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The Impact of Holyoake's DRUMBEAT Program on Prisoner Wellbeing in Western Australian Prisons

Karen Martin, Lisa Wood, Jenny Tasker and Catherine Coletsis

Those on the research team acknowledge the traditional Aboriginal owners of country throughout Western Australia and pay their respects to them, their culture and Elders past and present.

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1 EXECUTIVE SUMMARY

DRUMBEAT (Discovering Relationships Using Music - Beliefs, Emotions, Attitudes, and Thoughts) is an evidence based intervention developed by the Holyoake Institute which aims to improve mental, social and emotional wellbeing within high risk populations. As part of the “Closing the Gap” initiative, Holyoake received funding from The Mental Health Commission, WA and The Federal Department of Health to deliver and evaluate the DRUMBEAT program in WA prisons, with a particular focus on imprisoned Aboriginal people. A team of researchers from the School of Population Health, The University of Western Australia evaluated the delivery of a series of DRUMBEAT programs within seven Western Australian prisons between November 2012 and July 2013. The aim of this evaluation was to investigate the effectiveness of the DRUMBEAT program in reducing psychological distress, improving mental wellbeing and increasing resilience in the prisoners who participated in the program.

A mixed method was used to evaluate the series of DRUMBEAT programs and included prisoner surveys (incorporating validated measures) and semi-structured interviews with prisoners, prison staff and DRUMBEAT facilitators. 114 prisoners completed the pre- and post-surveys, 20 prisoners completed three month follow-up surveys and 31 prisoners were interviewed. Results indicated that DRUMBEAT improved mental wellbeing, psychological distress and resilience of prisoners. Mental wellbeing for DRUMBEAT prisoner participants was significantly higher ($p < .001$) after the program. This positive improvement was maintained three months post-program (compared to pre-program; $p = 0.014$). Psychological distress scores were significantly lower ($p = 0.001$) at post-program than at program start. Although not significant, the three months post-program scores for psychological distress were lower than at program start. DRUMBEAT participants also recorded significantly higher resilience scores ($p < 0.001$) after participating in the DRUMBEAT program, compared with their scores at the start of the program.

Survey and qualitative data indicated DRUMBEAT had a positive impact upon prisoners’;

- emotions and emotional regulation,
- positive feelings,
- capacity to talk with others,
- self-worth,
- learning about themselves,
- feeling part of a team,
- self-confidence and social skills,
- relationship building abilities,
- emotional barriers, connecting with others and forming friendships, and behaviour.

Nearly all prisoners reported enjoying the DRUMBEAT program and indicated they would convey lessons from the program to other prisoners, friends and/or family members. Key contributing factors to optimal DRUMBEAT program delivery in the prison setting included the program’s; 1) structure, accessibility, style and flexibility, 2) facilitation of interactions, connections, group connectedness and trust, 3) unique nature, 4) support by prison staff, 5) facilitators, and 6) consistency and stability. Challenges faced during program implementation included; 1) session delivery timing, 2) lack of support from some prison staff, 3) competing demands on prisoner time, 4) prisoner perceptions of the program, and 5) location and prison operational issues. It can be concluded from this comprehensive evaluation that the DRUMBEAT program was effective in this population in improving prisoner mental wellbeing in the immediate and longer term and in reducing psychological distress and increasing resilience in at least the short term. The strengths and potentially far reaching impact of the program highlighted in this report augur for ongoing support of the program in the prison system.

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2 BACKGROUND

DRUMBEAT (Discovering Relationships Using Music - Beliefs, Emotions, Attitudes, and Thoughts) is an evidence-based intervention developed by Holyoake Institute which aims to improve mental, social and emotional wellbeing within high risk populations. The DRUMBEAT program incorporates both experiential and cognitive based therapies which address a range of factors influencing an individual's mental health, including emotional comparison, anxiety, self-esteem, resilience and social relationships.

The DRUMBEAT program was developed in 2003, initially as an early intervention strategy to engage young Aboriginal men in Western Australia's Wheatbelt region as a way of strengthening resilience to drug and alcohol use (Faulkner, Wood et al. 2012). The program has since been delivered to a wide variety of population groups and settings, including schools, mental health clinics, youth services and drug rehabilitation centres¹. In 2010, the program was conducted for the first time in a prison, with four groups run in the Alice Springs Correctional Facility (Holyoake 2010).

Overall, prisoners have complex health needs and poorer mental health compared with the general Australian population (Schlesinger, Ober et al. 2007, AIHW 2012, Fleming, Gately et al. 2012). The higher prevalence of mental health problems is particularly pronounced amongst imprisoned Aboriginal people², who are significantly over-represented in Australian and Western Australian prisons (ABS 2012, Fleming, Gately et al. 2012)³. As well as prisoners being more likely to enter prison with existing mental health issues (AIHW 2013), the prison environment and separation from family and support networks associated with imprisonment itself can have further detrimental effects on mental health (AIHW 2012). For Aboriginal people, "the process of incarceration may only compound the experiences of trauma, grief and loss that are associated with mental health problems" (Heffernan, Andersen et al. 2009, Fleming, Gately et al. 2012). Due to cultural differences in understanding and identifying mental wellbeing and mental health issues in this population established mental health screening, assessment and diagnostic tools are often not culturally appropriate or have not been validated with Aboriginal populations (Schlesinger, Ober et al. 2007, Heffernan, Andersen et al. 2009, Fleming, Gately et al. 2012).

The DRUMBEAT program has been well received when run with Aboriginal people in community settings (Faulkner, Ivery et al. 2010), but has not previously been formally evaluated in a prison setting as a therapeutic intervention with Aboriginal people. In keeping with traditional modes of learning in Aboriginal communities, the major emphasis in the DRUMBEAT program is through the experiential process of observing and experimenting.

A team of researchers from the School of Population Health at The University of Western Australia was commissioned to evaluate the delivery of these series of DRUMBEAT programs within WA prisons during 2012-2013. Each program aimed to incorporate at least 60% Aboriginal participants.

