Mental health difficulties amongst children and young people (C&YP) in the UK are on the rise (NHS, 2018). In particular, emotional disorders have increased from 3.9% in 2004 to 5.8% in 2017 (NHS, 2018). In the same survey, self-harm and suicide attempts were reported by 25.5% of 11-16 year olds, and 46.8% of 17-19 year olds with a mental health condition (NHS, 2018). Such stark prevalence rates for those with a mental health condition, alongside the association between self-harm and suicide, identify a significant public health concern (Brent et al., 2013; Campbell, 2016; 2018). In addition, the survey found that 3% of 11-16 year olds without a disorder, had also self-harmed and considered suicide (NHS, 2018). Previous studies exploring community samples suggest that lifetime prevalence rates for self-harm amongst adolescents is much higher - between 13-45% (Nock, 2010, p344). This suggests there is perhaps a ‘hidden demographic’ of adolescents who engage in self-harm but are unknown. This group is of particular concern due to the likelihood that they are not accessing appropriate support services. Indeed, research suggests that between a third and one-half of adolescents who self-harm do not seek help for this issue (Rowe et al., 2014; Deliberto & Nock, 2008).

Self-harm is a complex behaviour existing along a ‘continuum of self-destructiveness’ (Nock, 2010). At one end of the spectrum the individual’s intent may be to end their own life, whilst at the other it may be to maintain it (Rae, 2016). It involves intentional and direct self-poisoning (e.g. overdose) and/or self-injury (e.g. cutting) with methods being diverse and often conducted privately (Hawton et al., 2012).

The effective identification and treatment of this group therefore poses a considerable challenge and suggests that early, preventative and community-based interventions are needed. However, research into psychosocial interventions for adolescents, primarily focuses on higher-tier clinical support provided post hospital admission. The treatments considered most effective are intensive, long term, tend to support the family as well as the adolescent (Glen et al., 2015; Ougrin et al., 2015) and therefore have significant cost implications.

Research into community-based support for self-harm is limited but preliminary findings have suggested that programmes based within schools and/or that involve peers and non-familial supportive adults such as teachers, could be beneficial (Brent et al., 2013). This approach is further supported by evidence that interpersonal factors play a crucial role in self-harm and that the behaviour is strongly associated with peer relationship problems and peer victimisation (Giletta et al., 2012; Brunner et al., 2014). Having a friend who self-harms is also recognised as risk factor for self-harm behaviour (King & Merchant, 2008). Therefore, addressing self-harm within a peer group context has the potential of tackling key contributing social causes or maintenance factors. Preliminary evidence has suggested such programmes could be highly beneficial for adolescents (Nock, 2010, p355; Wood et al., 2001, 2003; Nock et al., 2007; Wood et al., 2001).

Veronica Roberts, Richard Joiner, Claire Russell, Richard Bradley, Mark Bowles, Aaron Bowes and Terence Nice

Mind and Body: an early intervention group programme for adolescents with self-harm thoughts and behaviours

For communication, please email: veronica@drvroberts.co.uk and r.joiner@bath.ac.uk

Dr Veronica Roberts is an Independent Educational Psychologist and Research Associate. Professor Richard Joiner is Professor of Educational Psychology. Claire Russell is an Honorary Lecturer at the Department of Psychology, University of Bath. Richard Bradley is the Head of Organisation Design and Development at Addaction, UK. Mark Bowles is the Director and Aaron Bowes is Senior Project officer at The Training Effect, UK, www.thetrainingeffect.co.uk Dr Terence Nice is a lecturer in psychotherapy at the Centre for Professional Practice, University of Kent.
Conversely though, concerns have also been raised regarding a ‘social contagion’ effect (Jarvi et al., 2013) potentially undermining the efficacy of group interventions. Therefore, further research into community-based early intervention group programmes is required.

**Evaluation focus**

This study evaluated Mind and Body (MAB), which is an early intervention group programme for adolescents at risk of, or engaging in, self-harm behaviours. It was delivered within secondary schools and community-based clinics by Addaction. This evaluation therefore contributes to the preliminary research into community-based interventions for self-harm in adolescents.

Specifically, the programme was evaluated for its:

1. Identification, referral and support of young people at risk of, or engaging in self-harm behaviours.
2. Impact on young people’s awareness and management of thoughts, feelings and behaviours related to self-harm.
3. Impact on mental health and emotional well-being.

