

Mindfulness-Based Stress Reduction Research in Aotearoa New Zealand

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Abstract

The popularity of mindfulness as a therapeutic approach is growing. International research has shown mindfulness to be an effective treatment for a wide range of physical and psychological conditions. Little research into mindfulness has been done in Aotearoa New Zealand. This report documents a locally conducted waitlist control study of the effectiveness of using Mindfulness-Based Stress Reduction (MBSR) with chronic health conditions. Twenty-nine participants completed the eight-week course in MBSR and the outcomes indicated significant improvements in their physical and psychological health and wellbeing as a result of the training. The qualitative data were thematically analysed and are reported here. Key elements of mindfulness meditation are discussed and comparisons made between the leading mindfulness-based therapeutic approaches. The application of mindfulness techniques and attitudes, and their relevance to counsellors, is considered.

Keywords: chronic illness, MBSR, mindfulness, research, stress reduction

Mindfulness is increasingly being discussed in the therapeutic literature. While its origins lie in the tradition of Buddhist meditation, mindfulness has recently found currency in a variety of different contexts including sports, education, psychology, and several therapeutic disciplines. To date there has been no published research into the effectiveness of mindfulness in Aotearoa New Zealand. One internationally well-researched approach to teaching mindfulness is the Mindfulness-Based Stress Reduction programme (MBSR). This report details the use of MBSR with a group of 29 people with chronic health conditions in a waitlist control study in order to begin to create an Aotearoa New Zealand evidence base.

Counsellors and other health professionals may find themselves working with people with chronic illness and supporting them in developing effective coping strategies to deal with the effects of their illness. With its emphasis on mindfully accepting and opening to life in the present moment, MBSR is one approach that counsellors may find useful. While offered as a group education programme, it contains elements that are transferable to more traditional counselling settings. This article begins by considering the origins of MBSR and defining mindfulness. It then considers the use of mindfulness in other therapeutic approaches, focusing on Dialectical Behaviour Therapy (DBT), Acceptance and Commitment Therapy (ACT), and Mindfulness-Based Cognitive Therapy (MBCT), which have been called the Third Wave of behavioural therapies (Segal, Teasdale, & Williams, 2004). The methodology of the study is then discussed, and the qualitative results presented. The quantitative data from the study are reported elsewhere (Simpson & Mapel, 2011). Two case studies are presented, followed by a discussion of the findings, the study's limitations, and considerations for counselling practice.

Origins of MBSR and definition of mindfulness

Mindfulness is one of the key features of Buddhist meditation, which has a rich 2500-year history, yet its essence is universal (McKay, Wood, & Brantley, 2007). As Eastern practices became better known in the West during the 1970s, mindfulness was identified as a core component of Buddhist meditation that could be taught and utilised without reference to the ritual and religious elements of the larger Buddhist tradition. In 1979, Jon Kabat-Zinn, a neurobiologist working within the Massachusetts Medical School, developed the MBSR programme to help people with a range of physical illnesses that could not be managed effectively by conventional medical treatment. The MBSR programme combines mindfulness meditation, Hatha yoga, and modern psychological and medical principles into a secular, eight-week educational programme that has now been delivered in many locations across the English-speaking world (Kabat-Zinn, 1990).

MBSR teaches participants to develop a new relationship with their physical and psychological pain and distress—an attitude of openness and acceptance rather than resistance and rejection. A large body of research data collected over the past 30 years now indicates that MBSR is an effective approach to alleviating suffering from physical and mental ill-health (Baer, 2003; Grossman, Niemann, Schmidt, & Walach, 2004).

Kabat-Zinn (1990) defined mindfulness as bringing one's complete attention to

the experiences occurring in the present moment in a non-judgemental or accepting way. Mindfulness is an innate ability of the human mind that can become stronger with practice and training. As Germer, Siegel, and Fulton (2005) put it: “Mindfulness is simply about being aware of where your mind is from one moment to the next, with gentle acceptance. This kind of simple attention can have a deeply transformative effect on our daily lives” (p. xiii). Developing a more mindful attitude toward pain and distress enables one to disengage from habitual thoughts and unhealthy behaviour patterns and to respond with more healthy alternatives (Brown & Ryan, 2003). In the MBSR programme, mindfulness is taught through formal meditation exercises in order to strengthen this reflexive attention, as well as by encouraging a general “mindful” attitude to everyday experience.