The **primary aim** of this evaluation project was to investigate the effectiveness of the DRUMBEAT program in assisting prisoners to improve their mental wellbeing and resilience, as well as more

¹ <http://www.holyoake.org.au/index-drumbeat.php>

² The term *Aboriginal people* is used in this report to refer to the original Indigenous peoples of Australia and Western Australia, and where reference is to the broader Australian context, includes Aboriginal and Torres Strait Islander peoples.

³ In 2012, Aboriginal people represented 39.7% of prisoners in WA, with an imprisonment rate of 20 times that of the non-Indigenous population in the state (ABS, 2012)

broadly looking at the impact of the program on participants in relation to interpersonal relationships, self-esteem, and interpersonal skills.

A **secondary aim** of the project was to develop and trial a comprehensive set of prison evaluation tools for programs targeting mental wellbeing. Although most scales and questions were sourced or adapted from validated instruments used elsewhere in Aboriginal and/or prison research, and measures used in other DRUMBEAT program evaluations, this project examined how well the combination of tools and specific measures worked in evaluating an intervention in a prison setting, and the appropriateness of these for Aboriginal populations. The research team monitored the ease of survey completion and issues with its completion.

As noted in a 2009 review of studies of Aboriginal mental health in custodial contexts, a mix of qualitative and quantitative research approaches is preferable, particularly given the lack of culturally validated mental health tools for use with Aboriginal people (Heffernan, Andersen et al. 2009). Hence survey data were complemented by interviews with prisoners, staff and DRUMBEAT program facilitators. Factors which assisted, as well as hindered, the implementation of the DRUMBEAT program were also documented and are detailed in this report.

The evaluation project was approved by the Holyoake Research Committee, the University of Western Australia's Human Research Ethics Committee and the Department of Corrective Services (DCS) Research and Evaluation Committee.

3 THE DRUMBEAT PROGRAM

The central aim of the DRUMBEAT program is to raise awareness of the fundamental skills and values that support healthy interaction between people in relationships. The music created by each group participating in the DRUMBEAT program serves as a direct reflection of the participant's teamwork and social skills. The program deliberately avoids any opportunity for competition and instead focuses strongly on teamwork and the benefits of working with others to achieve goals unobtainable as an individual. Providing a teamwork program, which helps to develop the social skills and self-belief of participants, translates into skills and consciousness which support the same individual in a range of other group situations, including community, workplace and family relationships.

The specific objectives of the DRUMBEAT program include:

- a. Increased levels of cooperation,
- b. Self-responsibility for behaviour,
- c. Improved emotional regulation,
- d. Greater levels of tolerance and empathy,
- e. Increased self-esteem,
- f. Improved communication skills,
- g. Awareness of the importance of healthy values in supporting healthy relationships and lifestyle choices,
- h. Increased levels of focus, concentration, perseverance and commitment, and
- i. Improved connection and sense of belonging with the community.

These outcomes are achieved through five core elements (refer to Figure 1) of the program; *core rhythms*, which develop teamwork skills, focus and concentration; *discussions*, which relate the experiences of the drum-circle to other 'real life' experiences; *rhythm games*, which support teamwork and lead to introspection on a range of life issues such as communication, peer pressure and social responsibility; *improvisation*, which develops creativity and adaption in response to changing life circumstances, and a final *public performance*, which offers recognition for achievement, builds self-confidence and links participants to their community.

