

An Exploration of Middle School Students' Experiences of Mindfulness Training in an International School Environment

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Abstract

The following study explores middle school students' experiences of mindfulness training within an international school environment in The Netherlands. A cohort of 11-year-old middle school students participated voluntarily in a pilot run of the Dot B mindfulness program. Eighteen participants were involved, who came from a range of countries including Korea, France, India, the Netherlands, the UK, and the US, and they were all in Year 1 of the International Baccalaureate Middle Years' Program. This was a qualitative study, characterized by the semi-structured interviewing of the students following their participation in the program. The interviews explored students' personal perspectives on the impact of the mindfulness program on their daily lives. The themes that emerged indicated that participation in the training positively influenced students' capacity to manage stress, to be metacognitive, to harness their attention, to regulate their emotions, and to experience present moment awareness. Students identified the strategies that they found most useful, including the 7/11 breathing technique and the Dot B. The positive nature of students' perspectives and experiences prompted the rolling out of the Dot B program across the grade level.

Keywords: Mindfulness, Stress, Meta-Cognition

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Introduction

In an effort to determine whether students would benefit from mindfulness training in Year 1 of the Middle Years' Programme, a pilot run of the Dot B mindfulness program was implemented within an International Baccalaureate school, in the Netherlands. These sessions occurred after school, and students were free to sign up if they were interested. The students, who participated, were asked to share their perspectives afterwards, and their views were taken into account in determining whether the program could be rolled out to the whole grade level. This article introduces the reader to the nature of mindfulness training in schools, it reviews the relevant research in this area, and then identifies and discusses the themes that emerged in conversation with students within this middle school environment.

Mindfulness-based trainings are characterized by a range of guided meditation practices, such as mindful walking, mindful eating, mindful sitting, mindful speaking, and mindful lying (Kabat-Zinn, 1990), and they are the cornerstone of mindfulness-based interventions, such as MBSR (Mindfulness Based Stress Reduction) and MBCT (Mindfulness Based Cognitive Therapy). The success of these programs on the reduction of stress, depression, and chronic pain in adults led, over time, to the development of mindfulness-based programs for schools (Albrecht, 2014), to the point that there are now more than 30 different school-based programs in place worldwide. Indeed, a recent study in Australia indicates that as many as 50 percent of teachers have already engaged students with mindfulness-based activities (Ager *et al.*, 2014). According to Browning & Romer (2020) the purpose of these school-based programs is to “reduce stress, to regulate emotions, and improve self-awareness” (p. 3). Many of these programs mirror the clinical MBSR and MBCT models, albeit with adaptations made for young people (Semple & Burke, 2019). Similar to MBSR and MBCT, the content of the courses includes breath awareness, present moment awareness, mindful movement, mindful eating, relaxation, and body awareness (Weare, 2012).

The program at the heart of this study is the Dot B Program, which was developed by two schoolteachers, Chris Cullen and Richard Burnett, from two private schools in England (Simpson, 2017), in association with Chris O'Neill, an MBCT student at Oxford University. Together they created the Dot B curriculum for 12–16-year-old students, which is comprised of 9 scripted lessons, designed to “direct attention, moment by moment, with open-minded curiosity and acceptance” (Kuyken *et al.*, 2013, p. 127). The signature practice is also called *Dot B*, which stands for ‘Stop, Breathe and Be!’ In Chris Cullen’s words, the purpose of *Dot B* (both the curriculum and the practice) is “to promote the capacity to respond rather than react” to circumstances in life (cited in Simpson, 2017, p.11). Other practices include the *FOFBOC* (Feet on Floor, Bum on Chair), which grounds attention, while observing body sensations. The *7-11* practice is a brief calming breathing practice that involves breathing in for a count of 7 and out for a count of 11. Longer practices include the *Beditation*, which involves a body scan that is practiced lying down, and the *Sit like a Statue* practice, which is a seated meditation that runs for approximately 15 minutes.

Research carried out on mindfulness-based programs focused initially on adults (Broderick & Frank, 2014), and it validated the health benefits of mindfulness within this population (Van Aalderen *et al.*, 2012). According to Keng *et al.* (2011) findings from correlational studies, clinical intervention studies, and laboratory-based, experimental studies indicate that mindfulness is positively associated with increased subjective well-being, reduced emotional reactivity, and improved regulation of behavior. Given the mounting evidence in favor of mindfulness-based approaches with adults, researchers turned their attention to younger

populations to investigate the effectiveness of school-based programs. Overall, research indicates that school-based programs are effective at improving attention, executive functioning, social and emotional resilience, as well as the capacity to cope with day-to-day stressors (Semple *et al.*, 2017), as well as metacognition (Sanger & Dorjee, 2016), and mental health problems, behavior issues and physical health (Weare, 2012)).