Literature review

Mindfulness is a key feature of several recently developed therapeutic approaches in addition to MBSR. Dialectical Behaviour Therapy (DBT) was developed by Linehan (1993a), specifically targeting suicidal clients suffering from Borderline Personality Disorder (BPD). Linehan, a long-time Zen practitioner, wanted to devise a treatment that integrated meditation practice with a cognitive-behavioural approach. BPD clients “present with severe problems and intense misery. They are difficult to treat successfully,” often leaving clinicians “feeling overwhelmed and inadequate” (Linehan, 1993a, p. 3). DBT is an intensive and comprehensive treatment approach for BPD sufferers and utilises mindfulness as one of its core skills. The core dialectic in its approach is between change and acceptance and it appreciates the paradox that “acceptance of change” is change in and of itself. Mindfulness is used particularly to promote greater self-acceptance (Follette, Palm, & Rasmussen Hall, 2004). DBT teaches mindfulness in terms of three “what” skills—observing, describing, and participating—and three “how” skills—taking a non-judgemental stance, focusing on one thing at a time, and being effective (Linehan, 1993b). These mindfulness skills are taught in a year-long weekly skills group along with problem-solving and validation strategies as well as distress tolerance, emotion regulation, interpersonal effectiveness, and self-management skills. Individual therapy consists of applying these skills to the client’s daily life.

Acceptance and Commitment Therapy (ACT) emerged from the behaviour analysis wing of psychology and is a synthesis of behavioural and CBT approaches (Hayes, Strosahl, & Wilson, 1999). The goal of ACT is for clients to achieve greater psychological flexibility in order to live their lives better according to their values and

purposes (Hayes, 2004). ACT emphasises a non-judgemental acceptance of all experience (including the irrational, negative, and psychotic) and encourages clients to become passionately interested in their lives according to their own values. Mindfulness skills are taught and serve as the foundation for the principles of acceptance, living in the present moment, and defusion skills. Defusion skills are the ability to step back from and externalise experience and the ability to see phenomena as separate from the person experiencing them. A strong emphasis is placed on accepting one's experience as it is, while simultaneously developing larger and more effective behaviour patterns that align with what the client really wants out of life. Therapy proceeds along the lines of exploring and implementing ever-widening cycles of defusion, acceptance, values, and engagement (Hayes, 2004). In this respect, ACT is as much a change-oriented therapy as an acceptance-oriented strategy.

Mindfulness-Based Cognitive Therapy (MBCT) developed through an attempt to incorporate aspects of MBSR with Cognitive Therapy (CT) for clients with depression (Segal, Williams, & Teasdale, 2002). While initially they believed they could graft mindfulness techniques onto a CT approach, Segal, Williams, and Teasdale were quickly confronted with their own difficulties in accepting negative thoughts, sensations, and feelings, and the requirement that MBSR trainers must be experienced mindfulness practitioners themselves. While the traditional cognitive therapy approach has been to try to change the *content* of the depressed person's thinking, the goal of Mindfulness-Based Cognitive Therapy is "to help individuals make a radical shift in their relationship to the thoughts, feelings, and bodily sensations that contribute to depressive relapse" (Segal et al., 2002, p. 65). This is done through becoming mindful of thoughts, feelings, and sensations as they arise in the present moment and learning to "decentre" from them in order to stop the habitual relapse process occurring. MBCT is offered in an eight-week-long group format, essentially the same as the MBSR programme but catering to the needs of depressed clients. In clinical trials, MBCT appears to halve the relapse and recurrence rate of clinically depressed clients (Segal et al., 2004).

