

The Effect of Drumming on Mental Well-being among Adults with Mood Disorders

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Note: Photographs used in this presentation were taken by David Harrison for a Mail & Guardian Article on the mental health and social benefits of drumming. Participants are Stellenbosch University students.

Creative activities are routinely used as a means to recovery in occupational therapy practice

“You have to do something. If you do something, you become somebody. Even a daffodil does something, has a profession. It gives off scent, professionally.”

— [Stella Adler, *The Art of Acting*](#)

“Absence of occupation is not rest; A mind quite vacant is a mind distressed.”

- [William Cooper](#)



Drumming

= the rhythmic beating or tapping of a variety of percussion instruments, which often occurs within a group or social setting

- Increasingly popular as a mental health treatment modality
- Used internationally in schools, community centres, psychiatric hospitals, mental health clinics & residential homes
- Western Cape: 2 State-run psychiatric hospitals and 7 private clinics

Literature Review

MODERATE EVIDENCE THAT DRUMMING IMPROVES MENTAL WELL-BEING AMONG MENTALLY WELL ADULTS

- Increased positive feelings and emotions [1,3]
- Reduced cortisol [2]
- Reduced self-reported anxiety [2]
- Reduced self-reported stress [1,3]

VERY WEAK EVIDENCE SUPPORTING OCCUPATIONAL THERAPY LED-DRUMMING

- Homeless men and adults with MS [4]
- Older adults in residential care [5]



Practice Setting



Occupational Therapy Service

- Clinic for adults with acute mental health problems
- 2 Occupational Therapists
- Group interventions 5 ½ days per week
- Life skills, crafts, relaxation groups
- Drumming twice per week for 45 minutes per session

Spence's 360-degree facilitation method

1. Set up
2. Introduction and warm up – Group members are introduced and familiarised with the drums, using small movements. Establishes climate and therapeutic needs of the group.
3. Rhythm time – Introduction of simple rhythms and methods of drumming, moving towards more complex interaction.
4. Expression – Space is created for individual expression using drums, participants' voices, and other percussion instruments.
5. Wind-up / Wind-down – Speed and volume are used to bring the group to the climax of the session. This may include either energising or relaxing the group, depending on the therapeutic needs of participants.
6. Closure – Discussion on participants' experiences and learning

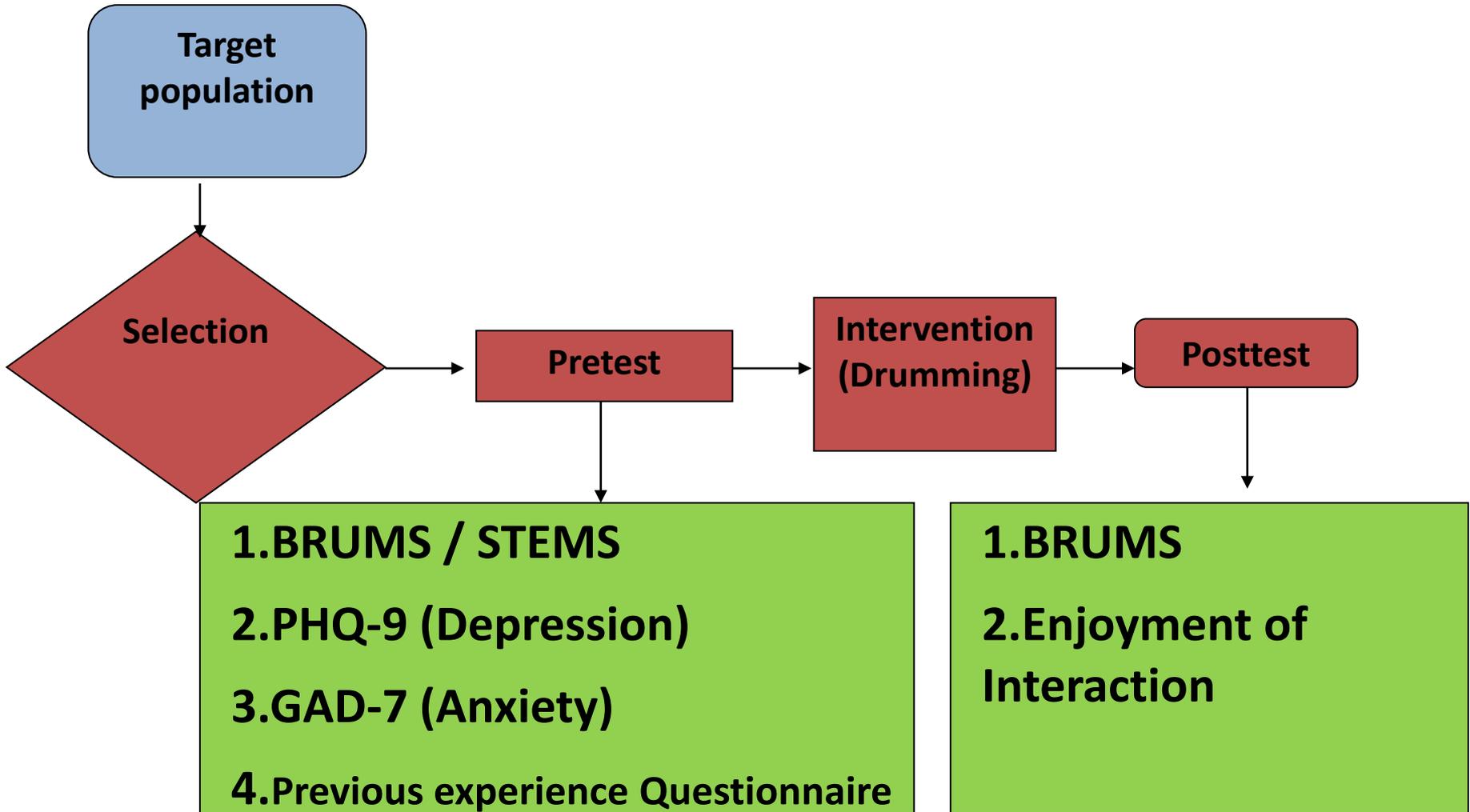
Generating our own practice-based evidence