**Method**

**Students**

8440 students (13-17 year olds) completed a screening survey. 1573 students (18.6% of the screened population), were identified at risk of self-harm and had one-to-one sessions with an Addaction professional to determine the programme’s suitability. In addition, school staff could highlight students of concern and adolescents were also able to self-refer to the programme. 622 students participated in the programme between March 2016 and April 2017 (13.6% of the total screened population). We collected data from 299 young people who undertook and completed the programme. See Table 1 (below) for a geographical breakdown.

**Procedure**

The MAB programme was delivered in three pilot sites across England: Kent, Cornwall and Lancashire within secondary schools and community centres, by Addaction professionals. We obtained ethical approval from the Psychology Department’s ethics committee at the University of Bath. The parents were informed that the programme was being delivered in their child’s school and they were told to notify the school if they did not want their child to participate. The programme involved 8 weekly group sessions and 3 one-to-one sessions (See Figure 1 below). Group sizes were between 6-8 students.

Baseline assessments were conducted one-to-one with the students prior to their participation in the programme and post-intervention.

In addition, we conducted semi-structured focus groups with key stakeholders at the start of the programme delivery and six months later in each area, except for Lancashire, where following an initial focus-group, feedback questionnaires were completed by stakeholders 6 months later.

**Table1: Screened and participating sample figures**

<table>
<thead>
<tr>
<th>Area</th>
<th>Number screened</th>
<th>Number identified as at risk</th>
<th>Number engaged in programme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cornwall</td>
<td>914</td>
<td>203</td>
<td>107</td>
</tr>
<tr>
<td>Kent</td>
<td>6039</td>
<td>1115</td>
<td>421</td>
</tr>
<tr>
<td>Lancashire</td>
<td>1487</td>
<td>255</td>
<td>94</td>
</tr>
<tr>
<td>Totals:</td>
<td>8440</td>
<td>1573</td>
<td>622</td>
</tr>
</tbody>
</table>

**Figure 1: Programme structure and core themes**
Measures

i. Screening survey

We used a bespoke online screening survey developed by The Training Effect, to identify adolescents at risk of, or engaging in, self-harm. The questions explored emotions, life-focus, peers and family, alcohol, smoking, self-harm and school support.

ii Pre and post-intervention measures

We evaluated the effectiveness of the programme before and after the programme using measures of mental wellbeing and a self-harm risk assessment.

The Short Warwick Edinburgh Mental Well-being Scale (Stewart-Brown, 2009) a 7-item scale to assess and monitor students’ mental health and well-being.

The Strengths and Difficulties Questionnaire (SDQ) a 25-item questionnaire exploring emotions, behavioural conduct, attention/distractibility, peer relationships and prosocial behaviour; providing a quantitative measure of behavioural change (Goodman, 1997).

Self-Harm Risk Assessment – a 7-question protocol exploring the frequency of self-harm behaviour, thoughts of self-harm, nature of self-harm behaviours and presence of suicide ideation.

All the above measures are of known validity and reliability.

Quantitative analysis

The quantitative analysis we conducted compared students’ pre- and post-intervention scores on the Short Warwick Edinburgh Mental Well-being Scale, the Strengths and Difficulties Questionnaire and the Self-Harm Risk Assessment. Non-parametric statistical tests were used in keeping with the ordinal nature of the questionnaire data.

Qualitative analysis

We took notes during the focus groups and the transcripts were circulated to attendees for accuracy and perspective checks. Thematic analysis (Braun and Clarke, 2006) was conducted to explore core themes regarding the MAB programme delivery, impact and outcomes.

Findings

Quantitative findings

We found a significant reduction in the number of self-harm thoughts after the programme, for students who disclosed self-harm thoughts before the programme; 67% reported a reduction in self-harm thoughts after the programme, 24% reported an increase and for 9% there was no change (Wilcoxon signed ranks test, $z = 5.00$, $p < 0.05$). We found a similar pattern for self-harm actions: 64% of students reported a reduction in the number of self-harm actions; 27% reported an increase, and there was no change for 10% of students (Wilcoxon signed ranks test, $z = 2.44$, $p < 0.05$).

We compared the students’ scores on the Short Warwick Edinburgh Mental Well-being Scale and the Strengths and Difficulties Questionnaire before and after the intervention (see Table 2 below).