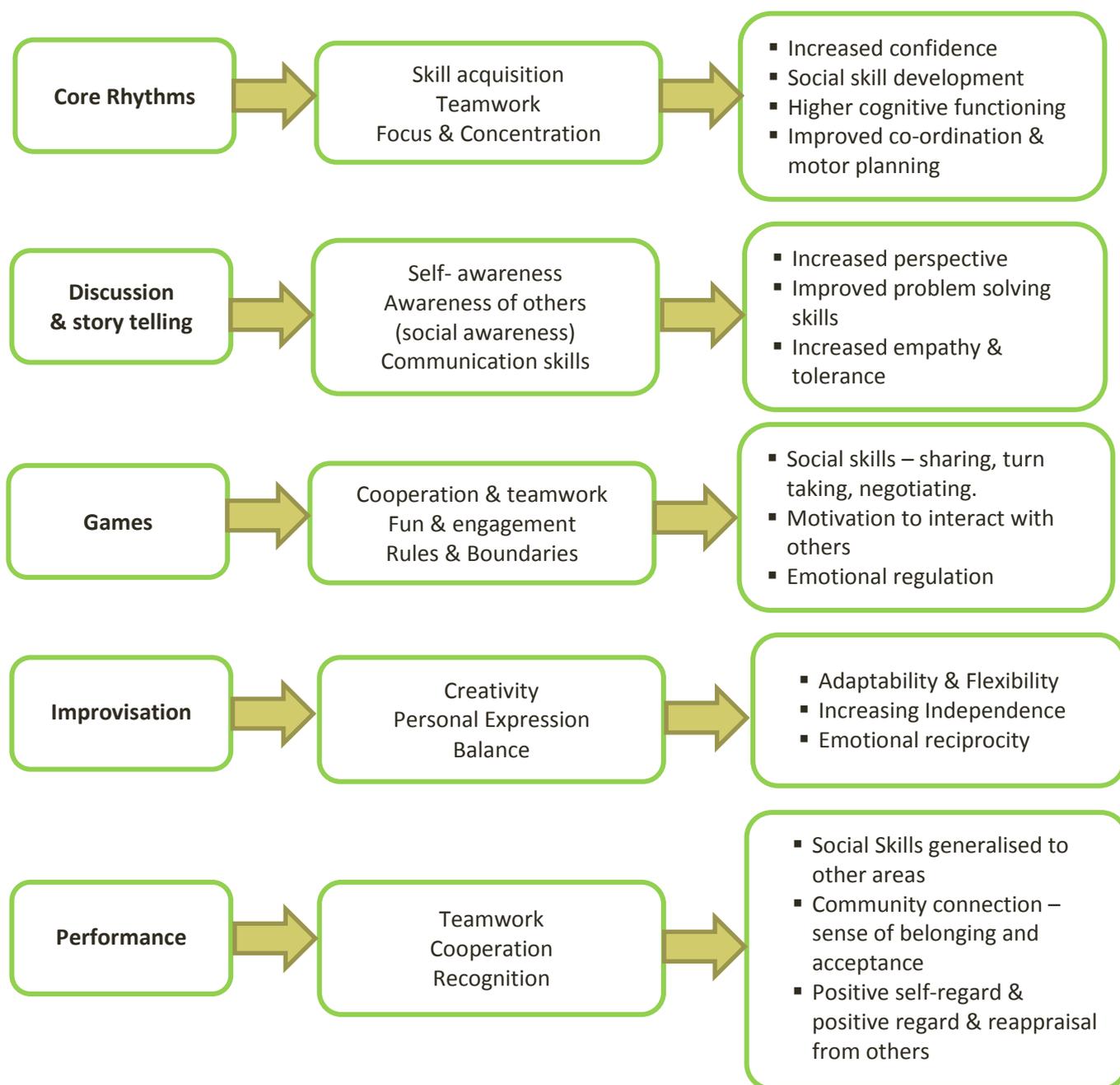


Figure 1. DRUMBEAT Program - Core Elements

DRUMBEAT is intended to be delivered once a week for two hours across a ten week period, culminating in the performance on the tenth week. The first six weeks focus on a specific topic related to a relationship or emotional issue. Each session includes time for playing the drum as a group and time for reflection and discussion on the themes of the program. In particular there is a strong focus on linking these themed discussions to real life situations. The performance itself provides an opportunity for the group members to celebrate their achievements, to demonstrate the impact of group collaboration and for recognition of the skills they have mastered. Figure 2 summarises the program’s core elements, and session structure.

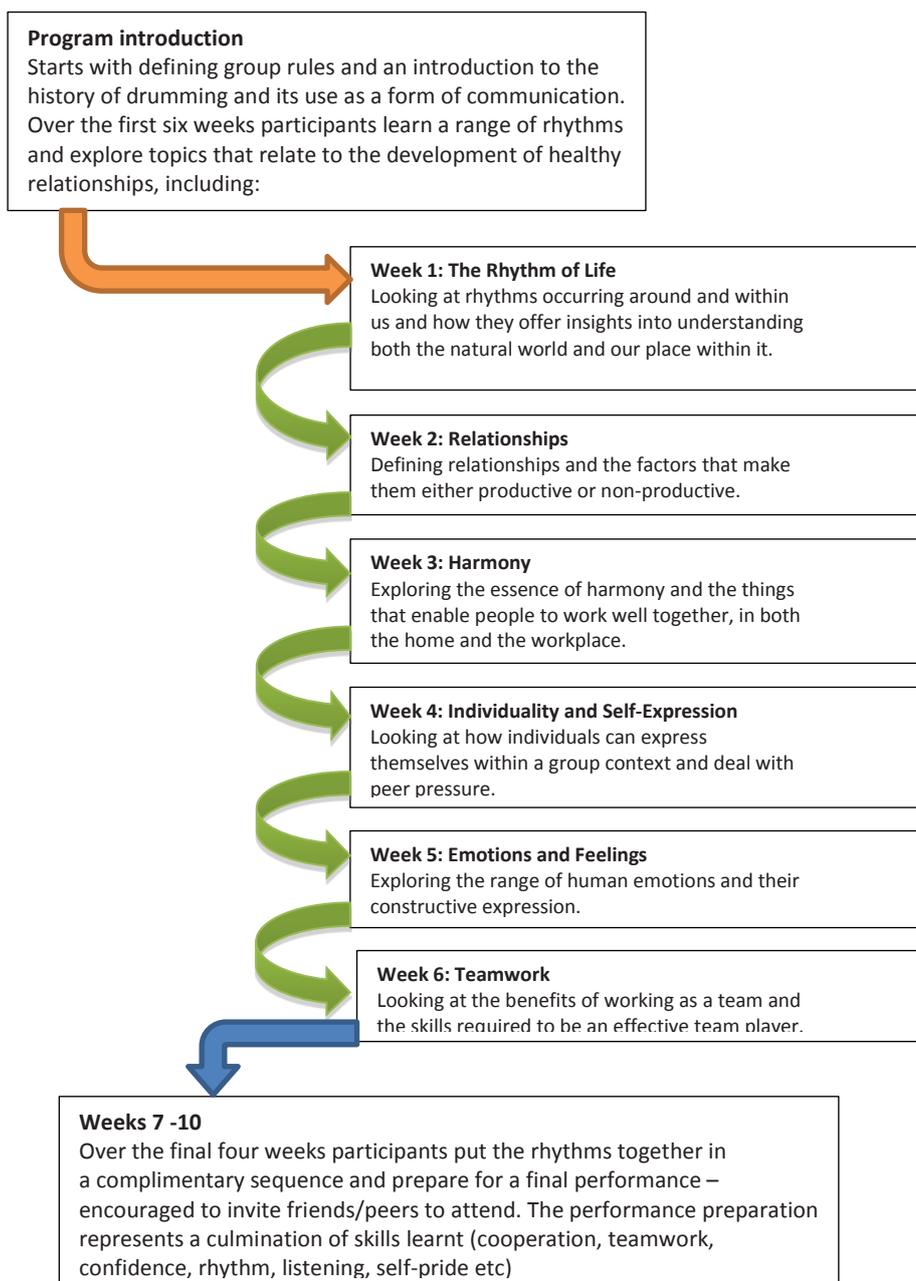


Figure 2: Course structure of the DRUMBEAT Program (Faulkner, Wood et al. 2012)

4 EVALUATION

A total of 21 DRUMBEAT program groups were run and evaluated within seven WA prisons over a nine month period (between November 2012 and July 2013). To ensure assessment of its broader application, the DRUMBEAT program was held across a spectrum of prison security levels, male and female prisons, and within metropolitan and regional prisons. Table 1 summarises the prisons within which the DRUMBEAT program was delivered.