While aimed at different client groups and delivered in different formats, MBSR, DBT, ACT, and MBCT all share mindfulness as a core component and embrace its central features: living in the present moment with openness and acceptance enables a more defused or decentred relationship to the content of one's experience to occur. This new mindful relationship provides the opportunity to *not* engage with negative habitual behaviour and instead to develop new, more healthy cognitive and behavioural choices. Mindfulness encourages people to become more self-aware and intimate

with their own experience, and to learn not to judge, evaluate, or try to fix thoughts, sensations, or feelings as they arise moment by moment. This attitude is more akin to a way of being than a therapeutic technique, and takes patient, consistent training and practice to develop.

Methodology

This study was designed to be a replication study of research (as yet unpublished) undertaken by a team working at the Waikato District Health Board, based in Hamilton, New Zealand. Their study explored whether MBSR could reduce the signs and symptoms of people with chronic physical illness and promote greater wellbeing. The purpose was to establish an Aotearoa New Zealand evidence base with findings that could contribute to the growing body of research internationally.

The current study was funded by the Hawke's Bay Medical Research Foundation with support from the Eastern Institute of Technology and senior clinicians at Hawke's Bay Hospital. The research team consisted of a registered nurse and a counsellor, both with extensive mindfulness meditation experience, and one formally trained in MBSR delivery. Because it was a replication study, the methodology was consistent with the Waikato study and the course content and delivery were consistent with Kabat-Zinn's (1990) original programme.

Recruitment was undertaken through GP and hospital channels and some local advertising. Thirty-seven potential participants contacted the researchers and underwent a screening interview to ensure they met the participant criteria, which included having a stable chronic health problem (such as irritable bowel syndrome, chronic fatigue syndrome, hypertension, cardiac problems, pain, etc.); being an outpatient (able to travel to the hospital venue); being 20+ years old; possessing a good command of the English language; willingness to work cooperatively in a group setting; willingness and physical ability to participate in MBSR training, practise regularly, and keep an MBSR practice record; and being prepared to complete measures of psychological and physical health throughout the research process. The exclusion criteria included hearing, visual, and/or physical impairment or disability that would prevent full participation in MBSR training, regular practice, and/or keeping MBSR practice records; being currently acutely physically or mentally ill; being known to have a psychotic illness or personality disorder; drug and/or alcohol dependency; and being already involved in a regular meditation practice. One potential participant failed to meet the criteria. At the interview, informed consent was also obtained from those who

qualified to participate. Thirty-six participants were randomly divided into two groups. One group would receive the MBSR training initially, followed by the second group receiving the same training according to a waitlist control research design. Four people who agreed to participate did not commence the study, one because of overseas travel, another because of being overcommitted. One had surgery pending, and the last person's letter was returned and they were therefore unable to be contacted. One person withdrew from Group 1 after commencement and two people withdrew from Group 2. Twenty-nine participants therefore completed the study and the findings are drawn from that pool.

Each participant filled out six internationally recognised self-report screening tools before commencement of the training, after the eight-week programme finished, and six months after the completion of their training. These screening tools measured physical and psychological health and wellbeing, and provided quantitative data allowing comparisons over time to investigate the effectiveness of the MBSR programme. The waitlist control design allowed for the comparison of the two groups with each other. It also enabled comparisons within the group that was "waiting," between the time they were initially screened and the time they commenced their training (generally about two months), to ascertain whether their post-training results were due to the MBSR programme or were just a factor of time. Qualitative data were collected via a questionnaire and in a focus group meeting with each group held six months after the completion of the programme. The focus groups were run by the authors and were guided by three questions asking participants to reflect on how the MBSR programme had affected them, and what changes they or significant others had noticed as a result of the training.

The MBSR course itself was conducted in a group format over an eight-week period with weekly evening meetings lasting two and a half hours, as well as a one-day eight-hour retreat held between the sixth and seventh weeks. Participants were taught basic mindfulness skills using breath and body-scan meditations and were guided through gentle Hatha yoga sequences with the focus being on mindful movement. CDs were provided with the meditation and yoga exercises and participants were asked to practise them at home for 45 minutes a day, six days a week. Short lectures on stress, nutrition, emotions, communication styles, assertiveness, and mindful living were offered. Participants were encouraged to bring their mindfulness practice into their everyday activities and experiences. Opportunities for group discussion and sharing of the participants' learning and struggles were provided during each class.

