British Journal of
Learning Disabilities
The Official Journal of the British Institute of Learning Disabilities

ORIGINAL ARTICLE

Thematic analysis of the effectiveness of an inpatient mindfulness group for adults with intellectual disabilities

Hatice Yildiran and **Rachel R. Holt**, Community Support Unit, Hertfordshire Partnership University, NHS Foundation Trust, 14 Stratford Road, Watford, Hertfordshire, WD17 4DG, UK (E-mail: hatice.yildiran@hpft.nhs.uk)

Accessible summary

- Mindfulness helps people focus instead of worrying about the past or future.
- We talked to six people who took part in a mindfulness group.
- They all had intellectual disabilities and were in hospital for mental health problems.
- They told us the group helped, and we hope that mindfulness can help other people too.

Summary

The study focused on the effectiveness of group mindfulness for people with intellectual disabilities in an assessment and treatment unit. Six participants with mild or moderate intellectual disabilities were interviewed using semi-structured interviews. The interviews focused on identifying the benefits and difficulties of using mindfulness. The interviews were analysed using thematic analysis. Five themes were identified which were categorised into interpersonal ('helping people') and intrapersonal ('focusing on one particular thing'; 'improving skills'; get rid of all nasty bad stuff you want to get rid of') benefits. The theme 'bit too late to teach old dog new tricks' captured the difficulties encountered. The themes highlighted that people with intellectual disabilities were able to form an understanding of mindfulness and were able to benefit from the intervention.

Keywords *Group, inpatient, intellectual disabilities, mindfulness, thematic analysis*

Introduction

Over the years, Buddhist meditative practices have been making their way into the clinical arena and being incorporated into traditional Western psychotherapies (Felder *et al.* 2012). One such meditative practice is that of mindfulness, the art of being present in the moment and accepting it without judgement ('paying attention in a particular way: on purpose, in the present moment, and non judgmentally' (Kabat-Zinn 1994, p.4). This requires two components: firstly, the ability to pay attention to the moment and secondly, to be curious, open and accepting of your experience in the moment (Bishop *et al.* 2004).

There is an emerging evidence base for the effectiveness of mindfulness in the treatment of various mental health problems such as depression (Siegal *et al.* 2002) and anxiety (Hofmann *et al.* 2010). It is also a National Institute for Health and Clinical Excellence (NICE)-recommended treatment (as part of dialectical behaviour therapy) for people with borderline personality disorder (NICE 2009). Mindfulness

  doi:10.1111/bld.12085

interventions have also been found to be effective with diverse client populations including children (Burke 2010), adolescents (Biegel 2009) and people with intellectual disabilities (Singh *et al*. 2007).

The growing evidence base for people with intellectual disabilities is of particular interest to this paper. There is increasing evidence for the 'Soles of the Feet' programme (Singh *et al*. 2003) which encourages people to shift their attention from their angry thoughts to a neutral point on their body – soles of their feet. The benefits of involvement in the programme have included people with moderate intellectual disabilities being able to manage their anger in constructive ways and thus avoiding their community placements from breaking down (Singh *et al*. 2007).

An interesting additional benefit of mindfulness can be seen when looking into the effects it has on staff caring for people with intellectual disabilities. This is particularly relevant in the light of the recent Winterbourne View abuse scandal of 2011, which identified frequent use of inappropriate restraint (Care Quality Commission 2011). Although factors contributing to the abuse at Winterbourne View are complex and systemic, frequent use of restraint has been linked to staff stress caused by work related issues (Paterson *et al*. 2011). There is evidence that mindfulness is effective in reducing psychological distress for staff working with people with intellectual disabilities. In particular, the promotion of acceptance in carers and teachers has been found to be effective with staff reporting less stress, particularly those who did not have a professional qualification and may have been more vulnerable (Noone & Hastings 2010). Further benefits of mindfulness for staff and services include reduction in physical restraint by staff (Singh *et al*. 2009) and cost effectiveness by reducing sick days and medical rehabilitation for staff who have been injured (Singh *et al*. 2008).

