

Health rhythms: A preliminary inquiry into group-drumming as experienced by participants on a structured day services programme for substance-misusers

PETER S. BLACKETT & HELEN L. PAYNE

University of Hertfordshire, UK

Abstract

In the move towards improving retention rates for substance-misuse treatment programmes, interest is growing in interventions that complement existing programmes. This paper describes a multi-method research design used to explore the experience of seven participants who took part in a seven session group-drumming intervention called Health Rhythms (HR). The study inquires into the efficacy of this intervention as part of a structured day-services treatment programme for adult substance-misusers in West Hertfordshire in the UK. Semi-structured interviews, combined with a measurement instrument and attendance records provided a triangulated approach for data collection, with findings subjected to qualitative and quantitative analysis. The main findings can be summarized as: (a) showing support for the therapeutic elements of group-drumming found in previous studies; and (b) indicating that HR sessions are a popular addition to substance-misuse treatment programmes, with implications for attendance and retention rates. The paper concludes with suggestions for further study and implications for the use of drumming groups in a range of health-care settings.

Introduction

Within the field of substance misuse and addictions an interest is growing in alternative therapies to complement existing treatment programmes (Adelman & Castricone, 1986; Bennett, Cardone, & Jarczyk, 1998; Matto, Corcoran, & Fassler, 2003; McPeake, Kennedy, & Gordon, 2002). The concept of matching clients to treatments requires a range of cost-effective interventions to cater for the needs of the client group (Miller & Heather, 1998, National Treatment Agency, 2002). As fallout rates are high (Craig, 2002; Kleber & Riordan, 1982) and substance-misuse figures rising (Craig, 2002; Kleber & Riordan, 1982), it is increasingly necessary to match clients to groups that they will regularly attend and provide a service with which they can engage (Hodgson, 1994;

Lindstrom, 1992). Such measures will enable a move towards an improvement in retention rates in Substance-Misuse Treatment Programmes (SMTPs).

Group-drumming is an activity that is proving to be a popular, successful and cost-effective intervention with therapeutic and clinical applications across healthcare (Bittman et al., 2001a; Bittman, Bruhn, Stevens, Westengard, & Umbach, 2003; Friedman, 1997; Stevens & Burt, 1997).

Background

The use of drumming has long been evident in healing rituals with images of figures holding drums adorning cave walls and archaeological sites the world over (Achterberg, 1985; Devereux, 2001; Neher, 1962; Storr, 1989). However, it is only more recently that the therapeutic elements of group-drumming have been explored, with recent research studies beginning to provide an evidence base for considering drumming as a therapeutic intervention in its own right or as a part of other programmes (Bittman et al., 2001a, 2003; Friedman, 1997; Stevens & Burt, 1997).

Following a systematic review of literature, recurring themes were identified indicating that group-drumming is a complex interaction with far-reaching therapeutic qualities (Blackett, 2003). These themes have been distilled into the following categories, which provide a focus for the research:

- Rhythm is natural to human function (Bittman et al., 2001a, 2003; Camilleri, 2002; Clair, Bertsein, Johnson, & Hoover, 1993; Claire, Alicia, Berstein, & Johnson, 1995; Crowe, Reuer, & Berstein, 1999; Maxfield, 1990, 1997; Strong, 1997, 2000).
- Drumming enhances communication (Bittman et al., 2003; Friedman, 1997; Kaplan, 2000; Longhhofer & Floersch, 1993; Stevens & Burt, 1997).
- Drumming reduces stress and tension (Bittman et al., 2003; Quinn, 2002; Strong, 2000).
- Drumming can be experienced as transcendent, spiritual or as altering perception and consciousness (Atwater, 1999; Maxfield, 1990, 1994; Neher, 1962; Woodside, Kumar, & Pekala, 1997).
- Drumming is creative (Camilleri, 2002; Longhhofer & Floersch, 1993; Stevens & Burt, 1997).
- Drumming is cognitive with implications for focusing the mind in the present and aiding memory, concentration and other mental processes (Clair et al., 1993, 1995; Kaplan, 2000; Quinn, 2002; Stevens & Burt, 1999; Strong, 2000).
- Drumming is accessible to all people (Bittman et al., 2001a; Camilleri, 2002; Crowe, Reuer, & Berstein, 1999).
- Drumming has physical benefits such as aerobic exercise, psychomotor co-ordination and positive immune system responses (Bittman et al., 2001a; Stevens & Burt, 1997; Strong, 2000).
- Drumming is social, creating group cohesion (Camilleri, 2002; Kaplan, 2000; Longhhofer & Floersch, 1993; Stevens & Burt, 1997).
- Drumming fosters emotional processing (Bittman, 1998; Friedman, 1997; Slotoff, 1994; Strong, 2000).

These ten elements introduce the argument for group-drumming to be considered in a wide range of applications. For example the non-verbal qualities and the emphasis on group cohesion, creativity, achievement and communication may present a positive alternative group experience, which could be valuable for SMTPs where client retention

rates are low. It has been suggested by Stevens and Burt (1997) that the use of drumming groups in SMTPs could engage clients and provide a stepping-stone to other treatments, such as group therapy, topic or support groups.