Table 1: Prisons Involved in the DRUMBEAT Program Evaluation

Prison	Highest security level	Gender	Distance from Perth
Acacia	medium	M	55km
Bandyup	maximum	F	22km
Boronia	minimum	F	9km
Bunbury (<i>r</i>)	maximum (remand)	M	183km
Casuarina	maximum	M	35km
Karnet	minimum	M	79km
Wooroloo	minimum	M	55km

r, regional

It is pertinent to note that although most of the prisons are located in the metropolitan area, a high proportion of participants reside in regional WA when not imprisoned, and a high proportion of these people are from the Kimberley region.

The series of DRUMBEAT programs incorporated within this evaluation were run as either as a ten week program (once per week) or a five week program (two sessions per week). In some instances, the program duration was shortened due to conflicting prison circumstances (such as staff strike, prison lock down) or due to a high proportion of prisoners being transferred or released prior to the DRUMBEAT program completion date.

Each DRUMBEAT program was facilitated by two of the four Holyoake DRUMBEAT trained facilitators assigned to deliver the programs within the prisons. Each facilitator had prior training in mental health and drug and alcohol co-morbidities (co-existing medical conditions). A prison liaison staff member was nominated at each prison and s/he assisted the DRUMBEAT facilitators with organising the delivery of the DRUMBEAT program and the research team with its evaluation.

Although UWA researchers were present for many of the initial and final DRUMBEAT sessions in order to explain and assist with survey completion, the researchers were not actually involved in running the DRUMBEAT program and therefore remained independent to the program delivery.

It is important to note participation in the DRUMBEAT program and its evaluation was completely voluntary. Prisoners were free to withdraw at any time, and were under no obligation to complete the surveys, or participate in interviews with the research team. Participation in the DRUMBEAT program and/or its evaluation was voluntary, and prisoners were free to withdraw from the program and/or evaluation at any time.

5 METHODS

5.1 Overview

The DRUMBEAT program was evaluated by using mixed methods comprising quantitative and qualitative data collection. This included structured prisoner surveys and semi-structured interviews with prisoners, prison staff and program facilitators. The survey included previously validated questionnaires and several open-ended questions to enable collection of other qualitative data including feedback on the program and its perceived impact.

Figure 3 provides an overview of the DRUMBEAT evaluation process. Prison staff and DRUMBEAT facilitators were also under no obligation to complete the evaluation interview or feedback process.

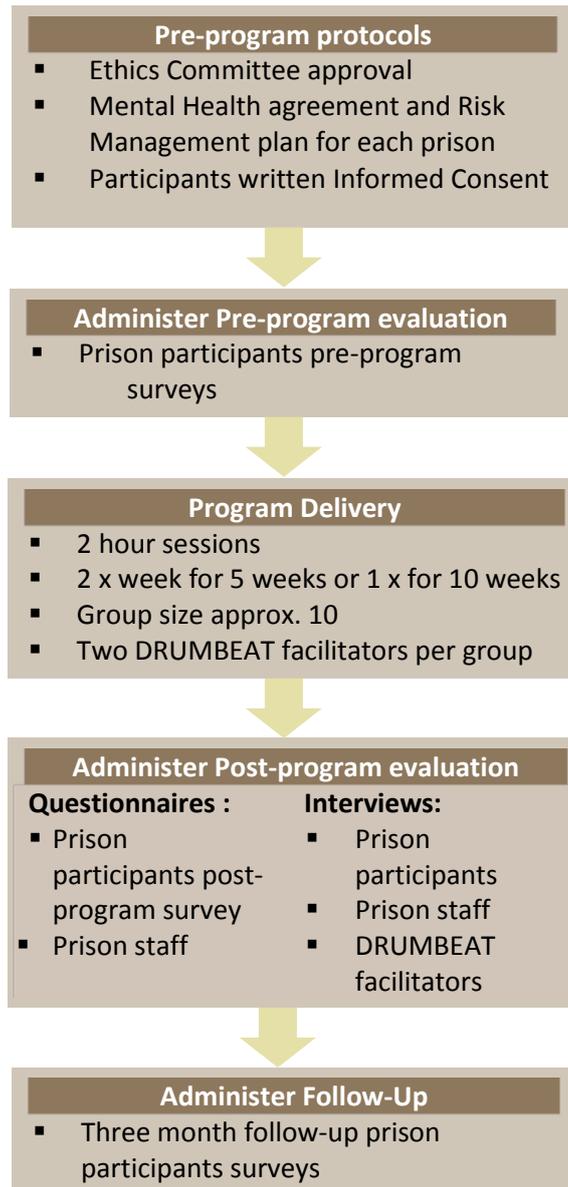


Figure 3: Evaluation process overview

5.2 Prisoner Surveys

Prisoner surveys were conducted at three time points – at the start of the program (pre), at the conclusion of the last session (post) and three months (3 months follow-up) after the DRUMBEAT program was completed. Written informed consent was provided by prisoners participating in the evaluation (Refer to Appendix 1).

5.2.1 Measures

The pre- and post-program surveys each consisted of four established scales or set of items including: 1) Warwick Edinburgh Mental Wellbeing Scale (WEMWBS) (Tennant, Hiller et al. 2007), a validated measure of positive mental wellbeing; 2) Kessler-5 (K-5) (Kessler, Andrews et al. 2002), measuring psychological distress, adapted for Aboriginal populations from K-6 (which is itself an abbreviated version of the Kessler-10 (Slade, Grove et al. 2011), 3) the Resilience Scale (Wagnild and Young 1993); 4) General Health Questions, used in previous DRUMBEAT evaluations. Refer to Appendix 2 for the pre-program survey and Appendix 3 for the post-program survey.