There was a significant improvement for students on the Short Warwick Edinburgh Well-being Scale and the Strengths and Difficulties Questionnaire.

Table 2: Changes in psychological well-being following participation in the MAB programme

<table>
<thead>
<tr>
<th>Measure</th>
<th>Deteriorated</th>
<th>Stayed the Same</th>
<th>Improved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Warwick Edinburgh Mental Well-Being Scale</td>
<td>21.4%</td>
<td>5.8%</td>
<td>72.8%</td>
</tr>
<tr>
<td>Strengths and Difficulties Questionnaire</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional</td>
<td>11.8%</td>
<td>40.3%</td>
<td>48.5%</td>
</tr>
<tr>
<td>Conduct</td>
<td>13.6%</td>
<td>56.0%</td>
<td>30.5%</td>
</tr>
<tr>
<td>Hyperactivity</td>
<td>25.9%</td>
<td>43.2%</td>
<td>30.9%</td>
</tr>
<tr>
<td>Peer Problems</td>
<td>24.2%</td>
<td>42.8%</td>
<td>32.9%</td>
</tr>
<tr>
<td>Prosocial</td>
<td>18.0%</td>
<td>67.9%</td>
<td>14.0%</td>
</tr>
</tbody>
</table>
Mental Well-being Scale (Mann-Whitney, $z = 10.37, p < 0.05$), with 73% of students improving over the course of the programme. In addition, significant improvements occurred on the Strength and Difficulties Questionnaire, for emotional problems (Mann-Whitney, $z = 7.42, p < 0.05$), conduct problems (Mann-Whitney, $z = 12.24, p < 0.05$) and peer problems (Mann-Whitney, $z = 2.45, p < 0.05$). There was no significant improvement in terms of hyperactivity (Mann-Whitney, $z = 1.28, p > 0.05$) or prosocial behaviour (Mann-Whitney, $z = 1.19, p > 0.05$).

We further explored whether there were any differences between those students who improved and those who did not (see Table 3 below). Those who improved on the Short Warwick Edinburgh Mental Well-being Scale, scored significantly lower before the programme, than those who did not improve (Kruskal-Wallis, Chi-squared = 27.79, $p < 0.05$). Those who improved on the Strengths and Difficulties Questionnaire had significantly higher ratings on emotional problems (Kruskal-Wallis, Chi-squared = 32.41, $p < 0.05$), conduct problems (Kruskal-Wallis, Chi-squared = 118.96, $p < 0.05$), hyperactivity (Kruskal-Wallis, Chi-squared = 66.59, $p < 0.05$), peer problems (Kruskal-Wallis, Chi-squared = 57.19, $p < 0.05$) and lower scores on prosocial behaviour (Kruskal-Wallis, Chi-squared = 116.70, $p < 0.05$). Therefore, students who benefitted the most from the programme were those who had the greatest difficulties before the programme.

**Qualitative findings**

We organised emergent themes from stakeholder focus groups around the key objectives of the MAB programme. Themes and the number of stakeholders contributing to the theme are summarised in Table 4 (see next page).

**Identification, referral and support of young people at risk of, or engaging in self-harm behaviours**

**Under the radar**

The screening survey was a powerful tool to identify ‘at risk’ students. In one stakeholder’s view, it had saved the life of a student who had been completely unknown to them as at risk.

“It pulled out students who I would never have come across. They would never have got support...but doing that survey, it identified those students. It was a real eye opener.” Stakeholder, Lancashire.

The high number of students identified was a surprise and led to concerns regarding how to support students who could not participate in MAB and did not meet the threshold for Child and Adolescent Mental Health Services (CAMHS).