Research to date has not reflected the participant experience of group-drumming ideally due to the descriptive or quantitative style of the studies (Bittman et al., 2001a, 2003; Stevens & Burt, 1997; Strong, 2000). A further gap in the literature, to which this study hopes to make a contribution, has been articulated by Stevens and Burt: 'Research in the area of application and efficacy is needed as well as research on rhythm and its impact on mental health' (Stevens & Burt, 1997, p. 182).

This study aimed to explore and formally record the experiences of group-drumming as reported by participants on a structured day services treatment programme for adult substance misusers in West Hertfordshire in the UK.

Methodology

Participant selection

On entry to the programme clients were informed that the drumming group would be subject to a research study and that they had a choice whether or not to participate. The participants, six men and one woman aged between 24 and 56, were all substance misusers (heroin, crack-cocaine and poly-drug use) at the beginning of the programme and had no previous experience of group-drumming. Ethical approval was obtained from the University of Hertfordshire and all seven participants, having given informed consent, volunteered to take part in seven, weekly, one-hour drumming sessions.

Design

The uncontrolled study was designed to provide an integrated procedure with the least possible disruption to the programme. A multi-method approach was employed to record participant responses to the sessions and to place it in the wider context of the programme by recording changes in attitude to substance use and general attendance.

The study was undertaken by the principal investigator; he is a practitioner-researcher and a qualified-counsellor with many years' experience in providing therapeutic music sessions and drumming-groups. He is trained as a Health Rhythms (HR) practitioner and facilitated the group-drumming for this study.

Data was collected from participant self-report change assessment questionnaires, an attendance summary of both the drumming group and the wider programme, and semi-structured interview transcripts, which were analysed to identify themes in the lived experience of drumming.

The sessions

The group met to take part in group-drumming sessions for one hour on seven consecutive Fridays. As group-drumming encompasses many styles and orientations a standardized protocol was used to ensure that the musical experience being researched could be replicated in further study. The Health Rhythms (HR) drumming protocol is a composite, evidence-based drumming intervention comprising carefully chosen exercises that make drumming a platform for group playing, relaxation, stress release and emotional processing.

It has also been found to facilitate positive, cell-mediated, immune system changes (Bittman et al., 2001a, 2001b, 2003).

Participants were given basic tuition and invited to play on a wide selection of drums and percussion instruments chosen for their tonal range and user-friendliness.

Each session began with an ice-breaker, such as a sound-wave or shaker-pass, which helped to develop a shared sense of rhythm and paved the way for music-making. Drumming patterns were formulated by echoing short phrases and new rhythms created by tapping out the syllables of participants' names to generate beats for the group to follow. Rhythm games and entrainment exercises, which facilitate the process of getting 'in-sync' or 'in-step' with the underlying shared pulse (Friedman, 2000; Hull, 1998; Strong, 1997) provided a framework for group playing and improvisation without the prescriptive formality of taught music.

Participants were given the opportunity to direct the group and signal for changes in tempo and dynamics, with space created for comments and responses, whether verbal or musical. Each session ended with high-impact, stress-release drumming followed by a guided relaxation exercise. Sessions closed with a moment for reflection during which participants were invited to record their experiences in a journal.

Data collection

The inquiry provided four sources of data (self-reports, attendance summaries, participant journals, and semi-structured interviews) that informed the research about the participants' subjective experience of group-drumming and documented its place within the context of the SMTP setting.

(a) Self-report. Before the first drumming session and after the last, participants completed a self-report questionnaire entitled 'Stages of Change Readiness and Treatment Eagerness Scale Version Eight Drug (SOCRATESv8D)' (Miller & Tonigan, 1996). This instrument measures change in regard to specific substance use using three scales: (1) recognition; (2) ambivalence; and (3) steps taken. It is designed to assess readiness for change and motivation for treatment. Differences between the first and second tests give an indication of the participants' progress with reference to their substance use. The relevance of this change, if any, could be commented on by participants during the interview. Results from SOCRATESv8D can also give an indication of the diversity of the group in terms of stages of recovery and attitudes towards substance use.

(b) Attendance summaries. Attendance was recorded at the drumming group (seven weeks) and the SMTP as a whole (16 weeks). A signing-in book recorded daily attendance to the programme with attendance to drumming sessions captured in a separate register. This data was explored to compare patterns of attendance and absence in the drumming group and in the wider programme.

(c) Participant journal. Each participant was given a blank journal in which they could record impressions of each session during the last five minutes of each drumming group. These vignettes (Barter & Renold, 1999) aimed to provide a basis for the participant responses in the interview as an aide-memoir of the session.

(d) Semi-structured interview. The interview schedule comprised four parts.

1. Each participant was asked the following questions:
 - How did you experience the drumming sessions?

- How did you feel during the drumming group experience?
 - What were you thinking about during the drumming group experience?
 - How do you assess the drumming group in relation to other things going on in your life at that time?
 - How might drumming be useful to you or other people in your position now or in the future?
2. The participant's journal was explored entry-by-entry to enable them to recall their experience of the drumming sessions by commenting on their own notes.
 3. Participants were asked to comment on changes (if any) in the SOCRATESv8D between the pre-intervention and post-intervention test.
 4. Participants were read the list of ten elements associated with group-drumming and asked to comment on them in light of their own experience of the sessions.