Concerning the Dot B program, specifically, Kuyken *et al.* (2013), found evidence of less symptoms of depression, lower stress levels, and improved sense of wellbeing among 12–15-year-olds who had taken the program. This reflects Burnett's (2011) findings that students find mindfulness helpful for coping with the stressors brought on by school life. Other studies on Dot B have indicated improvements in present moment awareness and in self-regulation (Hennelly, 2011). These results carried through across different year groups. Similar to Dot B, the Mindful Schools program in the US has yielded positive results. For example, a study carried out by Liehr & Diaz (2010) indicated that 89 percent of participating students demonstrated increased emotional regulation, 83 percent demonstrated improved focus, 76 percent showed greater compassion, and 79 percent indicated increased engagement.

An issue that has been raised in relation to the study of school-based mindfulness programs is that the majority are outcomes-based (Ager *et al.*, 2015), with little emphasis placed on qualitative approaches that explore students' perceptions of mindfulness practices. Roeser *et al.* (2012) maintain that there is a critical need for in-depth studies that consider the voice of the students. The qualitative studies that do exist demonstrate that mindfulness training enables students to develop a greater degree of awareness of their emotions, body, and thinking, similarly to the outcomes-based approaches. For example, a qualitative study carried out in New Zealand indicated that school-based programs promoted the development of awareness and empathy, they helped to reduce stress, they increased the ability to focus attention, and the ability to feel calm, peaceful and happy, and they led to greater awareness of emotions and the feelings of others (Ager *et al.*, 2014). In addition, a study that explored the subjective experiences of students in Chile, following a Dot B program, indicated that the expertise level of the teacher played an important role in their ability to benefit from the experience on somatic and emotional levels (Langer *et al.*, 2020).

Even though mindfulness-based approaches have proven beneficial to a range of mental and physical health issues, there is little evidence to validate the role of mindfulness in the reduction of anxiety. A meta-analysis of studies suggests that mindfulness-based interventions have a minimal role to play in the reduction of anxiety in young children, and they have little effect at all with adolescents (Odgers *et al.*, 2015). Another perceived criticism of school-based mindfulness training is that it focusses on the individual, and places minimal emphasis on the social sphere (Simpson, 2017), and even though studies show mindfulness teaching in schools improves social skills, to some degree, it is still unclear as to how this happens. Simpson makes the point that "relationships with others are only discussed in the penultimate class, and showing your gratitude is pitched as really good for you" (2017, p.3). Simpson is making a point about the need for balance between the individual and the collective in the Dot B training.

Research Approach

A cohort of 11-year-old middle school students participated voluntarily in a pilot run of the Dot B mindfulness program. Dot B has been designed by the Mindfulness in Schools Project for adolescents, and it consists of eight one-hour sessions. In the case of this study,

these sessions were held once weekly, after school, over an eight-week period. Eighteen participants were involved, and they came from a range of countries including Korea, France, India, the Netherlands, the UK, and the US. Ten were boys, eight were girls, and all were in Year 1 of the International Baccalaureate Middle Years' Program.

This was a qualitative study, characterized by the interviewing of the students following their participation in the program. The interviews were semi-structured and they explored students' personal perspectives on what mindfulness meant to them, how they felt about doing the program, what they learned about mindfulness, the strategies that they were finding useful, and how they might use mindfulness-based approaches in the future. The following questions were asked of the students two weeks after they completed the program.

Questions:

What do you think mindfulness means?

How did you feel about doing the mindfulness lessons?

What have you learned about mindfulness from the lessons?

What specific strategies are you finding beneficial?

How might you use mindfulness in the future?

Thematic analysis was carried out, and the resulting themes are discussed and related back to research carried out in the area of school-based mindfulness-training programs.

Findings and Discussion

What do you think mindfulness means?