The effectiveness of mindfulness in intellectual disabilities has been attributed to the experiential nature of the activities which do not require sophisticated verbal reasoning skills as some traditional psychotherapies warrant such as cognitive behaviour therapy (Brown & Hooper 2009). Current interest in the field appears to be in relation to further adaptations of mindfulness to suit the needs of people with intellectual disabilities. However, research is at the early stages, and further investigations are needed in the area of adaptations (Robertson 2011).

The current study aimed to explore people with intellectual disabilities' understanding of mindfulness, including the benefits and difficulties they experienced in their use of mindfulness exercises.

Methods

The current study explored a range of mindfulness exercises, taught and practiced during a weekly relaxation and mindfulness group. The group was held on an inpatient assessment and treatment unit for people with intellectual disabilities and acute mental health problems. The inpatient therapy room was transformed into a space which was separate from other clinical activities which took place there (e.g. one-to-one sessions) with input from participants. Sensory lamps and light background music were used to transform the space.

One exercise was an adaptation of the raisin exercise (Kabat-Zinn 2012). The raisin script was generalised to fruits. Participants were prompted to focus on different sensory features of the fruit. They were prompted to focus on what it feels like in their hand, what colours they can see, what shape it was, focus on the scent, taste and sounds whilst eating the fruit. The fruit was used as a tangible focal point for participants to orient themselves to the present moment. The group members focused on a different fruit each week.

The relaxation and mindfulness group also involved other mindfulness-related exercises. Muscle tension and relaxation was used with a mindfulness element including a body scan; participants were prompted to notice the changes in their bodies and locate where the warm feelings were. Deep breathing whilst meditating on the breath was also used in the group; participants were prompted to focus on the tip of their nose, noticing the sound of the breath and the air on the face. Further olfactory experiences were explored in the group; incense sticks and candles were used to focus on scents; participants were prompted to focus their attention on the scents of fruits and flowers.

During times where it was evident that participants' thoughts drifted away from the present moment, they were reminded to bring their focus back to the tangible anchor point used in the exercises which included fruits, incense and candle sticks, warm feelings in their body and the tip of their nose.

The group was facilitated by trainee and assistant clinical psychologists. It had been running for 1.5 years at the time the interviews took place for this study.

Participants

Seven inpatients who had taken part in the group were invited to take part in the study. Group participants who had been discharged from the inpatient unit were not contacted due to the potential difficulties (such as possible confusion and misinterpretation of being contacted by the inpatient team). One participant was discharged during the study phase and was interviewed in their community placement.

Six service users chose to participate in the study. Smaller sample sizes are accepted in the literature for qualitative research as evidenced in the following quote:

> Qualitative research methods differ from quantitative approaches in many important aspects … Quantitative

> researchers capture a shallow band of information from a wide swath of people and seek … to understand, predict, or influence *what* people do. Qualitative researchers generally study many fewer people, but delve more deeply into those individuals, settings, subcultures … hoping to generate a subjective understanding of *how* and *why* people perceive … interpret, and interact … both approaches are theoretically valuable(Barker & Edwards 2012).

Participants had diagnoses of mild or moderate intellectual disabilities. All the participants had additional diagnoses including paranoid personality disorder, autism, recurrent depressive disorder, anxiety disorder and epilepsy. They were all inpatients at a specialist assessment and treatment unit for people with intellectual disabilities and acute mental health problems. The sample consisted of four females and two males. The age range was 21–64 years (mean age 44 years). The number of sessions of mindfulness that the participants had attended was between 2 and 23 (mean number of sessions attended was 10).

Procedure

All participants were deemed to have capacity to consent by their Clinical team. Informed consent was given by all the participants. Semi-structured interviews were used for data collection during June 2012. The interview schedule was developed by the first author generating topics relevant to the experience of mindfulness in a group setting – which included topics about understanding of the intervention, benefits and difficulties. The interview schedule was discussed and agreed by both authors. The interview included open questions (e.g. 'What do you do in the group') and closed questions related to the practicalities of the group (e.g. 'The relaxation and mindfulness group is at 4 pm on Wednesdays. Are you happy with this time and date? Yes/No').