Interviews were conducted by each participant's keyworker, lasted an average of forty-five minutes and were scheduled to take place during the week following the final drumming session. The interviews were audiotaped and transcribed. Transcripts were given to the participants for validation and to see if they wanted to add or remove any of the data. Permission was given to use anonymous quotations in the research report.

Analysis

The analysis was comparative and deductive, based on a template approach recommended by Miles and Huberman (1994) using the ten categories of therapeutic attributes as a start list for thematic analysis.

In analysing the interview transcripts participant responses were explored to identify themes that compared to the ten categories, giving this study context in the wider field and adding to the body of research on group-drumming and HR. Where a response aligned itself with a category that section of text was coded corresponding to the ten categories (Calloway & Knapp, 1996; Miles & Huberman, 1994). Strong support for a theme was considered where a participant confirmed a theme three times. Those responses that described the experience but fell outside the ten categories were considered as new themes resulting in findings from the study.

The reliability and validity of identified themes was established by one interviewer, another colleague from day services and an American researcher with an interest in drumming and psychology. A high level of agreement was reached (76–84%) between the three raters. Differences in coding were resolved through discussion.

Findings

The SOCRATESv8D, attendance summaries, themes from the interviews that found strong or no support, as well as contraindications and new themes all form the basis for discussion of the findings.

SOCRATESv8D self-report

Changes in score between pre- and post-intervention were recorded and are visually represented in Figure 1.

An equal scoring indicating 'no change' was recorded for participants C and G in the 'ambivalence'-scale and for participant D in the 'taking steps'-scale. Increased scores

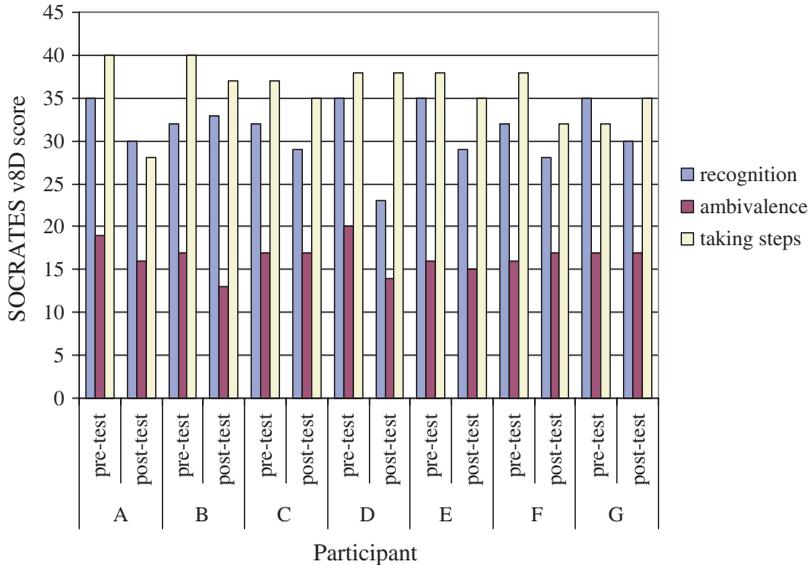


Figure 1. Differences in SOCRATESv8D scores for all participants between pre- and post-intervention tests. SOCRATESv8D measures changes regarding ‘recognition’, ‘ambivalence’ and ‘steps taken’ with regard to specific substance use. Using these three scales, comparisons can be made between results from pre- and post-intervention tests to indicate changes in attitude towards substance use and treatment motivation.

were noticed in three participants, all in different scales. Participant B showed a one-point increase in the recognition-scale. Participant F showed a one-point increase in the ‘ambivalence’-scale and participant G recorded a three-point increase in the ‘taking steps’-scale. All other tests showed a decreased score across all scales. None of the participants made links between changes in their score and the drumming sessions during the interview. The results of the SOCRATESv8D showed that all seven participants were at different stages in their motivation for change and held different attitudes towards substance misuse.

Attendance

Figure 2 shows attendance summaries for both the SMTP and the drumming sessions. The attendance summary for the SMTP recorded a range of scores between 47% (38/80 days) and 93% (74/80 days). Attendance at the drumming sessions ranged from between 71% (5/7 sessions) and 100% (7/7 sessions), showing a greater level of attendance at the drumming sessions than at the overall programme.