Follow-up was done with participants one month after completion of the programme to see how they were going and to troubleshoot their mindfulness practice if required. Six months after completion of the training, participants were asked to fill out a questionnaire about their current use of the MBSR techniques and to participate in a focus group discussion. The questionnaire inquired about participants' ongoing use of the MBSR programme and asked them two questions relevant to the analysis that follows: a) Describe an example of how you apply mindfulness to your everyday living, and b) Have you made any lasting changes as a result of doing MBSR training, and if so, what are they?

The focus groups utilised a semi-structured discussion format guided by three primary questions: a) Have you or your doctor noticed any changes in your physical health over the time of the MBSR study? b) Have you noticed any changes in your emotional wellbeing? and c) Is there anything else you would like to tell us and the group about how the MBSR practices have impacted on your life? Thematic analysis of this data was carried out and is reported in the next section.

Results

Participants' health and wellbeing improved as a result of their MBSR training and stayed better for six months after training across almost all of the physical and psychological health measures used. These quantitative results, which are reported elsewhere (Simpson & Mapel, 2011), corresponded closely with the qualitative data that are reported here. The qualitative data, obtained through the questionnaire and focus groups that were conducted six months after training was completed, revealed four main themes, with two of those themes having three and two subthemes respectively.

First, positive physiological changes were noted. There were many reports of participants feeling more physically well six months after the MBSR training. For some, their physical improvements had been significant and for one they had been "phenomenal," while for another, "major improvements" had occurred. These improvements among participants related to a variety of symptoms, including eczema, blood pressure, irritable bowel syndrome, reduced frequency and intensity of migraines, and improved management of sinus ventricular tachycardia. Also reported was a decrease in medication use, and better sleeping patterns or less sleep needed, while one person attributed giving up smoking to MBSR. On the other hand, one participant said that her arthritis had not improved and one stated that her blood pressure continued to remain too high.

Second, there were changes in behaviour. Participants noted generally positive developments related to lifestyle and health that they attributed to the MBSR training. These included being able to do or work more, to better manage behaviours that had previously been difficult or stressful (e.g., driving, travel, moving house, living alone), to manage pain, and to take better care of themselves. Slowing down and taking more time out for themselves was mentioned, as was the regular use of yoga, meditation, or mindfulness—particularly when feeling stressed. Changes in diet and consumer choices were noted alongside an increased awareness of body sensations, and the ability to recognise tension and anxiety as they arose and to reduce them were important behavioural changes. Several participants described their life as “more disciplined,” “balanced,” and “controlled,” and one declared they felt “invincible—able to do things unimaginable before.” A representative response from one participant was: “I conduct my life at a slower pace and I am able to disregard the negative issues in my life. Being in a relaxed state mentally and physically is now my priority.”

Third, healthy psychological changes occurred in: a) attitudes; b) quality of life/wellbeing; and c) self-efficacy/agency. Regarding attitudes, several participants shared that they were more peaceful, had a more positive attitude toward life, were kinder to themselves, and were putting themselves first more often. An openness and “appreciation of things as they are” were described in relation to what had been difficult feelings such as grief, sadness, and stress, and this allowed room for new and unexpected things to occur. Several participants stated that their attentional focus had changed and they were observing and enjoying the present moment more, living for the moment and “smelling the roses.” This helped them to put their lives into perspective and “not fixate on things like in the past, which was a great relief.”

Many were clearer and more confident about their abilities to manage stress and were actively involved in slowing down, looking for balance, and knowing their own limitations. Comments also supported feeling a greater sense of interconnectedness with the world and developing a more holistic appreciation of their bodies, feelings, thoughts, food, and environment. One participant commented, “The confidence I have gained helps me through everyday life. I have a much more positive attitude and am prepared to give any of them a go. This has reduced anxiety.”