Initially, students did not have a clear understanding of what mindfulness is. The majority mentioned that they were unsure, as they had had little experience of mindfulness. The responses from others indicated an understanding that mindfulness was associated with awareness, calm, thinking, and decision-making. For example, S16 shared "I think mindfulness is about being aware, being aware of your surroundings". Other students commented on the relationship between calm and metacognition. For example, S4 said, "I think mindfulness is about staying calm and thinking about what your mind is thinking". In addition, there were connections made between mindfulness and decision-making, with S15 saying, "I think that mindfulness is about good decisions that make sense in the time being". Students, who did not feel able to describe mindfulness in words, used metaphors. For example, S12 described mindfulness as "a wave – that just rolls in and then leaves again" similarly to thinking: "it's like your thoughts – they come in, they stay for a while and then they leave again". All in all, even though only a few students were able to elaborate on what mindfulness might be, those who did had clear ideas that reflected some of the patterns that arose in the questions that followed their exposure to the Dot B program.

How did you feel about doing the mindfulness lessons?

Overall, the students enjoyed participating in the program. Their comments indicated that they found it useful and enjoyable. For example, S16 said that she "really liked mindfulness" as it "makes you happy and calm", S14 found it "great", S1 thought it was "really useful". In addition, S4 added, "it can really help me throughout my life". Even though, there was a sense that it was time well spent, there were students who acknowledged that it took a while

to settle in to the program. For example, S12 shared, “At first, I thought it was a waste of time – but then after a few lessons it started to get more cosy and more fun”.

What have you learned about mindfulness from the lessons?

When asked about what they had learned from the Dot B program, a number of themes emerged through the students’ responses. The themes included references to stress reduction, the management of emotions, present moment awareness, meta-cognition, self-regulation, and attention.

Stress Management: less stress, calming, relaxation, harmony, better sleep

Meta-cognition: awareness of thinking, stepping back from thinking, control of thinking

Harnessing Attention: focus, attention, concentration, present moment awareness

Present Moment Awareness: awareness of surroundings, feelings, body sensations, in sync

Self-Regulation: anger, fear, nervous, grief, sadness, worry, responding vs reacting

Stress Reduction

The strongest theme was the role that the mindfulness-based strategies played in stress reduction. A number of the students commented on their capacity to calm themselves when stressed. For example, S11 shared that when he does mindfulness-based strategies they help them to realize that he is feeling stressed. In his words: “I really see how tired I am and how stressed I feel”, and S5 finds that “mindfulness is helpful as it helps me to relax when I was stressed” and S8 finds that the Dot B strategies “helped me to stay calm”. Similarly, S15 sees mindfulness as a helpful approach “for calming myself down when I am in a situation that I cannot get out of.” Students’ perceptions of the value of Dot B in reducing stress levels resonates strongly with much of the research in this area, which identifies stress as one of the core benefits of different mindfulness-based interventions (Semple *et al.*, 2017).

Meta-Cognition

Central to students’ capacity to apply mindfulness to stress reduction was their capacity to become metacognitive, meaning that they are aware of their thinking, and have the capacity to manage their thinking. A number of the students commented on the nature of thinking, their capacity to step back from thinking, their ability to control their thinking, and the ways in which this is helpful for them in their decision-making processes. For example, S9 shared, “I think mindfulness is about what you are thinking about – so if you close your eyes - you look at your thinking and what goes through your mind”. S3 adds that “when the thoughts come up, I just let them come up and I stay at the bus stop”. Overall, there is this sense that an awareness of the thoughts, and thinking, led to a capacity to manage thinking. Indeed, improvements in metacognition was identified by a study at Bangor University (Sanger & Dorjee, 2016) as a key outcome of mindfulness training with adolescents and they cited the potential for increased metacognition to influence improvements in academic performance and well-being.

Harnessing Attention

In addition to their ability to manage thinking, several students commented on the role of mindfulness in their capacity to harness their attention. For example, S17 shared that “mindfulness helps you to concentrate on one thing and eliminates everything else”. Students

volunteered some of the strategies that they found particularly helpful in honing their attention. S15 mentioned, “the mind buses help me getting hold of my thoughts and not getting distracted or preoccupied with what I was thinking or what I was doing”. The students’ comments reflect the outcomes of a number of similar studies (Semple *et al*, 2017), and in a study with adolescents in the US (Liehr & Diaz, 2010) eighty-three percent of students identified improvements in attention as being one of the benefits of a school-based training.

Present Moment Awareness

The role of mindfulness in helping the students to be in the present moment was raised by several students. S16 shares: “I think mindfulness is about being aware of anything that might be of importance at the time”. S4 took this idea of awareness a step further, and spoke of the role of mindfulness training in enabling him to “be in sync with everything in life”. The advantage of being in the present moment in a school context was commented on by S2, who shared that mindfulness “helped me to be present when doing speaking presentations or tests”. A qualitative study carried out by Hennelly (2011) on the effectiveness of Dot B found similar results among adolescents in the UK, where students found the training helpful for being in the present moment.