The goals of the DRUMBEAT program in improving prisoner wellbeing provided the rationale for the choice of instruments used for this evaluation. Measuring positive mental wellbeing was particularly important, given the emphasis within the DRUMBEAT program on healthy relationships and positive self-esteem. Although the WEMWBS tool has not been previously validated with an Aboriginal population, it has been used in other prison based research (Stewart-Brown and Janmohamed 2008). There is evidence (Schlesinger, Ober et al. 2007, Fleming, Gately et al. 2012) that a high proportion of prisoners experience psychological distress upon incarceration and during their imprisonment. The research raises concerns about the paucity of appropriate screening and assessment tools for prisoners in general, and for Aboriginal prisoners in particular, as well as commenting on the significant impact poor mental health and psychological distress has on recidivism rates (Schlesinger, Ober et al. 2007, Fleming, Gately et al. 2012). As the DRUMBEAT program aims to improve mental wellbeing and emotional regulation, it was hypothesised it may also positively impact (i.e. lower) on psychological distress in participants. Resilience is particularly pertinent for Aboriginals; the Resilience Scale has been used previously in DRUMBEAT evaluations and is incorporated within the Aboriginal and Torres Strait Islander Healing Foundation Limited 'Toolbox' - scales for measuring Aboriginal Culture and Social Emotional Wellbeing (Aboriginal and Torres Strait Islander Healing Foundation).

In addition to these questionnaires, the pre-program survey collected basic demographic data, sentence length and prior imprisonment data. The post and three month follow-up surveys incorporated additional items relating to program feedback and open-ended questions on the value of the DRUMBEAT program and its impact on the prisoner's life, relationships and behaviour.

5.2.2 Survey administration

Although the surveys were designed to be self-completed, it was recognised the inclusion of validated questionnaires with previously established wording may prove challenging to some participants with literacy, English as a Second Language or comprehension issues (Schlesinger, Ober et al. 2007, Fleming, Gately et al. 2012). Thus when the pre- and post-program surveys were administered, the DRUMBEAT facilitators and/or UWA researchers were available to assist prisoners who asked questions, or (in a few instances where there were major literacy challenges) to read out questions and assist with the recording of responses.

Each completed survey was assigned a unique confidential code to identify the prison, DRUMBEAT group and prisoner. Prisoner initials (rather than names) were used to ensure prisoner confidentiality. It was necessary to use unique participant identifiers in order that pre, post and three month follow-up surveys could be matched and analysed for each participant. It was also necessary in order to generate a master list so participant identifiers could be decoded into names

in those instances where prisoners needed to be identified because of concerns about their mental wellbeing and distress (refer to Section 5.2.3 below).

A. Pre-program

During the first DRUMBEAT session, the purpose and requirements of the program evaluation were explained to prisoners, either by the DRUMBEAT facilitators or members of the research team. The information and consent information was read to the group and prisoners were given information sheets and consent forms to read (refer to Appendix 1), and invited to sign if they were willing to participate in the evaluation. Those who agreed then completed the pre-program survey (refer to Appendix 2).

B. Post-program

The post-program survey (refer to Appendix 3) was completed at the final DRUMBEAT session after the performance (week 5 or 10, depending on the group). Prisoners who did not attend the last DRUMBEAT session were asked by the transitional officer or DRUMBEAT facilitator to complete the survey as soon as possible after program completion.

C. Three month follow-up

Approximately three months after program completion, a pack of three month follow-up surveys (refer to Appendix 4) was provided to each prison liaison staff member by the research team, along with a list of participants who had completed the program three months previously. These were given to the prisoners who were still in the prison at this follow up point. For prisoners who had been released into the community, the prison liaison staff posted them a survey with a reply paid envelope for return directly to the research team (when possible). In one instance, two members of the research team attended Casuarina prison to assist with administering the three month follow up surveys. With many prisoners at the three month time point relocated to other prisons, the available sample size at three month follow up was small.

5.2.3 Psychological distress protocol

In accordance with the DCS Risk Management Agreement put in place for each prison, the researchers were required to alert the prison should there be any concerns about the mental wellbeing of participants in the study. The use of the total Kessler score (in all forms; K-10, K-6 & K-5) as a quick screening tool for possibly psychosocial stress is well documented (Kessler, Andrews et al. 2002, Sunderland, Slade et al. 2011). Initially, a total score of 12 on the K-5 scale was used as a conservative basis for notifying the prisons that a participant may be at risk of psychological distress. This led to four notifications in December 2012, however in both instances prison staff indicated there were known circumstances (such as just having had parole refused) that may have accounted for the participant's high score at that point. At one prison, following the referral of the two identified prisoners to a psychiatrist, neither of these prisoners returned to the DRUMBEAT sessions, and the facilitators expressed concern that this may be as a response to the referral being seen as unwelcome or unwanted interference or a breach of trust between prisoner and the research team. These issues following the initial implementation of the risk management process highlighted the need for any single score on a scale to be interpreted within a broader context of the individual prisoner's circumstances and overall wellbeing. Following discussion with staff from DCS and prison counselling services, the research team broadened the approach to risk assessment

to look at participant's scores on the overall mental wellbeing scale (WEMWBS) prior to determining the need for referral. Following implementation of this modified risk management process, there were no participants that required to be placed on the DSC At-Risk Management System (ARMS).

5.3 Interviews

Interviews to elicit feedback about DRUMBEAT were held with prisoners, DRUMBEAT facilitators and prison liaison staff. Semi-structured interviews were conducted with prisoners who agreed to be interviewed (and were still in the same prison) approximately two to three weeks after program completion. Interviews were conducted approximately bimonthly with Holyoake DRUMBEAT facilitators at the completion of DRUMBEAT programs. Prison liaisons provided feedback via interviews or in written form at the end of the series of programs at the prison.

5.3.1 Prisoner interviews

At the conclusion of their DRUMBEAT program, prisoners who had previously provided written consent to be interviewed were invited by the researchers and/or DRUMBEAT facilitators to participate in an interview with a member of the research team. The prison liaison assisted in coordinating the scheduling of these interviews on a date that suited prison timetabling and prisoner availability.