Healthy psychological changes in terms of quality of life and wellbeing were expressed by participants in a variety of ways. The most common response was a greater sense of appreciation and enjoyment of the moment and particularly of the little things in life, such as birds singing, their environment, or simply walking in their gardens. For

some, the training had produced dramatic changes, expressed as “life is worth living now” and the comment that the course had “given me back my life.” Others mentioned that their lives were more “stable,” “calmer,” there were “fewer mood swings,” and “more clarity of mind.” An ability to manage their stress and anxiety was shared by several participants and expressed by one as “I am less likely now to get as deeply depressed as I was before. I still hit lows but they are not as deep or as long. I can get up and go on again.”

Healthy psychological changes in terms of self-efficacy or agency were an important element for many participants. The ability to feel that they had some control over their lives and were able to consciously make choices was a recurrent theme in the data. Participants’ comments around this theme provided insight into how they were using the MBSR techniques to good effect. For some, knowledge and confidence that their stress and symptoms were manageable and could be worked with was the key, while others had developed particular applications that worked in their personal circumstances. One participant expressed the former this way: “The most lasting change has been the knowledge that IT IS POSSIBLE for even a stress junkie like myself to de-stress. Even if I don’t always practise what I preach, I have that knowledge now. Just the knowledge I can do it keeps me less stressed.” Expressions of the latter included: “Not getting worried about abdominal pain, relaxing and waiting for it to go—which has worked;” or “[I] do yoga when muscles are tight and I now know when they are tight or sore;” or “I let go of mind-chatter/worries/what if’s, etc., and just be present and feel sensations in the now;” and “I still get very uptight virtually every day but I slow myself and thoughts down and just breathe. After a while I am not as tense as before.”

The fourth theme included interpersonal changes around boundaries and relationships, and feedback received from others. In terms of boundaries, several participants mentioned they were more conscious of whom they spent time with and they were deliberately choosing not to associate with negative people so much. Alongside this, for some, was developing the ability to say “no” and not to be so concerned about what other people thought about them. Others found themselves sharing their experiences and the techniques of MBSR with their friends, while yet others commented that their relationships within their families had improved.

In terms of feedback, participants stated they had received feedback from family, friends, and health professionals. In general, the feedback comprised positive recognition of differences such as the participants’ looking well and seeming more relaxed. One participant commented that her partner “notices I’m happier, less bothered, more positive, and the world is a ‘beautiful place.’” Others commented

that their family noticed them trying to live more in the present moment, and one had a husband who “nudges me to meditate when it has been too long.”

Case study illustrations

Two case studies—one male, one female—are offered to personalise the participants’ experience of MBSR. These particular case studies were chosen to illustrate the positive and interconnected changes in their chronic health conditions that are representative of many participants’ experience.

Alex (a pseudonym) is a 38-year-old Pākehā woman who works part time and is a solo mother to her two children. She has suffered from irritable bowel syndrome (IBS) since the age of ten and this has severely affected her life and caused high levels of anxiety. She described how she knows where every toilet is in town and how her IBS has caused her to restrict her social activities and even decline going for walks with her children “in case she needs a loo.” She had tried numerous allopathic and alternative remedies for her condition but with no success. Her goals for the programme at the outset were to find another way of handling stress better so that her life could be less restricted; to try something new, and to make time for relaxation and perhaps gain greater peace of mind.

At the six-month follow-up, Alex wrote “yippee” on her IBS questionnaire, as she had been symptom-free for a while and was “hooked on mindfulness.” She was able to go walking again and had even ridden her bike for the first time in 20 years. She was continuing to practise yoga one to three times a week, using sitting meditation to “gather her thoughts,” and doing informal mindfulness activities like taking “breathing breaks” and bringing awareness to her communication nearly every day. She had dug a vegetable garden and made positive changes in her diet. She reported, “I am in control over my emotions around my children, concentrating on living in the moment. I am eating better and taking back control of my life.” She stated she was less likely to “lose her cool,” as she was noticing when she was getting angry and starting to stress. Alex decided to give up smoking the day after finishing the course and had not smoked for six months. “MBSR training has etched in me a way of living that I can extremely benefit from.” Alex scored herself eight out of ten for achieving her original goals and scored MBSR ten out of ten for its usefulness. Her ability to utilise the mindfulness techniques and keep them going for six months had made a significant contribution to a less stressed and restricted lifestyle, which translated into feeling more control over her life and having a greater sense of wellbeing.