Attendance summaries indicate that the drumming sessions were a popular part of the programme. One participant came into the SMTP especially for the drumming sessions, even on weeks when they had been absent for the rest of the time. Five of the participants referred to the Friday afternoon timing of the group (notoriously problematic for attendance) as ending the week on a good note, making reference to the usefulness of a session such as this to finish what had sometimes been a difficult week. For example:

I found it a good release at the end of the week. Especially after . . . some of the groups were really heavy and it was a good, relaxing release at the end of the week. (Participant B)

You do some quite heavy stuff and then finish the week on a lighter note, drumming-out all the troubles that you might have brought up for yourself and generally made you feel better for the weekend. (Participant D)

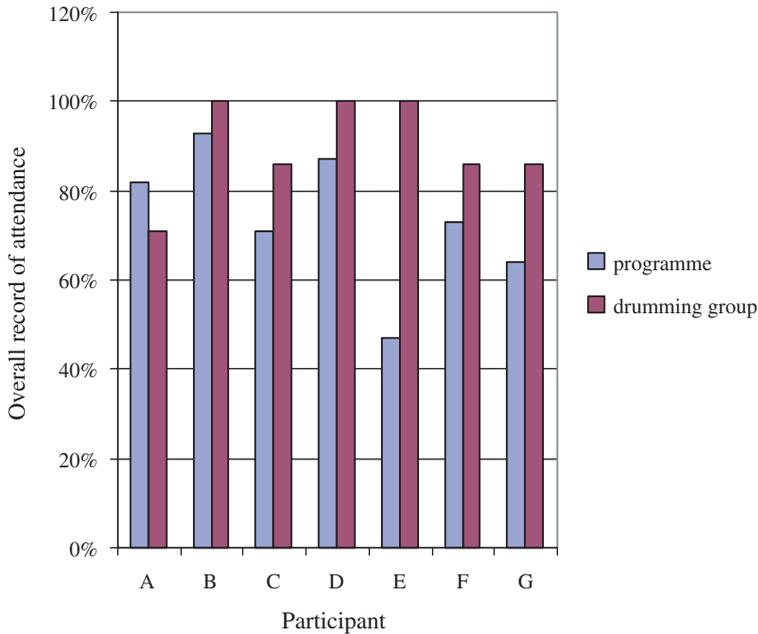


Figure 2. Patterns of drumming group and programme attendance for all participants. Rates of attendance were calculated from the overall daily attendance to the sixteen-week structured day-services programme and from the overall session attendance to the seven-week drumming group.

Interviews

Participant responses to the interview questions reflected their personal experience of the drumming sessions and provided a formal record of how they experienced the intervention. Outcomes regarding support for the ten elements associated with group-drumming from previous research can be seen in Figure 3.

The following findings summarize participant responses through the themes of the analysis, incorporating participant quotes where appropriate.

1. Rhythm is natural to human function. Six participants supported or strongly supported this theme.

It does come naturally so long as you don't start to think about it and it's amazing that. I was quite surprised when I very first started drumming. (Participant B)

One participant was uncertain about the natural process of rhythm, saying:

I don't know if it's natural, but it is easier than I thought. (Participant C)

Those who felt that making music with others was surprisingly easy linked the musical elements of pulse and metre to walking, breathing and heart rate.

Rhythm! We've all got it. There's a rhythm of things all the way along, yeah? Like heartbeat or the walking, you know? (Participant D)

2. Drumming enhances communication. Six participants agreed that the drumming sessions aided communication in some way and one did not. Drumming offers the opportunity for non-verbal communication with the unique feature of simultaneous communication

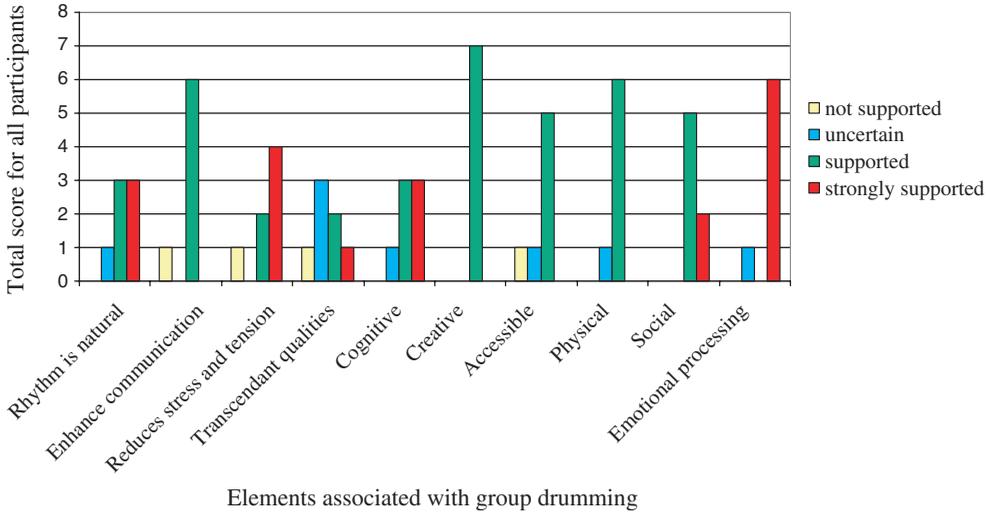


Figure 3. Participant interview responses regarding support for the ten elements associated with group drumming. Levels of participant support for each of the ten elements associated with group drumming were identified through analysis of transcripts from the semi-structured interviews.

Table I. Questions used to invite rhythmic responses.