- **Methodology:** Before and after quasi experimental study
- **Sampling:** Convenience sampling at one private psychiatric inpatient clinic
- **Data collection:** Within 6 groups over 3 weeks. Immediately before and after drumming sessions by OT.

Stellenbosch Mood Scale (STEMS / BRUMS)

- **Data Analysis:** SPSS - Paired t-test

Assessment Tools





Participant Characteristics



N = 13

Diagnosis

Depression (n = 9)

Bipolar mood disorder (n = 4)

Mood

Severe depression (n = 7)

Severe anxiety (n = 11)

Gender:

Female = 76.90%

Male = 23.10%

Age:

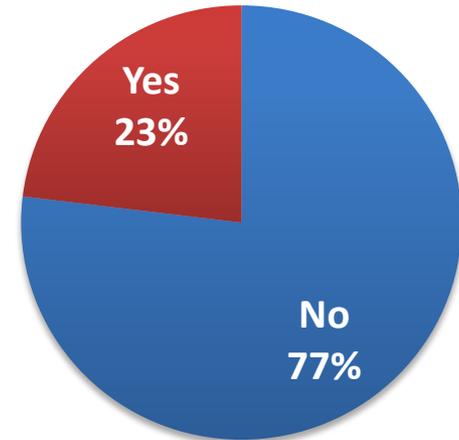
Range= 33-69 years, Mean= 46 years

Ethnicity:

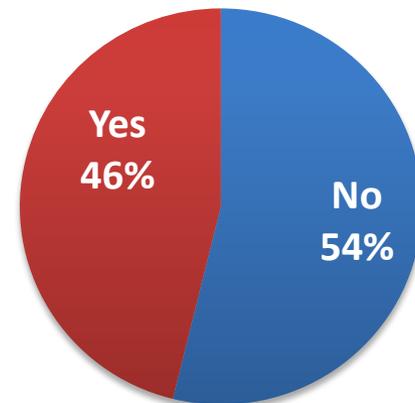
Caucasian (n = 7)

Mixed race (n = 6)