Peter (not his real name) is a 54-year-old Pākehā man who has suffered high blood pressure for 30 years and has been taking medication for it during the past eight years. He had a stroke last year and continues to struggle with some weakness on one side of his body and some speech hesitation as a result. His personal goals for participating in the study initially were to become an improved person in terms of his breathing, yoga, and every part of his life.

At the six-month follow-up, Peter was continuing to use the formal body scan and sitting meditation more than four times a week, with a preference for the former. The breathing exercises had had a huge impact on his blood pressure and, if anything, it was too low now. He began the day early with meditation and found that helped set a calm and relaxed tone for the rest of his day. Peter was also using informal mindfulness techniques daily, including taking “breathing spaces” and cultivating awareness of daily activities such as eating, body sensations, and communications. Peter stated, “I now consciously think in the present moment a lot more. I try to use it mostly when I am alone and occasionally when I am with somebody.” He considered he had made lasting changes as a result of MBSR: “I am totally mindful about everything in my life and it is wonderful to watch the changes it has brought, e.g., eating, breathing.” He gave himself top marks out of ten for the achievement of his original goals and scored MBSR ten out of ten for its overall usefulness. Peter’s commitment to mindfulness practice had resolved his long-standing high blood pressure issue and he was feeling much more peaceful and content within himself and with the world.

Discussion

The results of the qualitative data were very positive. Participants found a range of different ways to engage with the MBSR training and to make it work for their lives in meaningful ways. Overall, they got better and stayed better six months afterwards and reported an increase in their physical and psychological health and wellbeing. The results of this study align closely with overseas research carried out over the past 30 years (Baer, 2003; Grossman et al., 2004), indicating that MBSR is an appropriate and effective intervention in an Aotearoa New Zealand context.

Two key components of mindfulness meditation are: 1) being encouraged to live in the present moment with openness and acceptance, and 2) developing a more defused or decentred quality of attention toward experience. Focusing on the present moment with openness and acceptance enabled participants to develop a greater appreciation of their experience. In order to do this they had to slow down, and this subsequently led to a greater sense of peace and calm in their lives and an increased

quality of life and sense of wellbeing. The practice of breath and body-scan meditations, yoga, and mindfulness of daily life activities established and strengthened an increased openness and acceptance toward life. This in turn instilled a greater sense of hope in many participants.

Developing a more defused or decentred reflective quality of attention toward experience taught participants that their pain and suffering was something that could be worked with and they did not have to sit silently and suffer. Their thoughts, feelings, and sensations were not core to their identity, but rather momentary phenomena passing through awareness. They began to appreciate the possibility of responding in a new, wise, and compassionate way, rather than reacting to pain or distress in old habitual ways of aversion or avoidance. Participants also learned that they could direct their attention and that they could choose what to attend to or not. This realisation—that through mindfulness there was the possibility of developing a new relationship with their chronic illness and a range of different responses to it—was empowering and life-altering for many participants.

MBSR was designed to be delivered in a group format, and the collective learning that occurs and its relatively inexpensive delivery are clearly two of its strengths for the health system. However, the skills of mindfulness and its basic principles could also be taught to clients individually. The techniques of mindfulness meditation and the attitude of mindful living is something that counsellors can develop for themselves and then offer to their clients. Encouraging clients to slow down, to live more in the present moment, and to defuse or decentre their experience would benefit them and provide a platform for their acquiring better coping strategies. The results of this research indicate that teaching people how to develop a new relationship with their stress and pain can be significant. Learning to meditate, reading some of the numerous books on mindfulness, and attending a training course could be some of the ways to further an interest in this approach. A future article could consider incorporating mindfulness into the work of counselling practitioners.

This study was conducted by a registered nurse and a counsellor, while overseas, MBSR programmes have been delivered by a wide range of health professionals, attesting to its flexibility. The use of mindfulness approaches is not limited to any particular professional group. However, there is ongoing discussion regarding the extent of or necessity for mindfulness practice and training for MBSR instructors themselves (Dawson & Turnbull, 2006; Grossman et al., 2004; Kabat-Zinn, 1990; Segal et al., 2002) and this is an area in need of additional research.

