When asked which individuals benefited the most from the programme, every teacher felt that all pupils benefited in some way from the programme and had something to take away from it. Some teachers suggested where the programme was the most effective was for those pupils who struggle to calm themselves down and focus, such as individuals with ADHD and social and emotional health problems.

Evidence of Consistency of Impact		
Quotes	Participant	
"97% of them took part [in the audios] and did it properly which was really good." [] I didn't have anyone refuse. Not a single person refused"	Teacher 3	
"I would say 10% didn't engage with it at all, but the rest of them gave it a good shot."	Teacher 4	
"Since we've not been doing the listening exercises, I see a difference when they come in to class, they come in to class louder, whereas before they've been coming in much calmer."	Teacher 1	
"The vast majority of them I think responded really well [] I noticed the difference when they did engage with it."	Teacher 2	
"One of my classes in particular took a few weeks before they got into it, and by the third week they had started to settle a bit more. The other two classes worked the other way, they were quite attentive at the start but as we got closer to the end of the programme they were less engaged"	Teacher 4	
"I think it has to be tailored to the class in front of you, the characters you have and I have a class that are particularly rowdy [] that took a couple of weeks to settle so for me having them doing it at the start of the lesson was more beneficial because they were calmer and they were more able to learn because they had got to that point because they were settled. The other two settled quite quickly so actually as a bit of a reward at the end of the lesson 'let's just take some time to calm before you move on to your next lesson', worked better"	Teacher 4	
Evidence of Which Pupils Benefited		
"I think [the audios have] benefits for everyone [] but with children with ADHD, children with autism and children with other things going on I think it can be hugely beneficial."	Teacher 4	
"For those kids who just need some help to calm down, I'd say it's particularly helpful there, it grounds them in a lesson."	Teacher 1	
"One pupil who springs to mind who certainly has difficulties and challenges in their learning [] said that having that time out to reflect is particularly helpful so yeah I can see where it would be particularly beneficial for more vulnerable pupils."	Teacher 1	

Findings on Programme Implementation

- 1. Barrier to Learning: Repetitive/Boring
- 2. Improvements to Delivery: A Better Induction to the Programme

Barriers to Learning: Repetitive and Boring

The most prominent barrier to learning of the programme was the feeling that the repetitive listening became boring. Seven pupils and one teacher referenced boredom associated with repetitiveness of the audios. It was not that pupils disliked the listening exercises, overall they enjoyed the programme but thought the programme would benefit from more variation either by introducing a new voice for different tracks, introducing more tracks with new techniques, reducing the 9-week length programme or splitting the programme into blocks.

Barrier to Learning: Repetitiveness and Boring	
Quotes	Participant
"I think they got bored of it after a while, not because the activities were boring [] they just think they think "oh we are having 9 weeks of it". They would have been much more enthused if it was built into blocks"	Teacher 4
"I would keep the tracks because they are really helpful for future life and maybe add new techniques to make it less repetitive." you get upset or angry, [the audios] just calm you down."	Pupil 5
"I would keep in the tracks but maybe add some more tracks so they are not so repetitive."	Pupil 9
"Some weeks it was calm and some weeks it was just getting repetitive."	Pupil 4
"Maybe use like other people saying it, and different things to say"	Pupil 3
"I found like at the start of the week it was really nice but by the end of the week when you had heard the track a few times it was not a waste of time but it's like we've already heard it."	Pupil 14

A sense of repetitiveness and subsequently boredom of the programme may have been a barrier to learning. However, a caveat to this finding is the opinion of all five teachers who, as previously mentioned, felt there was a very small percentage of pupils who did not engage with the programme and whilst some pupils may have not attentively listened to the audio-tracks they were still able to draw benefits. One teacher also specifically referenced consistency of listening as an integral contributing factor to the success of the listening. Furthermore, the account of finding the audio-tracks repetitive and boring was met with inconsistencies from other pupils and two teachers who said pupils wanted more of the programme.

"For them the consistency was key, so say they hadn't done it consistently that week [...] it was difficult for them to engage whereas when the circumstances where right and it was consistent for them [..] the I could see the knock on effect during the rest of the period that was positive" Teacher

"I wish they brought out more because it was so relaxing and it was only for the 9-weeks" Pupil 13.

Pupils were explicitly asked in Section 7 of the questionnaire surveys what they would change in the programme. Similar to the interview responses, responses in these surveys indicated change to make the audios less repetitive and shorter.

Implementation recommendations

Question 7 asked: If you could change anything about the programme, what would you change? 30 pupils reported that they would not change anything.

The most widely requested change to the programme was to make the audio clips shorter and less repetitive in terms of the speakers and instruments used. Other comments included:

- Changes to Audio
 - · Make the speakers or instruments less repetitive
 - · Change or vary the speaking voice
 - · Make the audio clips shorter

Changes to the frequency of activities

- · Ensure different tracks are played in one week
- · Decrease the number of days of listening
- · Listen to the tracks earlier in the day

Improvements to Delivery: A Better Induction to the Programme

Participants reported that having an improved induction to the programme would benefit both pupils and teachers in providing a greater understanding of the programme's importance, why they are participating in the programme and to improve dissemination of information about the programme.