A total of 31 prisoners were interviewed (Bandyup: 5, Casuarina: 6, Karnet: 8, Wooroloo: 12). All interviews were undertaken by members of the research team, using a semi-structured interview guide (refer to Appendix 5). Each interview took 15-25 minutes to complete. Although DCS had pre-approved recording of interviews (subject to individual prison security protocols), approval to record was only provided by Karnet. The recording was sent electronically to a DCS approved transcription service (Pacific Transcription) for transcription and no audio recordings of the interview retained. Names and any other identifying information were not used within transcriptions. At interviews where approval of audio recording was not provided, notes were taken by a research assistant or the research team member conducting the interview.

5.3.2 DRUMBEAT facilitator interviews

Approximately bimonthly, the DRUMBEAT facilitators were interviewed in order to gather feedback on the program/s they had facilitated (Refer to Appendix 6). Facilitators were asked for their perceptions about the program, and impacts and/or notable changes they had observed for each group of participants. A total of 11 interviews were conducted with detailed notes or audio recordings made.

5.3.3 Prison liaison staff interviews

At the conclusion of the series of programs, the prison liaison staff from Karnet, Wooroloo, Bunbury, Casuarina and Bandyup prisons were interviewed and/or gave written feedback about the DRUMBEAT program and their perception of its impact on prisoners and their relationships with other prisoners, their families and the prison staff.

5.4 Data treatment

Missing scores for WEMWBS, K-5 and Resilience questionnaires were replaced with SPSS-generated individual measure means. The DCS provided Australian Standard Offence Classification (ASOC) codes for 93 of the prisoners. To assist with summarising, offences were categorised into broad offence categories. Prisoner sentence length was ascertained from self-report and DCS data; if there were discrepancies, the DCS data was used.

5.5 Data analysis

Quantitative data analysis was completed using SPSS V21. Descriptive statistics for each independent and outcome measure were generated. Pearson's correlations were used to assess relationships between length of sentence and age and each outcome measures (pre- and post-program for WEMWBS, K-5 and Resilience scores). Independent t-tests were used to examine relationships between Aboriginality and each outcome measures (pre- and post-program for WEMWBS, K-5 and Resilience scores). Paired t-tests were used to detect significant differences in scores pre- and post-program for WEMWBS, K-5 and Resilience. General linear modelling (repeated measures) was used to examine for differences between pre, post and three month follow up for WEMWBS and K-5 scores.

Qualitative data were thematically coded to establish the most consistent themes. Research team members conferred and agreed with the final categories.

6 RESULTS

The following sections describe the demographic profile of the prison participants, followed by results from the analysis of the pre- and post-program survey measures of mental health and resilience, and responses to questions related to the benefits of participation in the DRUMBEAT program. Findings from the qualitative interviews and open-ended survey questions are presented thematically throughout the results section to illustrate findings.

6.1 Demographic Data

A total of 21 DRUMBEAT programs were completed and evaluated. These programs were implemented within seven Western Australian prisons (six metropolitan and one regional) between November 2012 and July 2013.

Overall, of the 210 prisoners who enrolled in the DRUMBEAT program and attended at least one session, 179 completed *at least one* of the pre- or post-program surveys, and 146 prisoners actually finished the program. 114 prisoners (54% of those who attended at least one session) completed *both* the pre- and post-program surveys and 20 prisoners also completed the three month follow up survey⁴. Table 2 summarises the completed programs and survey completion at each of the participating prisons.

⁴ Reasons for non-completion are primarily related to prisoners being released, relocated to other prisons, commencing mandatory programs or prison work commitments

Table 2: DRUMBEAT program and evaluation participation numbers and proportions

PRISON	DRUMBEAT PROGRAM			EVALUATION COMPONENT				
	N programs completed	N prisoners started (A)	N prisoners completed	N prisoners completed pre	N prisoners completed post	N prisoners completed pre & post (B)	% prisoners completed pre & post (B/A)	N prisoners completed 3 month
Acacia	2	14	11	11	4	4	29	0
Bandyup	2	19	7	12	4	4	21	1
Boronia	1	8	4	7	4	4	50	0
Bunbury	2	20	15	13	14	10	50	0
Casuarina	6	59	39	53	37	35	59	3
Karnet	4	36	24	24	22	21	58	9
Wooroloo	5	54	46	44	44	40	74	7
TOTAL	21	210	146	168	129	114	54	20

Of the 114 participants who completed both a pre- and post-program survey, 46.5% (n=53) were Aboriginal. The average age of those who completed both the pre- and post-program surveys was 34.3 years (sd= 9.5) and the average sentence length was 2.9 years (sd 2.5). An average of 90.2 (sd 9.1)% of sessions were attended by those completing the pre and post surveys.

Offences committed by prisoners ranged from driving offences to murder. The demographic data collected from the survey indicates the program was delivered to a broad cross-section of prisoners in terms of participant age distribution, sentence duration and sentence type (refer to Appendix 7 for Distribution Displays). Unfortunately, due to low attendance and retention rates for the DRUMBEAT programs in the two women’s prisons (Bandyup and Boronia), meaningful analysis of female data was not possible, thus the female data were excluded from the statistical analysis.

6.2 Mental Health and Resilience Measures

Total scores for each prisoner were calculated for the WEMWBS, K-5 and Resilience questionnaires in the pre- and post-program surveys. Total scores for WEMWBS and K-5 were also calculated from the three month follow up surveys. Table 3 displays the distribution of the WEMWBS, K-5 and Resilience questionnaires for pre, post and three month follow up.