1 What do you bring to the programme which is unique to you?
2 Where are you on the journey of recovery?
3 Whose story do you most connect to and how did it feel?
4 What do you want to get out of this programme?
5 What would you say to somebody else in your position to inspire them?
6 What does your craving sound like? (And can you change it/take control of it?)
7 How does it feel to be ending the group?

when everybody is playing together (Stevens & Burt, 1997). The therapeutic processes of listening and being heard are brought to life in the HR protocol in a variety of ways, demonstrated through the following exercises:

- ‘call and respond’—participants play a rhythm for others to copy;
- ‘rhythmic naming’—individuals tap out the syllables of their name for the group to play as a rhythm; and
- ‘rhythmic responses’—participants respond to specific questions using their drums to communicate their answers in a non-verbal way.

The list of questions is shown in Table I.

The group was then asked to discuss the process. One participant described his experience as:

Finding my confidence, the confidence to express myself. (Participant G)

The opportunity to communicate with other people in a group in a non-verbal way was recognized by another participant as:

Something primal, different really to normal groups. (Participant B)

And they went on to say:

That's what it all sort of goes back to. Some sort of communication with different... tribes or whatever. Talking but not talking, there's a lot of communication in the actual group. Oh yeah, it does help. No words but communication. (Participant B)

Another participant recognized that the shared endeavour of both contributing sounds and listening enabled the overall sound to be better in their opinion:

Yeah. I get it. It's not just about speaking or playing to each other, it's the listening too. That's the difference, because it's needed to listen to make it work. (Participant C)

3. Drumming reduces stress and tension. Six out of seven agreed strongly that they experienced their stress and tension reduce during the sessions. Of these six, four provided strong support for previous findings:

You can get rid of all your anger, all your tension, or anything that's sort of pent up inside you. You can let it out on the drums. (Participant A)

One participant agreed that drumming could reduce stress and tension but was concerned about the potential for getting a headache.

4. Drumming can be experienced as transcendent, spiritual or as altering perception and consciousness. Drumming has enjoyed a long history of use in ritual transformational processes and enabling healing in many cultures (Maxfield, 1990, 1994; Neher, 1962; Woodside et al., 1997). However, the opportunity to connect to archetypes and transformational processes was missed by four of the participants who asserted they had no kind of spiritual or transcendent experience. Two recognized the possibility of going into trance and made links to previous substance use, while another had a strong feeling of transcendence that was linked to previous substance use.

I wouldn't say I went into trance but when you get your beat going, you get your rhythm going or whatever, you can definitely feel different in some respects. (Participant F)

5. Drumming is cognitive. All participants agreed that there was a benefit from focusing and concentrating on the session. Three gave strong support for previous findings in this element while one participant emphasized that the benefit only lasted for the duration of the session:

It empties your head you know. There's only what you're doing with the drum, the beat, the rhythm... I get so full of running, of working, of thinking all at once, but with that I feel relaxed, my head gets a rest, I feel more together. I can forget about the everyday. (Participant G)

6. Drumming is creative. Drumming offers the opportunity to create musical sounds and contribute to the whole of that creation. The drumming experience can stimulate creative processes in the individual. All of the participants agreed that they were part of something creative but there was no strong support for previous findings. One participant, who was experiencing a 'neighbour from hell' situation in their home life, found that being a part of 'creating the noise' helped them begin to enjoy music again:

I come to hate the boom-boom noise and I used to like music loads... but this was me doing it. It took a while but... it's better when you're making the noise isn't it? (Participant C)

7. Drumming is accessible to all people. Five felt they could access the session easily and one felt that drumming was inaccessible. Another was uncertain about the accessibility of drumming, suggesting that it would not be accessible to deaf people. One reported that although they had accessed the sessions easily, it was unfortunate that a lack of resources meant that not everybody could have the opportunity to drum.

8. Drumming has physical benefits. All participants felt they had experienced some physical benefits from playing drums. These included a good muscular work out, improved breathing, and benefits from rhythmical movement and creative hitting.

My arms ached all weekend! I did feel good though... it's good exercise, you're using parts of your body you might not normally use. (Participant A)

9. Drumming is social. All agreed that they had experienced some kind of positive social contact in the group-drumming sessions. Two expressed strong support for previous findings, commenting for example:

I felt more together as I think it brought the group together. It did. It brought the group together quite well. (Participant E)

I'd say it was a laugh and everyone enjoyed it, and for that hour that was what we were doing and we were all together doing it. I'd say it was quite sociable 'cause we all just done it... and everyone was happy and laughing. (Participant F)

10. Drumming fosters emotional processing. This theme had the strongest support. Six of the seven participants strongly supported previous findings in this element with the most support for de-stressing:

If you're un-stressing yourself then you're getting all your emotional badness out. (Participant F)

Another commented:

At first I was nervous and then I got into it. I used the room to let go and imagined a journey, disappearing off in my own world and letting emotion flow through the drum. (Participant D)

One participant was uncertain about the emotional content of the sessions.

11. Drumming is enjoyable. A new theme emerging from this study was that drumming was experienced by participants as fun and enjoyable. This found strong support from six participants with only one disagreeing.

It was great fun. I thoroughly enjoyed it. (Participant B)

I felt trouble-free and almost...silly. Not silly 'cause you're doing it, but sort of...free and happy. (Participant F)

Discussion

The methodological strengths lay in the way in which the intervention was incorporated into the SMTP with data being collected without any disruption to the wider programme. This enabled the drumming sessions to be assessed as part of the programme, which should prove useful for other service providers.

