Supporting positive mental health development in adolescents with a group cognitive intervention

Abstract

**Background:** Supporting positive mental health development in adolescents is an important school health concern, but there is a need to investigate the suitability of the interventions used.

**Aim:** The aim is to investigate the experiences of school health professionals in conducting a universal school-based programme aimed at preventing depressive symptoms in adolescents.

**Methods:** Twenty-two school health professionals participated in four focus groups. The interviews were analysed using qualitative content analysis.

**Findings:** The overall theme identified in the study consists of 'striking a balance between strictly following the manual and meeting the students' needs'. Three subthemes emerged: 'doing good and sowing seeds for the future', working with insufficient tools, and 'personal development as a professional and as an individual'.

**Conclusions:** School health professionals conducting the programme found it valuable in a school setting, but considered support from the school administration essential.

**Key words**

- Group cognitive intervention
- School prevention programme
- Depressive symptoms
- Adolescents
- Health promotion

Manual-based programmes are increasingly being used to promote positive mental health development in adolescents, but for successful implementation in a school setting, there is a great need for knowledge about how school health professionals assess these programmes' suitability and feasibility. This article focuses on the prevention of depressive symptoms in adolescents, the pros and cons of manual-based programmes, and inter-professional working environments in school health services.

**Background**

Promoting wellbeing and preventing depressive symptoms among young people is an important school health issue (Jetten, 2011; Parnell, 2013). Depression in adolescence is a common and complex condition affecting all aspects of life, impairing relationships, academic performance and general health (Nardi et al, 2013). It is estimated that up to 25% of adolescents will experience a depressive episode by the age of 19 (Kessler et al, 2001). Depressive symptoms may have long-term clinical and social implications (Sihvola et al, 2007). Adolescent depression presents a somewhat different clinical picture from adult depression (Nardi et al, 2013), and it is therefore important to be aware that behind the common complaints school nurses may encounter, such as different somatic symptoms, loss of energy and irritability, there might be a student with depression.

Interventions are classified into different categories ranging from health promotion to universal, selective and indicated prevention. Mental health promotion interventions at school usually target all students and include, for example, programmes promoting emotional and social competence through activities emphasizing self-control and problem solving (O’Connell et al, 2009).

Universal preventive mental health interventions at school target all children in a class, whereas a selective prevention targets individuals whose risk of developing mental disorders is higher than average because of a variety of risk factors. Indicated preventive interventions are targeted toward individuals who have been identified as already having some symptoms of a mental health condition but who do not yet meet the diagnostic levels (Mrazek and Haggerty, 1994).

School has been seen as a good environment for health-promoting and preventive interventions since they can be given early in this environment, with trained school staff playing an executive or supportive role (Corrieri et al, 2013). A programme frequently used in Sweden is a modified version of the US-based course 'Coping with Stress' (CWS) (Clarke and Lewinson, 1995), known in Sweden as 'Depression in Swedish adolescents' (Disa). CWS has been evaluated regarding its effects in the US (Clarke et al, 1995; Clarke et al, 2001; Garber et al, 2009), but whereas the CWS course is an indicated programme specifically designed for those showing...
signs of depression, the Swedish version is a universal programme which does not require participants to have or have had depressive symptoms (Treutiger and Lindberg, 2013; Garmy et al, 2014). The Swedish version consists of ten weekly sessions led by school health professionals (see Table 1). In Sweden, school health services include school nurses, school physicians, psychologists, social workers and special education teachers (Rising Holmström et al, 2013). There is a growing trend of using manual-based programmes at school. To the researchers’ knowledge, no study has yet been published on the experiences of school health professionals conducting a universal school-based programme. It is important to investigate this in order to gain more knowledge about the suitability and feasibility of such programmes in a school setting.

Aim
The aim of the study was to investigate the experiences of school health professionals who conducted a group cognitive intervention for the prevention of depressive symptoms in adolescents.

Methods
A qualitative focus group design was chosen to capture the experiences of school health professionals who conducted a school-based prevention programme (Kvale and Brinkmann, 2008).