Drumming as Leisure



First Drumming Session



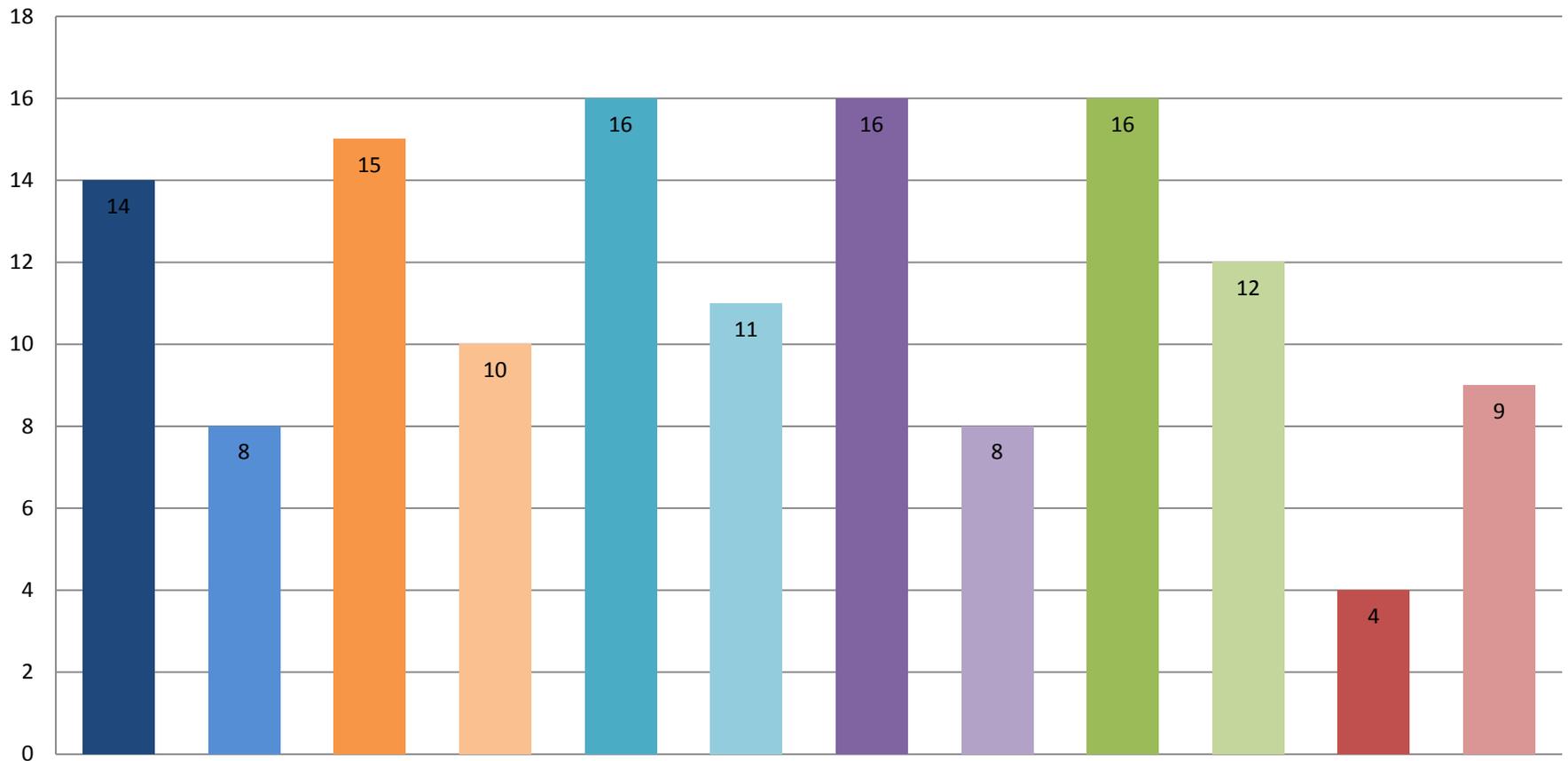


Key Findings



Drumming immediately improved:

tension, anger, confusion, depression,
fatigue, vigor



			95% CI				
STEMS	Mean Difference	SD	LL	UL	t	Sig.	Effect size
Tension	5.62	3.86	3.28	7.95	5.24	.000	0.83
Anger	4.47	4.94	1.47	7.55	3.25	.007	0.68
Confusion	5.62	4.05	3.17	8.06	5.00	.000	0.82
Depression	5.77	3.81	3.47	8.07	5.46	.000	0.84
Fatigue	4.62	3.55	2.47	6.76	4.70	.001	0.80
Vigor	- 3.0	4.10	-5.48	-.52	-2.64	.022	0.61

Group comparisons

There were no differences in mean change between the following groups:

- Gender (Independent t-test)
- Ethnicity (Independent t-test)

There was a significant negative correlation between level of depression and anxiety and mean change in tension, anger, confusion, & depression ($r = -.63$ to $-.74$, $p < .05$ to $.01$)

Patients REALLY enjoyed the session

Enjoyment of interaction measure:

- Median score= 28 / 30.
- Highest score of enjoyment possible.
- Most of the participants rated a 7/7 for all questions.
- Range= 23-28 with 10 (71%) of the participants scoring 28.

Discussion

- Drumming has the potential to immediately improve mental well-being among adults with mental health problems
- Most effective with adults who are most acutely unwell
- Directly addresses feelings of anhedonia and flat affect related to depression
- Carry-over and longer term effects are unknown

Why is OT-led Drumming Effective?

Systematic review of music therapy in acute psychiatric inpatient settings recommends:

- Frequent sessions – ours were twice weekly
- Active participation in music making – all our participants were given a drum and/or other instruments. They chose their level of engagement in the activity
- Verbal discussion of experiences – followed all of our sessions, including application to participation outside the clinic
- Consistent maintenance of contact and boundaries – Very clearly established by therapists working in a team
- Building of therapeutic relationships - consistency of therapists

Carr et al. (2013)

Intro & Warm Up	Prepare participants psychologically and physiologically for the group by providing limited stimuli first, and gradually increasing it. Match the mood of participants to begin with, then gradually change rhythms to achieve desired aims
Main Activity	<p>Select the drumming rhythms and actions based on what you want to achieve with participants – relaxation, invigoration, energising, distraction, rest</p> <p>Progress from simpler to more complex sensory motor activities by adjusting complexity of rhythms, speed, intensity, noise level, physical interaction and use of instruments</p> <p>Modify timing based on endurance and attention span of participants</p>
Discussion & Closure	<p>Use discussion to increase awareness of the effect of different drumming rhythms on the body and emotional state</p> <p>Identify positive feelings after the release of negative emotions (e.g. anger and tension)</p> <p>Problem-solve ways to manage negative emotions and express feelings in daily life</p>

Recommendations:

- Further research is needed with patients with a range of diagnoses and across inpatient mental health facilities
- Comparison to other OT interventions
- Effects of a series of interventions
- Long term effects
- Effect of drumming experience on group dynamics such as cohesion & interaction
- Extent to which previous exposure to drumming has an effect on the outcome
- BRUMS – easy to use as immediate assessment of a range of emotions