The first author carried out all the interviews one-to-one with participants, in a quiet area of the inpatient unit. All participants knew the main interviewer, who was one of the facilitators of the group. The participants' responses were written verbatim by the first author during the interviews, due to anticipated distress that audio recordings may cause, particularly participants with paranoid personality disorders. Written transcripts were anonymised and stored in a locked filing cabinet.

Materials from the relaxation and mindfulness group were used to aid participants' understanding of the questions and to aid their memory (the first author gave a visual demonstration of holding the fruit by cupping her hand and showed participants the CDs, incense sticks and candles). These aids were used as it was thought that the participants may have difficulties with orientating themselves to the topic of discussion and to associating the questions to their experiences in the group.

Results

The data were analysed using thematic analysis. This is a method for identifying and analysing patterns in qualitative data (Braun & Clarke 2013). Thematic analysis was used because it is relatively quick to do and accessible to novice researchers (Braun & Clarke 2006) and thus suitable for the two authors who are both primarily clinicians rather than researchers. Further advantages are its flexibility and potential to generate unanticipated insights.

The current study used the six phases of thematic analysis proposed by Braun & Clarke (2013). The first phase of 'familiarisation' of the data was achieved by the first author conducting the interviews and both authors reading and rereading the interview transcripts. The second phase, 'coding' involved collating and coding quotes taken from the interviews. 'Searching for themes' was achieved by looking for similarity between the codes and grouping similar codes together. This was initially done by the two authors individually. 'Reviewing themes' was achieved by both authors sharing their analyses of the data and comparing and discussing themes. Themes that emerged in both authors analyses and worked in relation to the coded extracts and the entire data set were retained. Themes that had only emerged in one analysis were discussed and checked to see whether they met the threshold of working in relation to the data. Themes that were similar and did not provide additional information about the data were collapsed together. 'Defining and naming themes' was achieved by ongoing analysis. It was decided to use quotes taken from the data as theme headings. The authors felt this was an important aspect of giving people with intellectual disabilities a greater presence in this article.

In addition to the six phases, the analysis for this study also included an additional phase of 'reflection'. After conducting the interviews and before starting analysis, the first author did not feel the study had yielded rich data to contribute to the evidence base for mindfulness in intellectual disabilities. This was due to assumptions of the first author in relation to her position as the group facilitator and interviewer for the study. On reflection, the first author realised she was expecting to hear explanations of mindfulness she had used in the group when she interviewed the participants. In contrast, the interviewees provided a variety of accounts of mindfulness which made her doubt the effectiveness of the group sessions. However, upon revisiting the interview transcripts, it became clear that perhaps the findings produced a stronger case for the effectiveness of mindfulness in intellectual disabilities, as the participants had attached their own meaning to mindfulness which was more relevant to their experiences.

Following the analysis, five broad themes were identified (see Fig. 1).

Focusing on one particular thing

The experience of participants fitted the theoretical aim of mindfulness, of enabling people to pay attention in a particular way. This helped participants to have control over the focus of their attention:

Think about something else because I hear voices

Not think about things from past life

It also enabled one participant to change their mood based on their orientation towards their experience:

Not worry about what's around you at the moment

However, the focus of that attention was not always on the present moment (as mindfulness is defined by e.g. Kabat-Zinn 1994), but could be on other time or place:

Happy memories
Seeing the future clearly
Smell … think of what country it comes from

Improving skills

Participants recognised a range of skills that they attributed to participating in mindfulness. Some of these were physical skills, based on the exercises used. They were connoted in a positive way by participants:

Makes arms strong
Practice breathing

Other skills were psychological. Participants were able to use their own words to describe the skills they had learnt:

Learn more relaxation techniques
Close mind … close brain right down and switch off

Helping people

Interestingly, participants reported that their involvement with mindfulness had enabled them to think about their relationships with others and to take actions that were caring towards others.