Not all teachers attended the teacher-training (primary teachers who led the taught sessions attended) and some teachers (particularly delivering the listening) were unaware of the greater details of the programme e.g. the science behind the programme, the tripartite composition of the programme involving weekly taught sessions and what the programme entails. Three out of five teachers reported these details would help incentivise teacher engagement with the programme and subsequently support pupil engagement by providing a clear and understandable message of why the programme is important in building non-cognitive skills. In addition an improved induction can increase communication and discussions between teachers delivering the programme so they are on the same page to take a whole-school approach to wellbeing. Some pupils also reported that they would benefit from greater understanding behind why they were doing the programme. We suggest an induction to the programme may also help with the pupils who struggled with the repetitive listening and found it boring by explaining why consistency is important to the programme and framing it in a way so that pupils know what to expect and why.

it would be nice to kind of build that connection across all the different parts of the programme" Teacher 5

"I think it would have been beneficial to have the actual people delivering it to do it, I attended the teacher training so that's why I delivered the first or few for each class, purely because the other teachers had no clue what was going on" Teacher 4 "If children know why they are doing it, they are more likely to get involved with it" Teacher 3 "It is important to know what you're doing, why you are doing it and what the kids are being told..so [teachers] all singing from the same hymn sheet" Teacher 3

Section 6: Discussion

A large variance in outcome measures across participating schools was found. This, we suggest, shows that school-variation in programme implementation strongly impacts the effectiveness of the programme. This is supported by the negative results from a school with known implementation differences. Conversely another school, who followed recommendations of programme delivery to a higher standard, showed positive changes for resilience (CHS), wellbeing (SWEMWBS), general life outcomes (CORS) and perceptions of self (SAS) measures.

As well as variation between schools, there was variation across outcome measures. The most positive impact of the programme was on the Children's' Hope Scale (CHS) a measure of resilience and coping skills, which showed control schools had a decrease in this measure that was approaching significance p = 0.0558. (the convention being significant p < 0.05), whilst treated schools (with outlier removed) had no significant change. This suggests that the intervention was able to maintain resilience during the challenging move to Y7/S1, as opposed to controls who experienced a drop in resilience and coping.

Questionnaire return was low (43-45%) and this together with the interruption of the study due to Covid-19 resulted in an underpowered study for quantitative analysis, and the consequent lack of statistically significant change seen in the outcome scales. However the qualitative results, both from the open-ended questions (section 7) and the interviews, support the positive trend seen in the CHS measure of resilience and coping. Pupils reported having the knowledge and skills to better manage wellbeing and emotional regulation; to feel calm and relaxed and to cope with stressful events.

"It helped me calm down when I was feeling really stressed and really down."

Thematic analysis supported our Theory of Change, placing pupil benefits into three broad categories of wellbeing and emotional regulation, knowledge and use of relevant skills and academic and behaviour change. Other benefits described were increased self confidence and increased concentration and focus. Teachers also remarked on the greater sense of calm and academic focus that followed the listening to the audios, and even used the audios with other years to help increase their calm and focus. "it made me more focused because if I was hyper I wouldn't be able to focus on the lesson"

"they seemed more focussed, they were more calm"

However not all pupils engaged so strongly with the programme. When asked if the programme was a good thing to do, there was a wide variation in responses, most falling within the middle, indicating ok, with approximately a 50:50 split above and below the median. This indicates substantial variation in pupil engagement with a proportion not engaging.

A sense of repetitiveness and subsequently boredom of the programme was expressed by some pupils and this may have been a barrier to learning. However, a caveat to this finding is the contrary opinion of all five interviewed teachers who felt there was only a very small percentage of pupils who did not engage with the programme and whilst some pupils may have not attentively listened to the audio-tracks they were still able to draw benefits. One teacher also specifically referenced consistency of listening as an integral contributing factor to the success of the listening. Furthermore, the account of finding the audio-tracks repetitive and boring was met with inconsistencies from other pupils and two teachers who said pupils wanted more of the programme.

PosMT for schools is a complex programme with many different elements, both in the daily listening and in the weekly creative sessions. Pupils benefitted from this variation within the programme in that there was generally something for everyone. This is demonstrated in the finding that the majority of pupils were able draw something positive from the programme; 84% percent of pupils (218 of all respondents) were able to provide concrete evidence of something they were able to use positively when asked about their experience of the programme (see table 5).