Although the attendance summaries indicate that the drumming sessions were a popular part of the programme it is worth considering that the 'Hawthorn effect' could be partly

responsible (Mayo, 1933). The improvement in attendance could be linked to the attention participants received by taking part in the study because it was being monitored for the purposes of research. However, it was only attendance to the drumming sessions that showed improvement and not attendance to the other aspects of the study. For instance the interviews, scheduled for the week following the final session, were delayed by three weeks through absence.

The design was a pilot intending to develop a template for a further study. It recorded participant perspectives on drumming sessions within the context of a SMTP.

The main findings can be summarized as: (a) showing support for the therapeutic elements of group-drumming found in previous studies; and (b) indicating that drumming sessions were a popular addition to the SMTP with implications for attendance and retention rates.

The findings support the expectation in expressive arts therapies and group therapy models that the therapeutic process is enhanced by curative factors such as the instillation of hope, universality, simple achievement, group-cohesion (Kaplan, 2000; Yalom, 1995) and an active feedback process (Adelman & Castricone, 1986). These factors, supported through the interview data and grounded in the participants' experiences, showed strong elements of emotional processing, stress reduction and social interaction. It was clear that the opportunities to express anger, resolve nervousness, build confidence and find enjoyment and relaxation through the controlled use of drumming was very popular with these participants.

I could feel something that . . . did bring something out of me. Well, you can bring out your anger . . . and your other emotions into or onto the drum as you say, but yeah I definitely did walk out of this place feeling a lot better. (Participant A)

Although the emotional processing remained mostly non-verbal, space was created in the sessions for verbal responses as well as rhythmical ones. This was experienced by one participant as a beneficial aspect of the drumming session:

It definitely brings people together. If you can get people together . . . it starts a process of talking and it's a good idea in my view because music does bring people together and you'll start talking about all sorts of different topics. It's enough for myself . . . to start talking about things. It's definitely made a big difference. (Participant B)

The strong experience and support for the social qualities of group-drumming is useful to the field of substance-misuse treatment and would benefit from further research.

The SOCRATESv8D outcomes show all the participants to be at different stages of motivational transition regarding their treatment. This is a common challenge in SMTPs, which can create a difficult or unsupportive group dynamic with amplified elements of denial, competition and intolerance towards other group members (Arroyave, 1985). Drumming embraces and unifies difference to create a whole sound through the layering-in of different voices (Longhofer & Floersch, 1993). In the drumming sessions, entrainment to a common pulse paves the way for difference to be expressed around the main beat. Each participant expresses their difference through the tonality, pitch and timbre of their instrument and by playing rhythms that interlock to create the whole, resulting in simultaneous communication (Stevens & Burt, 1997). All the participants in this research reported feeling a part of the group, for example:

I definitely felt part of the group when we were drumming. I don't exactly know the words, how to explain it, but you definitely feel . . . that you're all part of that one unit. (Participant C)

These findings are consistent with the components of increasing social contact (Stevens, 2000) and 'a breaking down of the addict's profound social isolation'

(Adelman & Castricone, 1986, p. 55) thought to be vital components of successful treatment for substance misuse.

From the participant perspective, during the drumming sessions they transcended the tags of 'drug addicts' or 'junkies' and had the opportunity to be an equal part of something creative and purposeful, which may have been important in terms of their relationship to others in the group and to their own motivation towards relationship-building and recovery.

The fact that rhythm is natural to human function was supported by the findings of this study and was associated with repetition, compulsion, altered states and other factors associated with the use of both drugs and drums. Further study into the interaction between rhythm and addiction is needed to identify the most effective exercises and techniques for enhancing therapeutic work with substance-misusers through a drumming intervention.

Contraindications

The main contraindications in the participants experience were: (a) an apprehension towards music making; and (b) the feeling that drumming would increase stress and cause a headache (one participant's concern). Others reported that they questioned the purpose of the drumming group at first, wondering why music making was included on the programme at all. Comments included:

Because I came here with a drug problem, I'm thinking how it's going to help me. (Participant E)

I could not see where this would fit in. (Participant G)

Despite initial reservations eventual benefits were recognized with social interaction at the heart of the accounts. This is consistent with the nature of resistance in addiction work, where a period of individual resistance is often resolved through a positive group experience (Adelman & Castricone, 1986; Arroyave, 1985; Stevens, 2000; Yalom, 1995). It is also appropriate to mention the possible manifestation of other processes associated with addictions, namely denial and avoidance. The positive group experience may indicate an avoidance of group conflict and authentic feelings that would otherwise have been worked through in talking therapy groups (Yalom, 1995; Turrey, 2000). It is worth noting that the possibility of creating trance-states through drumming can be helpful, but can also be a way to avoid feelings.

The limitations of this study are twofold. It was uncontrolled and, due to the small number of participants, external validity is difficult to predict. As many forms of treatment were occurring simultaneously on the programme and none of the participants made any links to the change in their SOCRATESv8D scores and the drumming sessions, the SOCRATESv8D yielded results of limited usefulness. The journal vignettes were difficult to administer and were forgotten (or lost) before interview by six of the seven participants, therefore a different approach to enable their inclusion will be sought for further study.