Brought candle … share with other service users
Want to relax to look after people
Come back … help at group don't have to pay me
Caring for other people

Get rid of all nasty bad stuff you want to get rid of – staying calm and being happy

Participants attributed improvements in their mood and reactions to the mindfulness exercises:

More relaxed at night
Improve my anger
If I get angry and agitated … know what to do before out of control
Talk to people a little bit calmer instead of shouting at them
Don't get cross anymore
Help me release tension
Happy in a good mood
Makes you feel alright … feel good
Not very happy … squeeze panda

Bit too late to teach old dog new tricks

Learning mindfulness was effortful for participants. The theme of 'bit too late to teach old dog new tricks' encapsulated all the difficulties encountered whilst using mindfulness and the things the participants did not like about it. Some participants doubted their own ability to learn the techniques:

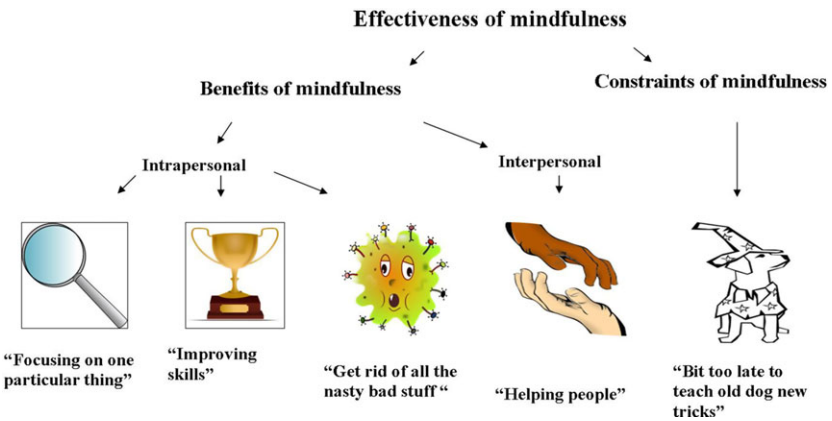

Figure 1 Five themes which emerged from data set.

Something never done in past life before…bit hard to do it

Hard to breathe from nose and mouth

Didn't work for me…tensed in all my muscles

Others felt that there wasn't a good match between their personal attributes and mindfulness:

Exercises hurt knee

I find other ways of relaxing in my room listening to music

I don't like that kind of music [likes music with words]

Don't have all the materials

Discussion

In this study, people with intellectual disabilities were able to form an understanding of mindfulness. The themes that emerged in the study can be divided into three broad categories of intrapersonal and interpersonal benefits of mindfulness, and difficulties of learning and using mindfulness. Intrapersonal benefits were about reducing difficulties and increasing positives (in relation to memories, experiences and thoughts). This included the themes of 'focusing on one particular thing', 'improving skills', 'get rid of all nasty bad stuff you want to get rid of'. Interpersonal benefits included the theme of 'helping people'. The interpersonal benefits may have been pronounced due to the intervention being offered in a group setting.

Participants' feedback on their experience of mindfulness showed a similarity to descriptions of mindfulness in the literature. This was evident in the themes which emerged in the study, for example, 'focusing on one particular thing' which highlighted the importance of focusing one's attention. However, the focus was not always 'the moment', but for some participants was on another time or place. Despite this, participants showed benefits that are similar to those associated with being mindful in the moment, such as stress reduction and reduced emotional reactivity (Davis & Hayes 2011). It is of note that participants were able to benefit from the techniques even whilst having a different internal experience to 'classic' mindfulness.

When considering adaptations of mindfulness for people with intellectual disabilities, it may be beneficial for more sessions to be offered, or for different or additional explanations and/or techniques to be introduced. It would be interesting to see whether this led to greater benefits.

There were also some themes which were more loosely related to mindfulness. Some of the participants understanding of mindfulness appeared to be in relation to the relaxation effects it induces (e.g. 'Learn more relaxation techniques', 'Want to relax to look after people', 'More relaxed at night').

The literature appears to convey a mixed relationship between mindfulness and relaxation. Although the relaxing effect of meditation practices has been documented (Wallace *et al*. 1984), it is not regarded as the primary purpose of mindfulness meditation (Shapiro 1982) but rather a secondary gain. Jain *et al.* (2007) compared mindfulness meditation with relaxation training in relation to their effects on distress, positive states of mind, rumination and distraction. They found that both interventions produced similar stress reduction compared to no treatment control; however, mindfulness produced an additional benefit in reducing ruminative thoughts.