Setting
A letter with information about the study’s purpose, design and methods was sent to the school health coordinators (n=4) and they forwarded this letter to all the tutors (n=32) in the relevant municipalities in southern Sweden. Four focus group interviews were performed from May to August 2012. Each focus group interview lasted 90–120 minutes. The participants chose the location for the interviews, which for two of the groups was the workplace of one or more of the participants (a school), and for the other two was Kristianstad University.

Ethical considerations
Consent forms for the participation and audio recording of the interviews were signed by participants. The study was approved by the Regional Ethical Review Board in Lund (2012/462).

Participants
Twenty-two informants, representing 16 different schools from urban and rural school districts in southern Sweden, were able to take part in the study. Three of the focus groups had six members each; the remaining group had four participants. Two of the focus groups had participants from mixed professions (school social workers, school nurses, teachers and a school psychologist), one group consisted of school nurses only, and one was made up entirely of school social workers. A description of informants is provided in Table 2.

<table>
<thead>
<tr>
<th>Table 1. A group cognitive intervention aimed at preventing depressive symptoms in adolescents</th>
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<tr>
<td><strong>Background</strong></td>
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<td><strong>Setting</strong></td>
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| **Focus** | ▪ Cognitive behavioural techniques to change negative thoughts  
▪ Communication training, and training in problem-solving strategies  
▪ Exercises to strengthen social skills and social networks, and exercises to increase participation in health promotion activities. |
| **Source:** Treutiger and Lindberg (2013). |

Interviews
The potential value of a qualitative focus group design lies in the interaction within the groups, which leads to new perspectives on the problems discussed and facilitates the discussions (Kreuger and Casey, 2009). The first and third author took turns moderating and observing the focus groups. Moderating the interviews involved keeping the discussion focused, ensuring that everyone took part and balancing the contributions of the different participants. The observer focused on the interactions in the group and took field notes. Before starting each focus group interview, the researchers informed participants about the study and emphasised that there were no right or wrong answers. A semi-structured interview guide with open-ended questions...
was developed by the researchers and reviewed by a group of eight school nurses and school social workers. The manual included questions aimed at assessing how the tutors experienced the course, such as, 'Do you consider the course to have significance for adolescents in regard to preventing possible mental disorders?' It also contained questions about conducting the programme ('What is it like to be a tutor?') and about organisational issues ('Can you please tell me about school organisation and support from the administration?'). The interviews were recorded with a digital tape recorder and transcribed verbatim into text.

**Data analysis**

Qualitative content analysis was used with the interviews. This enabled the analysis of large quantities of data (Krippendorff, 2012), focusing on the content and variations in views. After each focus group interview, notes were taken on the topics that had been covered. To discover the overarching themes, the transcripts were read through several times. The text was divided into meaning units, which were condensed and then abstracted, and labelled with a code. The authors met after coding to compare the results and reach an agreement on the most appropriate code for each meaning unit. They were compared on the basis of differences and similarities and sorted into themes. This method of condensing the material ensured that its core contents were captured without jeopardising the quality of the research process (Graneheim and Lundman, 2004). The analysis resulted in one overall theme and three subthemes. The preliminary findings were reviewed by a group of Disa tutors (who did not participate in the study) and five of the informants, who expressed a positive recognition of the results.

**Findings**

The overall theme was 'striking a balance between strictly following the manual and meeting the students' needs. The three subthemes identified were:
- Doing good and sowing seeds for the future
- Working with insufficient tools
- Personal development as a professional and as an individual.

**Striking a balance between strictly following the manual and meeting the students’ needs**

The tutors found that in some cases, it was difficult to adhere strictly to the manual and meet the students' needs at the same time. For many tutors it presented a moral dilemma, as they had been taught that it was essential to remain faithful to the programme. However, as school health professionals, they could see that the students would sometimes benefit from more flexibility in the programme. One participant reported:

‘The second group we had was a more difficult one. We had to include breaks and make it more fun in some way.’

All the tutors found it important to follow the manual. They were of the opinion that it was not appropriate to leave out certain elements of the course, although they did feel the need to add different exercises in order to make the material more attractive to the students. Many of the tutors mentioned wanting to work in a more flexible way by taking advantage of students discussing other topics which were important to them, even if this was not in line with the plan in the manual for the session in question. One participant said:

‘They want, in fact, to discuss it with each other. It is the conversation itself that is valuable, but sometimes there is so much you have to get through and remember to say ... This is the disadvantage of a manual-based programme: you're expected to follow the manual, but then you may lose something important that comes up spontaneously.’