**Filling a gap in services**

Stakeholders identified that the MAB programme bridged an important gap in services for students with self-harm behaviours who

### Table 3: Students' mean pre-test scores and standard deviations

<table>
<thead>
<tr>
<th></th>
<th>Deteriorated Mean (SD)</th>
<th>Stayed the Same Mean (SD)</th>
<th>Improved Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Warwick Edinburgh Mental Well-being Scale</td>
<td>21.05 (3.18)</td>
<td>21.3 (2.95)</td>
<td>18.77 (3.77)</td>
</tr>
<tr>
<td>Strengths and Difficulties Questionnaire</td>
<td>Emotional 2.21 (0.74)</td>
<td>3.18 (1.27)</td>
<td>3.38 (0.78)</td>
</tr>
<tr>
<td></td>
<td>Conduct 1.39 (0.56)</td>
<td>1.43 (0.92)</td>
<td>3.07 (0.85)</td>
</tr>
<tr>
<td></td>
<td>Hyperactivity 1.71 (0.77)</td>
<td>2.15 (1.33)</td>
<td>3.24 (0.80)</td>
</tr>
<tr>
<td></td>
<td>Peer Problems 1.92 (0.86)</td>
<td>2.79 (1.30)</td>
<td>3.43 (0.74)</td>
</tr>
<tr>
<td></td>
<td>Prosocial 2.59 (0.70)</td>
<td>1.19 (0.67)</td>
<td>1.41 (0.66)</td>
</tr>
</tbody>
</table>
required support beyond school staff expertise, but did not meet the criteria for CAMHS involvement.

Some stakeholders also identified how the programme filled a gap in the form of service offered to young people. The ease of access due to the programme being school-based, flexibility/responsiveness of approach, and availability during the school holidays were cited as reasons the programme had been so effective for many of the students.

“The other advantage is that access to the MAB practitioners is on the young person’s terms.”
Stakeholder, Cornwall.

**Young people’s awareness and management of thoughts, feelings and behaviours related to self-harm**

**Not alone**

Stakeholders highlighted how the group sessions had increased students’ awareness that they were ‘not alone’ with their experiences,

<table>
<thead>
<tr>
<th>Theme</th>
<th>No. of stakeholders</th>
<th>Cornwall</th>
<th>Kent</th>
<th>Lancs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification, referral and support of young people at risk of, or engaging in self-harm behaviours</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Under the radar</strong></td>
<td>10</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td><strong>Filling a gap in services</strong></td>
<td>14</td>
<td>4</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Young people’s awareness and management of thoughts, feelings and behaviours related to self-harm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Not alone</strong></td>
<td>5</td>
<td>-</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Reduced stigma and stereotyping</td>
<td>10</td>
<td>-</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Increased awareness in staff</td>
<td>11</td>
<td>1</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Increased support seeking</td>
<td>7</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Independent coping strategies</td>
<td>8</td>
<td>3</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Self-sustaining peer support</td>
<td>10</td>
<td>2</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Impact on students’ mental health, emotional well-being and behaviour</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication skills</td>
<td>7</td>
<td>1</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Confidence and empowerment</td>
<td>6</td>
<td>-</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Increased participation in school life</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>Additional key themes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skill of MAB practitioners</td>
<td>15</td>
<td>4</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Parent and family support</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>
Reducing their sense of isolation.

“Every single one of the students has acknowledged that there is support from the shared experience of their situations” Stakeholder, Lancashire.

Reduced stigma and stereotyping
Several stakeholders indicated that the programme led to a reduction in students’ stereotypes and stigma around mental health. In some instances, this had led to increased mental health awareness within the school.

Increased awareness in school staff
Stakeholders’ felt introductory assemblies had raised awareness for staff and students who attended, but that the impact could have been enhanced by presenting it to the whole-school and fostering a more supportive whole-school ethos. It was felt this would have helped overcome some teachers viewing students missing lessons for MAB as “a nuisance”.

Increased support seeking
Several stakeholders observed increased communication between MAB students and school staff, including coded communications and seeking additional support from school personnel when needed.

“Some YP…have initiated a system where they wear wrist bands to identify risk feelings or vulnerabilities” Stakeholder, Kent.

Independent coping strategies
Stakeholders indicated that the students were now more able to independently and effectively use appropriate coping strategies. One stakeholder felt that the extended time frame of the programme made it more realistic that young people would be able to develop and use these techniques.

Self-sustaining peer support
Stakeholders indicated that students had formed self-sustaining peer networks that provided support after the programme concluded. This was viewed as a particularly powerful and unanticipated outcome generated by the group format of the programme.

“I certainly think that the group aspect helps...young people are learning from one another without being judged.” Stakeholder, Kent.

“Because it’s a small group, the ethos is that the students will stick together. They may not be best friends but there is a support network based on shared experience” Stakeholder, Lancashire.