People with intellectual disabilities may find it easier to report relaxing effects of meditation as they may find it easier to identify these from the feedback of their body's response to it and may find the abstract nature of reporting on thoughts more difficult. This difference may be one produced by language and communication difficulties. It may also have been due to participants' relative level of exposure to the two interventions, mindfulness being a new skill they had not had previous experience of, whereas all of the participants had experience of relaxation techniques prior to attending the group.

It surprised the authors that one of the themes 'helping people' described participants becoming more caring towards others. It has been claimed that mindfulness skills enhance the capacity for caring relationships with others (Siegel 2007), which was the experience of participants in this study. This is one of the mechanisms that may enable mindfulness to increase the skills of staff who support people with intellectual disabilities. Research has shown that mindfulness training enables primary care physicians to be more empathic and caring of their patients (Krasner *et al*. 2009). Perhaps it should have been no surprise that it also happens for people other than care staff who learn mindfulness.

Some of the difficulties in engaging in mindfulness described by the theme 'bit too late to teach old dog new tricks' are related to learning. Participants in the study all had intellectual disabilities and are in a culture where they would be more often described as having 'learning disabilities'. This may increase the likelihood of individuals feeling daunted and lacking confidence about learning new techniques.

Limitations of study

One of the limitations of the study is in relation to the first author having a dual role as relaxation and mindfulness group facilitator and interviewer. The dual role of facilitator and interviewer was used as it was felt that familiarity will help participants orient themselves to the study. However, it could have affected the responses of the participants, biasing them towards the positive (social desirability effect).

An additional limitation was in relation to nature of the group sessions which combined mindfulness with relaxation techniques. This may have contributed to the participants'

reports of the relaxation effects mindfulness induced for them. The authors decided to offer mindfulness, a relatively new skill with a familiar intervention of relaxation to encourage attendance in the group. It would be interesting to repeat this study for a mindfulness group without relaxation.

Although staff participated in the sessions along with service users, they were not interviewed as part of this study. It would be valuable to analyse their experiences, both in terms of the effect of mindfulness on their own practice, and any impact they perceived on the service users.

Implications for practice

The themes identified in the study highlighted that people with intellectual disabilities can develop an understanding of mindfulness and identify positive impacts this can have on their lives. The effectiveness of mindfulness has been well documented in the literature, and it is encouraging that people with intellectual disabilities within an inpatient setting can also benefit from this. There may be a need for further adaptations to mindfulness to suit the communication needs of people with intellectual disabilities, for example, offering more sessions, more visual prompts, and using objects of reference.

Acknowledgements

Grateful thanks is given to Kathie Parkinson (Chartered Clinical Psychologist); Rebecca Davenport (Trainee Clinical Psychologist) and Jesvir Dhillon (Assistant Psychologist) for supporting in the setting up and facilitating of the group.

References

Barker E.S. & Edwards R. (2012) How many qualitative interviews is enough? NCRM, Available at: http://eprints.ncrm.ac.uk/2273/ (last accessed on 25 October 2013).

Biegel G.M. (2009) Mindfulness-based stress reduction for the treatment of adolescent psychiatric outpatients: a randomized clinical trial. *J Consult Clin Psychol*, **77**: 855–66.

Bishop S.R., Lau M., Shapiro S., Carlson L., Anderson N.D. *et al.* (2004) Mindfulness: a proposed operational definition. *Clin Psychol Sci Pract*, **11**: 230–41.

Braun V. & Clarke V. (2006) Using thematic analysis in psychology. *Qual Res Psychol*, **3**: 77–101.

Braun V. & Clarke V. (2013) Methods: teaching thematic analysis. *Psychologist*, BPS, **26**: 120–3.

Brown F.J. & Hooper S. (2009) Acceptance and commitment therapy (ACT) with a learning disabled young person experiencing anxious and obsessive thoughts. *J Intellect Disabil*, **13/3**: 195–201.