Future research

Further research is needed to establish whether these findings would be supported: (a) by a larger sample in a similar setting; and (b) when running a drumming group for the duration of a programme. A different methodology with a control group would perhaps establish whether HR is significantly useful for emotional processing, mood enhancement, retention rates and cost-effectiveness compared to other aspects of a SMTP, such as a relaxation class. Another measurement tool such as the Profile of Mood States

(Lorr & McNair, 1988) administered before and after each session might provide more 'in-the-moment' measurements that could be attributed specifically to HR and might overcome the difficulty of confounding factors presented by researching amidst a multi-disciplinary programme.

Further study into the process of rhythm and engagement with people with substance-related issues would help us to understand why this approach may be a useful intervention for the client group.

Implications of this study

In this study the support for therapeutic elements from the participants' perspective tells us that the HR group-drumming intervention in this setting provided a positive social group experience and was found to be useful for the manageable release of emotion and for stress reduction. The improved retention and attendance rates during the drumming group indicated that HR was a popular addition to this SMTP with potential to enhance treatment motivation by creating a culture of inclusion. HR sessions can be run at low cost, either by outside facilitators or by trained programme staff and with the purchase of basic equipment.

This study contributes to the growing body of research into drumming groups as a therapeutic intervention and is suggestive of the possibility of HR as a cost-effective and useful addition to SMTPs.

Acknowledgements

The authors wish to thank Marilyn Mardo, Neil Atkinson and the clients and staff of the Druglink Structured Day Services Programme in West Hertfordshire, and Dr Barry Bittman, Dr Charles Kaplan, Emma Norrington, Fergus Bergen and Christine K. Stevens for their support and interest in the project.

References

- Achterberg, J. (1985). *Imagery in healing: Shamanism and modern medicine*. Boston, MA: Shambhala.
- Adelman, E., & Castricone, L. (1986). An expressive arts model for substance abuse group training and treatment. *The Arts in Psychotherapy*, 13, 53–59.
- Arroyave, F. (1985). Group-analytic treatment of drinking problems. In T. E. Lear (Ed.), *Spheres of group analysis* (pp. 109–118). Naas, County Kildare: Lienster Leader Ltd.
- Atwater, F. H. (1999). *Brainwave and oxygen-saturation correlates during a ritual induced state of consciousness*. (Available at: www.monroeinstitute.org/research; last accessed 11.01.03).
- Barter, C., & Renold, E. (1999). *The use of vignettes in qualitative research*. *Social Research Update*, 25. (Available at: <http://www.soc.surrey.ac.uk/sru/SRU25.html>; last accessed 12.05.03).
- Bennett, L. D., Cardone, S., & Jarczyk, J. (1998). Effects of a therapeutic camping program on addiction recovery. *Journal of Substance Abuse Treatment*, 15(5), 469–474.
- Bittman, B. L. (1998). *Music enters: Where words cannot pass*. (Available at: www.allontribe.org/articles; last accessed 11.01.03).
- Bittman, B. L., Berk, L. S., Felten, D. L., Westergard, J., Simonton, O. C., Pappas, J., & Ninehouser, M. (2001a). Composite effects of group drumming music therapy on modulation of neuroendocrine-immune parameters in normal subjects. *Alternative Therapies in Health and Medicine*, 7(1), 38–47.
- Bittman, B., Bruhn, K. T., Stevens, C., Westergard, J., & Umbach, P. O. (2003). Recreational music making: A cost-effective group interdisciplinary strategy for reducing burnout and improving mood states in long-term care workers. *Advances in Body-Mind Medicine*, 19(3/4), 4–15.