The importance of programme variation came up frequently in the interviews, for both young people and teachers with regard to what worked for whom. For example, when listening to the audio tracks, some people found visualisation easier than others who preferred actions. Some found the music relaxing, whilst others did not. When doing the weekly activities, some people preferred writing in the booklet to process what they had done and others preferred learning by trying things out such as using the heart monitor. As well as varying content, this variation may also reflect the context-specific implementation of the programme respective to each school and the fact that a whole-class approach was taken, where individual differences and varied needs of each pupil exists. As the programme operates as a universal model and does not target specific groups, a potential caveat to implementation is this "no one size fits all" (Teacher 5) concept.

Whilst the whole class approach has many benefits such as stigmatising mental wellbeing; offering more anonymity; and the opportunity to learn from peers, it may be that a small percentage of pupils require additional support to enable better engagement with learning these non-cognitive key skills. However one aspect of the programme is that it teaches knowledge and skills, which some may not be ready or able to implement straight away, but may be able to store up the information to draw on at a later date.

here may too be an element of emotional literacy and maturity. The social anxiety results were not what was expected, and is contrary to explicitly expressed comments on lack of worry. Those in the intervention group may have gained greater emotional awareness which resulted in their consideration of the scale questions with a different perspective, compared with controls. However one could argue this initial step of self-awareness is integral to ultimately decreasing levels of anxiety.

Similarly increased motivation was not demonstrated in the measure but in both the interviews and open-ended questions of the post-intervention questionnaire, analysis did reveal that pupils found the programme helped them prepare and get ready for the day. It may be that the goals of subjects and future plans seem far away and are secondary to settling into a new school

"it helped me in class [...] I felt focused, ready to go on with the day" Pupil 11.

A number of suggestions were made on improvements to the programme which included a greater understanding of why it was important to do the programme (pupils and teachers) and improving dissemination of information to teachers. It is recognised that the addition of these will positively impact on programme implementation, which has come through so strongly as a key component to successful engagement and outcomes. The inconsistency of approach and difficulties in data collection we will also improve with a shorter programme (6 week)

Other suggestions were making the audios shorter and less repetitive. We are making a number of improvements to the programme which will go some way to addressing these and the implementation inconsistency and data collection constraints; these are making teacher training online and compulsory, improving teacher communication, shortening the programme to 6 weeks and extending this over 2 years (6 weeks /year). This we hope will give more time for individual differences to be addressed and allow for greater embodiment of non-cognitive skills and knowledge, giving time for individual differences across all pupils.

Section 7: Conclusion and Future Directions

Data analysis from this study indicates that Feeling Good with PosMT for Schools does have a positive impact on resilience and coping, and wellbeing. However due to the unavoidable disruption of Covid-19 on the programme, more data collection and analysis is needed, with the sample size in this evaluation potentially contributing to the lack of statistically significant findings.

Further research should be undertaken with a larger sample size to further confirm this study's findings. Additionally a measures review is suggested to explore measures of self perception and motivation to better capture any changes in these non-cognitive skills.

Future research will also benefit from a more systematic way of matching control groups (e.g. based on demographic and deprivation data as opposed to location and availability) and to establish better ways for data collection.

The on-going future programme will benefit from including all teachers involved in the delivery of the programme in the online training and this and other improvements to improve programme consistency have been discussed above.

Appendix

1. Scoring of Self-report Scales :

Children's Hope Scale

Each item has response options rated on a six-point Likert-type scale ranging from one (None of the Time) to six (All of the Time). The CHS Total Score represents the mean of the responses across all items if at least 85% of the items are completed. All items are positively worded, with a high CHS Total Score indicating positive goal-oriented thinking. CHS is a total score only, representing the mean of all six items.

Short Warwick Edinburgh Mental Health Scale (SWEMS)

7-item scale where seve statements are positively worded rated on five-point Likert-type scale ranging from "none of the time" to "all of the time". Scored by first summing the score for each of the seven items and then transforming the total raw scores to metric scores using <u>conversion table:</u>

Child Outcome Rating Scale (CORS)

Each of the four visual analogue scales is 10cm so the score for each of the four visual analogue scales in the measurement length on the ruler (e.g 3.3cm = score of 3.3) with 10 being the highest score for each scale. The four scores added together for overall score. The total possible score is 40. The cut-off score is 32.

Patterns of Adaptive Learning Scales (PALS ; Academic efficacy subscale)

Five point Likert-type scales 1 = "Not at all true," 3 = "Somewhat true," and 5 = "Very true. Scores computed by summing the rating for the items. High scores = High academic efficacy (perception of competence to do class work).

Social Anxiety Scale for Adolescents (SAS-A)- Fear of Negative Evaluation Subscale

Each item on the measure is rated on a 5-point scale (1=Not at all; 2 Hardly ever ; 3= Sometimes, 4 = Most of the time and 5 = All of the time). Scores computed by summing the rating for the items within each subscale. Range is 8-40 for FNE subsale. High scoring = High Social Anxiety. Negatively worded questions e.g "I worry what others say about me", but all questions negatively worded so no reverse coding needed within scale.