Emotional and Behavioral Regulation

A number of students commented on the role that the Dot B program played in their ability to manage strong emotions or emotional states. Several emotions or states were identified as ones that could be alleviated by mindfulness, including fear, grief, anger, agitation, and worry. For example, S5 shared: “When something scary is going on I use mindfulness to help me to relax”. In addition, S14 mentioned that “if I am ever worried, I can do mindfulness and everything will be done”. Another student S8 raised the role of mindfulness in helping her to cope with grief: “It helped me with the passing of my bunny”. Overall, there was a sense that engagement with the Dot B training enabled the students to shift from reactive modes of thinking and behaving to more measured responses, which allowed them to stay in touch with themselves and not to lose themselves when upset. S6 sums this up with “I found mindfulness useful because it helped me to step back a bit and respond instead of reacting”. Indeed, this comment sums up the overall purpose of Dot B, which according to Chris Cullen is “to promote the capacity to respond rather than react” (cited in Simpson, 2017, p.11).

What specific strategies are you finding beneficial?

Overall, the students identified a good number of the Dot B strategies as useful in a range of situations. The strategy that was mentioned most often was the 7-11, and it was credited with being a valuable source of immediate relief when stressed or when emotional. For example, S1 notes, “when I am angry, I use the 7-11 to calm myself down”. Rather than identify a single strategy, a number of students identified that combinations of strategies were useful, when they need to be calm, or concentrated, or when they need to come back to themselves. S4 shares “I like the 7-11 and the FOFBOC. They are useful when I am angry and stressed with someone or something. It can calm me down and let me be in the moment”.

Additional strategies that were mentioned, albeit less than the others, were the beditation, and the thought buses, and the 15-minute meditation. The beditation was identified as helpful with both sleeping, relaxation, and for recuperation after sports. For example, S14 says “The

thing that was most useful was the meditation because I had problems going to bed and now, I can sleep finally". In addition, the thought buses proved instrumental in enabling a few students to step back from their thinking. For example, S15 shares that "the mind buses really help me getting hold of my thoughts and not getting distracted or preoccupied with what I was thinking or what I was doing". Noticeably few students referred to the seated meditation as useful to them on a daily basis. Those that did focused on the seated meditations that involved visualization. One of the reasons for this was suggested by S13 who shared, "I think breathing was one of the most important things we did but also boring". He continued with "in time it got more interesting as you could visualize different things, such as the clouds drifting by or buses". Having something visual to focus on seemed important.

How might you use mindfulness in the future?

Overall, for the future students commented that they were most likely to use mindfulness-based approaches for coping with stress. There was a sense that they would be encountering more stress in the future and that this training was preparing them to cope with this. For example, S7 said, "I can use it in the future life because I will have stress with other things – and I enjoyed doing it". The strategies mentioned most often by the students that they would find useful in the future were the 7-11, and the Dot B. For example, S13 shared, "In the future one thing I would do would be the 7-11 and the Dot B as they help me to calm down". Explanations given as to why these strategies were the favorites, centered on the fact that they were short, easy, to use, and useful in an emergency or when they would need to focus.

Interestingly few students commented on the usefulness of the Dot B training for relationships or the development of social skills. This may have to do with the fact that, for the most part, the training focusses on the student as an individual. As Simpson (2017) has identified, it places minimal emphasis on the social sphere, and on the inter-relationships between people. In saying that, it needs to be acknowledged that this study was carried out with the eight-week Dot B program, as opposed to the updated nine-week program version, which places more of an emphasis on empathy, compassion and interpersonal communication.

Conclusion

Overall, students' experiences of the program were positive and beneficial. Students commented, in depth, on the value of the training in relation to their capacity to manage stress, to step back from their thinking, to harness their attention, to regulate their emotions, and to experience a greater degree of present moment awareness. They identified a number of ways in which they were already using a variety of strategies, including the Dot B and the 7-11. They found these practices helpful for a range of purposes both in school and outside of school. In general, they seemed to value short practices over longer practices, as they could implement them at any given moment to find calm, to focus, and to reduce stress. Overall, students commented little on the social benefits of the Dot B mindfulness training, which indicates a need to focus on this important aspect in future trainings and, potentially, in a follow up research study.

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