**Doing good and sowing seeds for the future**

The tutors felt that they were doing something good: they experienced giving the students tools to handle future difficulties in life. The tutors found it very beneficial that the students could verbalise their thoughts and, in this way, become aware of unreasonable ones. One participant said:

‘I think they realise how much they can influence their own behaviour. That's my experience from our groups, when you can see that they can take it and understand that yes, you can make an impact on yourself.’

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**Table 2. Participant characteristics (n=22)**

<table>
<thead>
<tr>
<th>Sex</th>
<th>Female</th>
<th>22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years</td>
<td>Mean 42 (range 29–56)</td>
<td></td>
</tr>
<tr>
<td>Professional background</td>
<td>School social workers</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>School nurses</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Teachers</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>School psychologists</td>
<td>1</td>
</tr>
<tr>
<td>Work experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years</td>
<td>Mean 8 (range 1–22)</td>
<td></td>
</tr>
<tr>
<td>Tutor experience (groups)</td>
<td>Mdn 3 (range 1–30)</td>
<td></td>
</tr>
<tr>
<td>School employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compulsory school (ages 6–15)</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Upper secondary school (ages 16–19)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
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Another participant reported:

‘Some say, “I can take this with me in my future life. I can take it with me.” I think the material is quite heavy, but I think it’s good, and it’s also good that they know they don’t have to use it right now, but in the future.’

The tutors also spoke of detecting depression they had not been aware of before in some students, which then made it possible for these students to receive support, either through school health services or by being referred to a child psychiatric clinic.

Working with insufficient tools
All the tutors could also see the limitations of the programme, and they experienced situations in which the programme was not optimal for the group. They also found it essential to receive sufficient support from the school administration. If the tutors were not given enough time to plan and conduct the programme, and if the teachers did not motivate the adolescents to participate in it, it was difficult to run it successfully. The tutors maintained that it was not appropriate to run the course if there were ongoing conflicts in the group. Some of the tutors felt that the school’s efforts in this regard were somewhat one-sided. One remark was:

‘It was a difficult group. It would have been better with some other type of group activity.’

They found the material to be quite arduous, and a lot of effort was required on the part of the tutors to simplify it. Many of the students also found it difficult to work with material with such a strong emphasis on negative matters. Some of the tutors therefore attempted to change the focus, taking a more positive approach to prevent the students from becoming bored.

Personal development as a professional and as an individual
Many participants found that being a tutor had a positive impact on their own lives. They appreciated the 3-day training course on being a tutor, not only because it gave them more tools to work with adolescents, but also because they acquired more knowledge about cognitive behavioural techniques. Many tutors described how they had started to use the techniques on themselves as well. One participant said:

‘You don’t want to be without this way of thinking; you’ve learned a great deal yourself as well.’

They also appreciated the training course for improving the cohesion of the professional group. One participant reported:

‘When we [school social workers and school nurses] did it together. There were a lot of [trainees] I didn’t know very well before, and I think it was also incredibly valuable for our continuing professional work. We’ve met many times since, in different professional settings, and we’ve had a very strong feeling of fellowship since this training, I think.’

They also expressed that their training course had made an impact on them in the same way as it had made an impact on the adolescents. The interviews revealed an appreciation of working inter-professionally; for example, when a school nurse and a school social worker conducted a course together.

Discussion
The school health professionals found themselves trying to strike a balance between adhering strictly to the manual and being more flexible in accommodating students. Because of the theoretical nature of the course, the tutors had to consider how they could meet the students’ needs and still remain faithful to the programme. They agreed that it was not appropriate to exclude anything from the intervention, but many of them included additional games and communication training exercises in order to make it more palatable to the adolescent audience. Whether this method of adapting the programme is appropriate is open to discussion (Breitenstein et al, 2012). According to O’Connor et al (2007), this may be an acceptable adaptation since the dose of the intervention is not modified, content is not removed from the programme and the theoretical approach is not changed. However, many tutors also focus on more positive approaches rather than on the negative aspects of the original programme. Whether this changes the theoretical approach or whether it can be considered an acceptable adaptation is debatable. Similar changes may include translation or modification of the vocabulary, using images relevant to the target audience, and replacing or changing cultural references. This indicates a need for further research in terms of programme fidelity, and perhaps also a need to adapt the intervention to make it more adolescent-friendly.