Impact on students’ mental health, emotional well-being and behaviour

Communication skills
Stakeholders reported that participating in MAB had supported students’ communication skills towards peers, school staff and/or their parents. One stakeholder felt this helped reduce their sense of isolation whilst others reported it had helped some students to talk to their parents.

“We do an exercise where we support young people to identify their communication styles. This really opens their eyes so that they can take different perspectives...Young people were able to change their communication styles.” Stakeholder, Cornwall.

Confidence and empowerment
Some stakeholders reported that many participating students had noticeably improved confidence. Four stakeholders felt that the group sessions provided a safe space to be ‘heard without judgement’ and that this had led to a lasting sense of empowerment.

Increased participation in school life
Some stakeholders had observed improvements in the students’ engagement and participation in school life including reduced absences, behavioural incidents and lateness, and improved attitude to learning. Two stakeholders reported some students had volunteered for events that previously they would not have put themselves forward for. One stakeholder reported that some students had improved so significantly that they were no longer on the school’s intervention list.

Additional key themes

Skill of MAB Practitioners
MAB practitioners’ skills were viewed as a key factor supporting the effectiveness of the programme. This included their ability to communicate clearly with school staff, their relationship with the students and flexibility in responding to the students’ needs within programme delivery. Their ability to do this was linked by stakeholders to the level of prior experience and expertise practitioners had, as well as extensive training in the MAB programme and being external to the school.
organisation.

“Having an independent person seemed to promote honest and authentic disclosure.” Stakeholder, Cornwall.

“Because the practitioner was empathic, the students felt they could really trust her” Stakeholder, Kent.

Areas for further development

A few stakeholders indicated that there was a potential gap in the provision of support to parents/families of students attending MAB.

“Parents are crying out for support when they don’t know what to do to help their children.” Stakeholder, Cornwall.

Discussion

The Mind and Body programme was developed in response to the need for preventative and early interventions for young people who engage in or, are at-risk of engaging in, self-harm behaviours. MAB aimed to support students in addressing thoughts and actions associated with self-harm and to increase mental well-being. The screening tool identified 1573 students at risk of or, engaging in, self-harm – 18.6% of the screened population. This included many “under the radar” students, who were not known by the school or local mental health services to be experiencing any difficulties. Follow-on interviews with all identified students indicated that this level of identification was valid and therefore the screening tool was effective at identifying young people at risk of or, engaged in self-harm behaviours. The potential of this instrument for nationwide identification of young people at risk of self-harm is therefore worth further investigation.

Quantitative analysis indicated that the MAB programme was effective in improving mental well-being for the majority (72.8%) of students. In addition, significant improvements were found for students in emotional (48.5%), conduct (30.5%), and peer problems (32.9%). Furthermore, of students completing the self-harm risk assessment, 67% reported a reduction in self-harm thoughts and 63% reported a reduction in self-harm actions. These results are therefore supportive of the efficacy of the MAB programme for providing an effective school-based group intervention for students at risk of or, engaging in, self-harm behaviour.

Qualitative observations from stakeholders also supported the view that the MAB programme had a positive impact on young people’s awareness, thoughts, feelings and behaviours relating to self-harm:

- There was a reported increase in young people’s appropriately seeking and accessing support from school staff
- There was a reported increase in young people’s coping skills/strategies
- There was a reduction in stigma about self-harm, aided by the group sharing experiences, understanding, empathy and compassion
- There was an increase in young people’s well-being and a broadening of their social networks
- There was also an observed improvement for some young people in their attendance and contribution in classes

Given these findings regarding the impact of the MAB Programme, there is strong emerging evidence for the effectiveness of the programme. However, whilst these findings are very promising, they need to be considered within the limitations of the evaluation. There was no control group and so it is not possible to show categorically that these improvements would not have happened without the programme. In addition, data were not collated for all of the students who completed the programme and so may not be fully representative. Furthermore, follow-up data are not available and so it is unclear whether these improvements were maintained over time. In addition, it is notable that a sizable minority of young people deteriorated during the course of the programme, and more exploration of the factors that may have contributed to their deterioration is needed.

In conclusion, both the screening tool and MAB programme demonstrate considerable promise in providing an effective way of identifying and supporting young people at risk of or, engaging in, self-harm behaviour, as a form of early and community-based intervention. However, further research is required to build upon the current evaluation’s findings.

References