Burke C.A. (2010) Mindfulness-Based approaches with children and adolescents: a preliminary review of current research in an emergent field. *J Child Fam Stud*, **19**: 133–44.

Care Quality Commission (2011) Review of compliance: Winterbourne View.

Davis D.M. & Hayes J.A. (2011) What are the benefits of mindfulness? A practice review of psychotherapy-related research. *Psychotherapy*, **48**: 198–208.

Felder J.N., Dimidjian S. & Segal Z. (2012) Collaboration in mindfulness-based cognitive therapy. *J Clin Psychol*, **68**: 179–86.

Hofmann S.G., Sawyer A.T., Witt A.A. & Oh D. (2010) The effect of mindfulness-based therapy on anxiety and depression: a meta-analytic review. *J Consult Clin Psychol*, **78**: 169–83.

Jain S., Shapiro S.L., Swanick S., Roesch S.C., Mills P.J. *et al.* (2007) A randomized controlled trial of mindfulness meditation versus relaxation training: effects on distress, positive states of mind, rumination and distraction. *Ann Behav Med*, **33**: 11–21.

Kabat-Zinn J. (1994) *Wherever you go, there you are: mindfulness meditation in everyday life*. New York, Hyperion.

Kabat-Zinn J. (2012) *Mindfulness for beginners: reclaiming the present moment and your life*. Louiseville, KY, Sounds True Inc.

Krasner M.S., Epstein R.M., Beckman H., Suchman A.L., Chapman B. *et al.* (2009) Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians. *JAMA*, **302**: 1284–93.

NICE (2009) Borderline personality disorder (BPD) (CG78).

Noone S.J. & Hastings R.P. (2010) Using acceptance and mindfulness – based workshops with support staff caring for adults with Intellectual disabilities. *Mindfulness*, **1/2**: 67–73.

Paterson B., Leadbetter D., Wilkinson D. & Bowie V. (2011) How corrupted cultures lead to abuse of restraint interventions. *Learn Disabil Pract*, **14**: 24–8.

Robertson B. (2011) The adaptation and application of mindfulness – based psychotherapeutic practices for individuals with Intellectual disabilities. *Adv Ment Health Intellect Disabil*, **5/5**: 46–52.

Shapiro D.H. (1982) Overview: clinical and physiological comparisons of meditation with other self-control strategies. *Am J Psychiatry*, **139**: 267–74.

Siegal Z.V., Williams J.M. & Teasdale J.D. (2002) *Mindfulness-based cognitive therapy for depression*. New York, NY, The Guildford Press.

Siegel D.J. (2007) *The mindful brain: reflection and attunement in the cultivation of well-being*. New York, WW Norton.

Singh N.N., Wahler R.G., Adkins A.D. & Myers R.E. (2003) Soles of the feet: a mindfulness-based self control intervention for aggression by an individual with mild mental retardation and mental illness. *Res Dev Disabil*, **24/3**: 158–69.

Singh N.N., Lancioni G.E., Winton A.S., Adkins A.D., Singh J. *et al.* (2007) Mindfulness training assists individuals with moderate mental retardation to maintain their community placement. *Behav Modif*, **31**: 800–14.

Singh N.N., Lancioni G.E., Winton A.S., Singh A.N., Adkins A.D. *et al.* (2008) Clinical and benefit-cost outcomes of teaching a mindfulness – based procedure to adult offenders with Intellectual disabilities. *Behav Modif*, **32/5**: 622–37.

Singh N.N., Lancioni G.E., Winton A.S., Singh A.N., Adkins A.D. *et al.* (2009) Mindful staff can reduce the use of physical restraints when providing care to individuals with Intellectual disabilities. *J Appl Res Intellect Disabil*, **22/2**: 194–202.

Wallace R.K., Benson H. & Wilson A.F. (1984) A wakeful hypometabolic physiologic state. In: Shapiro D.H. Jr, Walsh R.N., editors. *Meditation: classic and contemporary perspectives*. New York, Aldine: 417–31.