The interviews revealed that the school health professionals had the sense that they were sowing seeds for the future when they conducted a programme aimed at preventing depressive symptoms in adolescents. It gave their work meaning when they realised that the adolescents benefited from the intervention, and although it required a lot of time and energy, this encouraged them to continue. They appreciated the inter-professional work environment. However, they also described it as challenging when they found that the programme was sometimes an insufficient tool to work with. This was also found in Wickström’s study (2013). They found that sometimes the course material was too difficult for the students to grasp and that the student
group would have benefited more from a conflict-solving course. Even though the tutors found that group cohesion often improved after a course, they agreed that it was definitely not a conflict-solving programme. The tutors found that a common problem in a school setting was the fact that one intervention was offered to all the students, instead of individual solutions. A successful intervention had to be well anchored in the school administration in order to schedule the course optimally and to motivate the students.

A positive side effect of the tutor training, and of learning to deliver the course, was that the school health professionals felt it enhanced their development as individuals and the cohesion of the inter-professional group as a whole. This could possibly improve work satisfaction, creativity and meaningfulness. It may help to improve work commitment, according to studies by Isaksen and Ekvall (2010) on working climate. These beneficial professional side effects should also be considered in terms of health economics, and be taken into account when calculating the costs of implementing programmes of this type.

Limitations
The fact that the tutors belonged to various professions, were employed at different schools and varied in terms of experience (including how many courses they had conducted, etc.) contributes to the strength and transferability of the study. However, although almost all Disa tutors in Sweden are women, there are also a few men, and in this study, only women took part in the focus group interviews. It would be interesting to interview male tutors in a future study.

A potential disadvantage of focus groups is that participants may not be comfortable opening up as much as in individual interviews. For example, participants may avoid talking about embarrassing things. A clear advantage of focus groups, however, is that they are effective at generating constructive discussions and contrasting views (Kruger and Casey, 2009). The discussions in all four focus groups were productive, and participants said that they felt comfortable talking about matters they experienced as difficult. The focus group consisting only of school social workers talked very freely. This was the group in which contradictory opinions could be presented most easily. The social workers knew each other quite well and were accustomed to reflecting together. During the analysis of the transcripts, the researchers found that the groups did not differ much in terms of interview content; the discussions in all four focus groups touched upon the same basic themes and dealt with them to the same degree. For this reason, these four sets of interviews were considered to be sufficient. The fact that three researchers discussed the analysis and that a member check confirmed the findings also contributes to its credibility. Additional studies are needed to investigate the students’ points of view and the programme’s effectiveness.

Conclusions
School health professionals who conducted a group cognitive intervention aimed at preventing depressive symptoms in adolescents found that the intervention was valuable and that it sowed seeds for the future. They found that the adolescents learned about cognitive behavioural techniques which would benefit them in the long term. In addition, the tutors found that they too benefited from the training and from conducting the course. They learned more about, or became more aware of, how to use these techniques in their own lives, both as private individuals and as professionals. They also found that attending a training course with their colleagues improved their inter-professional group cohesion. This phenomenon was also seen among the adolescents who participated in the group cognitive intervention; group cohesion improved after the course. Nevertheless, the tutors found the course quite arduous and agreed that for successful implementation, it is essential for a health-promoting course to be fully supported by the school administration.

Implications for school nursing
A school-based intervention aimed at preventing depressive symptoms in adolescents can be considered a valuable tool for school nurses, but it is essential that the intervention is supported by the school administration and that there are no pervasive conflicts in the target group. Symptoms that can be commonly seen by the school nurse, such as headaches and abdominal pain, are particularly common in adolescents with depression (Nardi et al, 2013). Therefore, it is important for school nurses to be involved in activities promoting adolescent mental health and wellbeing.

Conflict of interest: None declared

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