Table 3: Distribution of mental health and resilience scores

Questionnaire		N*	Min	Max	Total score	
					Mean	sd
WEMWBS <i>Range 14-70.</i> <i>Higher score = more positive mental wellbeing</i>	pre	104	31	70	52.8	7.9
	post	99	33	70	56.7	7.6
	3 month	19	46	65	58.0	5.5
Kessler 5 <i>Range 5-25.</i> <i>Higher score = higher risk of psychological stress</i>	pre	111	5	19	10.5	3.5
	post	112	5	19	9.4	3.1
	3 month	18	5	22	9.3	4.5
Resilience <i>Range 14-70. Higher score = Higher resilience</i>	pre	103	29	70	56.9	8.8
	post	97	36	70	59.5	7.0

sd, standard deviation; min, minimum; max, maximum

The data were tested for relationships between participant demographics and sentence length with outcome measures (WEMWBS, K-5 and Resilience, pre- and post-program). There were no significant relationships observed between sentence length and WEMWBS pre-program or post-program scores, or between sentence length and Resilience pre-program or post-program scores. However, higher sentence length was significantly associated with higher pre-program K-5 ($p=0.046$), and higher post-program K-5 scores ($p=0.038$). Total pre-program or post-program scores for the WEMWBS, K-5 and Resilience or measures were not associated with whether or not a prisoner was Aboriginal.

SURVEY MAIN RESULTS

Analysis of matched data for program participants indicated significant improvements in WEMWBS, K-5 and Resilience scores immediately post-program and in WEMWBS scores at three months follow-up.

WEMWBS (a measure of positive mental wellbeing) scores were significantly higher ($p<.001$) at post-program than at the program start. This positive improvement was maintained at three months follow-up (compared to pre-program; $p=0.014$). This infers improved mental wellbeing was experienced immediately after, and three months following, the completion of the DRUMBEAT program.

Kessler-5 (a measure of psychological distress) scores were significantly lower ($p=0.001$) at post-program than at the program start. Although not significant, scores at three months follow-up were lower than at the program start. This infers reduced psychological distress was experienced following completion of the DRUMBEAT program.

Resilience (a measure of resilience) scores were significantly higher ($p=<0.001$) post-program than at the program start. This infers that higher resilience was experienced following completion of the DRUMBEAT program. Resilience measures were not available for the three months follow-up surveys.

6.3 Participant perspectives

In both the post-program and the three month follow-up surveys, prisoners indicated their extent of agreement with a series of questions about the impact of DRUMBEAT on their wellbeing and relationships (see Appendix 8). These results (from all prisoners who completed post-program surveys) have been combined with qualitative feedback and included in the results presented below.

6.3.1 Program Impact

Open-ended questions in the post-program survey and interviews asked prisoners if the DRUMBEAT program had helped them in a variety of ways, such as changing how they felt, improving communication or changing behaviour. In addition, prisoners were asked to identify other skills or tools they gained from the program.

Overall, the data indicated DRUMBEAT assisted prisoners with;

- i. Emotions and emotional regulation
- ii. Feeling more positive (including anger management, stress)
- iii. Developing the capacity to talk with others

- iv. Improving feelings about self/self-worth
- v. Learning about themselves
- vi. Feeling part of a team
- vii. Self-confidence and improved social skills
- viii. Relationship building
- ix. Breaking down barriers, connecting with others and forming friendships
- x. Changing behaviour.

i. Emotions and emotional regulation

Feedback from the surveys and interviews indicated the DRUMBEAT program was effective in assisting prisoners with releasing tension, anxiety and anger and feeling better.

“DRUMBEAT made me feel more released of anxiety and tension. It released it.” (Prisoner; male)

“It releases feelings. My feelings I have bottled up on the outside” (Prisoner; male)

“On drums I sometimes play my feelings. Like if I’m feeling down or sorry... disappointed... stressed... inside me. It’s good to control myself... control conflict before I explode. Wait for it to go away with drumming.” (Prisoner; male)

“Loved it. Getting frustrations out on that drum.... so could just get it all out.” (Prisoner; female)

“[Prisoners are] more calm and tolerant of other people.” (Prison Liaison Staff)

A number of prisoners said DRUMBEAT had helped them better manage their anger, with the drumming itself a tool for dealing with angry feelings:

“Instead of smashing someone else you smash the drum. It gets rid of tension. You get something out of it... and go back smiling to your cell.” (Prisoner; male)

“I went in with a bad attitude but then came out happy, smiling. You talk with the drum and I saw a change in attitude..... Once you start to make a happy feeling..... you take the stress out on the drum.” (Prisoner; male)

“... it relaxes you. Gets your mind off gaol when it gets you down. Instead of taking it out on an officer or someone else.” (Prisoner; male)

“....some of these fellas can be quite angry. You could tell by their body language, their short, one word answers and their how they're drumming. They'd smack the hell out of it and all that sort of stuff. That was quite evident straight up. That definitely dissolved with the guys over the weeks that we were out there [X's] drumming softened up greatly over the weeks. He was drumming a lot softer and in time with everyone else.” (DRUMBEAT Facilitator)

“when beating the drum a lot of tension comes out your body. First I was banging out of anger, but then I was beating to a rhythm, and that got me a more even beat -the beat was going through me and it was released. It was a therapy I wouldn’t consider on the outside.” (Prisoner; male)

ii. Feeling more positive

Prisoners commented on the way DRUMBEAT helped them feel happy and aided relaxation. These positive effects were also noted by the prison staff:

“It cheered me up.” (Prisoner; male);

“It was a good program kept me happy and relaxed.” (Prisoner; male)

"It relaxed your soul and mind... It took me to another place like I wasn't in gaol while I was drumming." (Prisoner; male)

"I always feel good during and after DRUMBEAT." (Prisoner; female)

"Feeling better after drumming, mind is clearer." (Prisoner, female)

"Have miserable days in here, don't feel very motivated, but when I would get to DRUMBEAT I would feel a lot better afterwards." (Prisoner; male)

"It has shown me it is not hard at all to be harmonious. You know it is now in my subconscious. I feel peaceful. The facilitators have a lot to do with that, they seem to be settled and calm. They tell us how they deal with issues and it is not how we would have, their way is better. It gives another perspective" (Prisoner; male)

Several participants made more overt comments about the program impacting positively on their mental wellbeing:

"It has helped keep me sane in here" (Prisoner; female)

"Well I have just gone off my mental health drugs because of DRUMBEAT! Since finishing I feel a lot more healthy in my head.... I couldn't tell you why, but I feel healthier. I.... feel great." (Prisoner; male)

iii. Developing the capacity to talk with others

The DRUMBEAT program involves a significant amount of group discussion around different themes and topics, with the facilitators focusing on establishing a climate of trust, sharing and honesty from the first session. Facilitator comments highlight how confronting and challenging this can be for prisoners who are not comfortable with, or used to, talking about themselves or their feelings and behaviours in a group setting. Improvements in this regard for both individuals and the groups as a whole were evident.