- Bittman, B., Steven, C. K., & Bruhn, K. T. (2001b). *Group empowerment drumming*. Valencia, CA: Remo Inc.
- Blackett, P. S. (2003). *The therapeutic effects of drumming groups rhythms and setting: A review of relevant literature*. Literature review submitted in partial fulfilment of an MA in counselling inquiry. University of Hertfordshire, UK.
- Calloway, L. J., & Knapp, C. A. (1996). *Using grounded theory to interpret interviews*. (Available at: <http://csis.pace.edu/~knapp/AIS95.htm>; last accessed 20.05.03).
- Camilleri, V. (2002). Community building through drumming. *Arts in Psychotherapy*, 29(5), 261–264.
- Clair, A., Alicia, A., Berstein, B., & Johnson, G. (1995). Rhythm playing characteristics in persons with severe dementia including those with probable Alzheimer's type. *Journal of Music Therapy*, 32, 113–131.
- Clair, A., Berstein, B., Johnson, G., & Hoover, M. (1993). *Rhythm for life: Comprehensive Alzheimer's Research Project*. (Available at: www.healthysounds.com/feature5.html; last accessed 16.12.02).
- Craig, R. J. (2002). *Reducing the treatment drop out rate in drug abuse programs*. Chicago, IL: West Side VA Medical Center.
- Crowe, B., Reuer, B., & Berstein, B. (1999). *Best practice in music therapy utilizing group percussion strategies for promoting volunteerism in the well older adult*. Silver Springs, MD: American Music Therapy Association.
- Devereux, P. (2001). *Stone age soundtracks: Acoustic archaeology of ancient sites*. London, UK: Vega.
- Friedman, D. (1997). *Alzheimer's disease patients mental health music therapy for the aged*. (Available at: www.uwec.edu/rasarla/research/litandgoals/Alzheimers/co-operation.htm; last accessed 16.12.02).
- Friedman, R. L. (2000). *The healing power of the drum*. Reno, NV: White Cliffs Media.
- Hodgson, R. (1994). Treatment of alcohol problems. *Addiction*, 89, 1529–1534.
- Hull, A. (1998). *Drum circle spirit: Facilitating human potential through rhythm*. Reno, NV: White Cliffs Media.
- Kaplan, C. (2000). *The effects of small group hand drumming on mood state and group cohesiveness*. Unpublished PhD Thesis, University of Connecticut.
- Kleber, H. D., & Riordan, C. E. (1982). The treatment of narcotic withdrawal: A historical review. *Journal of Clinical Psychiatry*, 43(6), 30–34.
- Lindstrom, L. (1992). *Managing alcoholism: Matching clients to treatments*. Oxford, UK: Oxford University Press.
- Longhofer, J., & Floersch, J. (1993). African drumming and psychiatric rehabilitation. *Psychosocial Rehabilitation Journal*, 16(4), 3–10.
- Lorr, M., & McNair, D. M. (1988). *Profile of mood states manual*. San Diego, CA: Educational and Industrial Testing Service.
- National Treatment Agency. (2002). *Models of care: For treatment of adult drug misusers*. London, UK: Department of Health/NTA for Substance Misuse.
- Neher, A. (1962). A physiological explanation of unusual behaviours in ceremonies involving drums. *Human Biology*, 34(2), 151–160.
- Matto, H., Corcoran, J., & Fassler, A. (2003). Integrating solution-focused and art therapies for substance abuse treatment: Guidelines for practice. *The Arts in Psychotherapy*, 30, 265–272.
- Maxfield, M. (1990). *Effects of rhythmic drumming on EEG and subjective experiences*. (Available at: www.peyote.com/jonsteff.brain.htm; last accessed 16.1.03).
- Maxfield, M. (1997). The journey of the drum. *ReVision*, 16(2), 157–163.
- Mayo, E. (1933). *The human problems of an industrial civilisation*. New York, NY: Arno Press.
- McPeake, J. D., Kennedy, B. P., & Gordon, S. M. (2002). Altered states of consciousness therapy: A missing component in alcohol and drug rehabilitation treatment. *Journal of Substance Abuse Treatment*, 8(1–2), 75–82.
- Miller, W. R., & Heather, N. (Eds) (1998). *Treating addictive behaviours*. New York: Plenum Press.
- Miller, W. R., & Tonigan, J. S. (1996). Assessing drinker's motivation for change: The stages of change readiness and treatment eagerness scale (SOCRATES). *Psychology of Addictive Behaviors*, 10(2), 81–89.
- Miles, M., & Huberman, A. (1994). *Qualitative data analysis* (2nd ed.). London, UK: Sage.
- Neher, A. (1962). A physiological explanation of unusual behaviours in ceremonies involving drums. *Human Biology*, 34(2), 151–160.
- Quinn, B. (2002). *Biofeedback indicates drumming relieves stress*. (Available at: www.allontribe/biofeedback2002; last accessed 11.01.03).
- Slotoroff, C. (1994). Drumming technique for assertiveness and anger management in the short-term psychiatric setting for adult and adolescent survivors of trauma. *Music Therapy Perspectives*, 12(2), 111–116.
- Stevens, C. K. (2000). Addictions. In R. L. Friedman (Ed.), *The healing power of the drum* (pp. 80–82). Reno, NV: White Cliffs Media.
- Stevens, C. K., & Burt, J. W. (1997). *Drum circles: Theory and application in the mental health treatment continuum*. Valencia, CA: Remo Drums Corp.
- Storr, A. (1989). Music in relation to self. In *Music and the cycle of life: Papers read at the one day conference held on the 12th November 1988*. East Barnet, UK: British Society for Music Therapy.
- Strong, J. (1997). *Rhythm entrainment intervention: A theoretical perspective*. (Available at: www.reinstitute.com/articles; last accessed 11.01.03).

- Strong, J. (2000). *Healing with drums: A rediscovered art*. (Available at: www.reinstitute.com/articles; last accessed 16.1.03).
- Turrey, A. (2000). Interview. In R. L. Friedman (Ed.), *The healing power of the drum* (pp. 130–132). Reno, NV: White Cliffs Media.
- Woodside, L. N., Kumar, V. K., & Pekala, R. J. (1997). Monotonous percussion drumming and trance postures: A controlled evaluation of phenomenological effects. *Anthropology of Consciousness*, 8(2–3), 69–87.
- Yalom, I. D. (1995). *The theory and practice of group psychotherapy*. New York, NY: Basic Books.