Several limitations of this study are worthy of note. A sample size of 29 is relatively small and this could be enlarged through the inclusion of the Waikato DHB study or further studies in Aotearoa New Zealand. All of the data were obtained through subjective self-report measures and these could have been made more reliable with the use of objective data sources. While efforts were made to collect both positive and negative data from participants, the fact that the focus groups were conducted by the researchers themselves may have created a “halo effect” on the responses given. Follow-up with participants who dropped out of the study may have provided further insight into the limitations of this approach.

The participants who completed this study were highly motivated and committed and thus it had a very low dropout rate. This high level of commitment is needed given the number of hours of homework required by participants each week and may not be achievable with all populations. The participants in this study were 80% female and only two identified themselves as Māori and one other as non-Pākehā; thus, they were not representative of the New Zealand population as a whole. Further research is needed to determine whether MBSR is suitable for Māori and for New Zealand men, as the sample size was so small in this study.

Conclusion

Participants in this study benefitted greatly from the MBSR programme. Mindfulness meditation helped them to increase their physical and psychological health and well-being and gave them tools to manage their chronic health problems more satisfactorily. Internationally, MBSR has been shown to be beneficial to chronic sufferers of ill-health and this research has suggested it can be effective in an Aotearoa New Zealand context as well. Mindfulness approaches have also been applied to other client groups and have been found to be successful in treating a wide range of conditions. Mindfulness techniques are used to practise and strengthen the mind’s inherent ability to be self-aware and to develop a reflective sense of detachment from present-moment experience. While designed to be delivered in a group format, MBSR and its related approaches could be adapted for one-to-one counselling. Encouraging a more open and accepting attitude to present-moment experiences and developing a more defused or decentred perspective on thoughts, sensations, and feelings is a powerful alternative to habitual ways of being and is effective in coping with stress and pain.

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Mindfulness-Based Stress Reduction for Children (MBSR-C) MBSR-C is a mindfulness programme for children that has been adapted from the MBSR programme for adults. However, it would be useful to conduct local research to explore the effectiveness of mindfulness in education settings in Aotearoa/New Zealand. Recommendation 1: Well-researched pilot programmes should be undertaken within New Zealand education settings, with a view to building a local body of evidence around the effectiveness of mindfulness programmes. Objective: To identify whether mindfulness-based stress reduction is effective in improving physical health outcomes for long-term physical conditions. Method: A systematic review of the literature (retrieved from MEDLINE, PubMed and PsycINFO). Results: Fifteen studies were included in the review. None of the studies assessed as having a low risk of bias demonstrated significant improvements in physical health status although there was some emerging evidence that mindfulness-based stress reduction may be useful in pain conditions. There was some preliminary evidence that it may also be effective. Mindfulness creates a new relationship to experiences. According to some psychologists, the core mindful practices of intention, attention, and attitude lead to a fundamental shift in perspective they are re-perceiving. Re-perceiving allows us to dis-identify from thoughts, emotions, and body sensations as they arise, and simply be with them instead of being controlled or defined by them. Mindfulness based stress reduction (MBSR) for improving health, quality of life and social functioning in adults. Campbell Systematic Reviews. Impact of Mindfulness-Based Stress Reduction training on intrinsic brain connectivity. Neuroimage 2011;56(1):290-8. Khoury B., Lecomte T, Fortin G, Masse M, Therien P, Bouchard V, Chapleau MA, Paquin K, Hofmann SG. Mindfulness-Based Stress Reduction (MBSR) reduces stress reactivity through contemplative practices, primarily meditation. The creator of the program, Kabat-Zinn (1994), defines mindfulness as "paying attention in a particular way; on purpose, in the present moment, and nonjudgmentally" (p. 4). Quantitative research on this intervention has exploded in the past decade, with numerous replications validating the effectiveness of this unique 8-week class for medically and psychiatrically ill patients. MBSR teachers report that their students often experience a shift in their understanding of mindfulness practice: from a method of goal-attainment to a way of being (Kabat-Zinn, 1990; Santorelli, 1999). This shift in intention has not been studied directly. Our guiding