"[they were] all Kimberley [in the group]; couple quiet, started very quiet, bit sceptical, all apart for 3 talking, engaging as program went on, 2 who very quiet but could have reasonably good convo, by the finish had opened up." (DRUMBEAT Facilitator)

"They actually enjoyed opening up and talking and you could see each week they were more comfortable." (DRUMBEAT Facilitator)

Prisoners also referred to changes in their ability to talk about issues and problems with others, with a number indicating this was the one of the most significant benefits of their participation in DRUMBEAT:

"DRUMBEAT showed me how to be positive as a person and how to open up as a person." (Prisoner; male)

"If I had a problem I didn't know who to talk to or was too proud to speak to a professional about it. Alcohol was an escape and I kept bad company that was negative. DRUMBEAT showed me how to be positive as a person and how to open up as a person." (Prisoner; male)

"A lot of guys don't want to talk about what they are feeling – doing DRUMBEAT helped them open up and talk about some of those things. And now they have a network of people who have done DRUMBEAT, they can go talk to those guys, that is who they would go to" (Prisoner; male)

"Didn't used to connect to many people before just the Mrs and the kids. I had bad trust experiences in the past....But learnt how to trust others, connect with others." (Prisoner; male)

iv. Improved feelings about self/self-worth

Nearly all participants (93.8%) reported learning drumming skills through the program had helped them feel good about themselves:

"the drumming skills I have learnt in DRUMBEAT have helped me to feel good about myself"
(Prisoner; male)

"With the other programs you don't come away feeling good, not like DRUMBEAT, where you do feel good. We know all these things we have done wrong, we don't have to be told- we need to know how to change these things- DRUMBEAT helps with that- it like makes you feel better about yourself. With DRUMBEAT, instead of the bad stuff being drummed into you, it is being drummed out."
(Prisoner; male)

"I was surprised how much people opened up, came out of their shell, related to each other"
(Prisoner; male)

Interviews with prison staff and DRUMBEAT facilitators echoed these comments:

"..one of the guys...told me that it was the best course he'd ever done and he'd done the clinical intervention stuff, he'd done life skills, he done a whole lot and he said that [DRUMBEAT] was the best. He got a lot out of it and he got a lot for his self-confidence." (Prison Liaison Staff)

"All [the prisoners] had haircuts for performance." (DRUMBEAT Facilitator)

v. Learning about themselves

The majority of participants (88.3%) indicated DRUMBEAT had helped them learn more about themselves, including taking ownership of past actions and decisions and responsibility for their future:

"you learn things about yourself that you never knew" (Prisoner; male)

"I have learnt a lot about myself through the DRUMBEAT sessions" (Prisoner; male)

"..opened my eyes up to a lot of things I thought wasn't a problem" (Prisoner; female)

"becoming aware of choosing the wrong relationships" (Prisoner; female)

"I need to stop using my mum as an excuse to make people feel sorry for me. I feel ashamed for that now. I want to have more control, determined, employment, a stronger person. I will find it hard but I realise I have to do the hard yards." (Prisoner; male)

"It has made me think about how lucky I am, I think about my kids and realise I need to stop thinking about myself, why I am in gaol."

"I know I am a good person who has made bad choices." (Prisoner; male)

vi. Feeling part of a team

Nearly all participants (98.2%) commented on the way DRUMBEAT helped them feel that they were part of a team, working towards a common goal (the performance) and working together to achieve a great outcome.

"I felt part of a team while doing DRUMBEAT" (Prisoner; male)

“That you may need to work in a group to achieve a goal and you can use a holistic approach to solve problems” (Prisoner; male; three months follow-up)

“... it brought a number of people together from different back grounds and we were all set a goal which we all achieved together as a team” (Prisoner; male; three months follow-up)

“one of the main purposes of DRUMBEAT, is to break down those barriers and make everyone feel included and part of a team. DRUMBEAT definitely does that, as you can see by the rapport that's been built towards the end of the session....sense of belonging to something.” (DRUMBEAT Facilitator)

“Normally on the outside I am an individual and I work by myself, I tackle problems by myself. With DRUMBEAT I learnt to work as a team, if one person was falling behind we would help that person, we would slow to their beat” (Prisoner; male)

A key part of this team effort involved learning to persist in the face of difficulties – either through determination, or with the support and encouragement of the rest of the team:

“....determination to master beats....something that I saw stand out in him...Every week he just keeps trying, he'd keep trying, he'd keep trying. If he had enough he'd stop but then he'd come back and then try again. He didn't give up, he just kept persisting” (DRUMBEAT Facilitator)

“...I saw a pretty big change in X....The last three weeks or so [of DRUMBEAT] - I think something must have changed for him, whether it be just the program or something changed in his circumstances....the last three weeks his drumming just went through the roof. He's really, really improved and he's started to have a lot more fun with his drumming” (DRUMBEAT Facilitator)

“She turned up each week - she brought her beautiful little girl each session as well, even though that was a bit of a distraction for her at times and sometimes she had to leave and then come back and things like that. So she was a real trooper as far as turning up and getting a bit out of it. We could just see with her willingness to talk with the group and share things with us that came out every week, improved every week. A lot of time she had to drum with one hand because she had the baby in the other. That's pretty gutsy” (DRUMBEAT Facilitator)

A striking example of the huge positive shift in confidence, persistence, sociability and wellbeing which is possible with the DRUMBEAT program can be seen in this comment from one of the facilitators:

“We noticed especially at the start his coordination and things like that, it just wasn't [really] happening for him. But again, he kept persisting...Kept persisting. If he didn't get it he'd say please wait I want to try again. He wasn't afraid to say that to the group.....So I'd say overall he would have been one of the ones that had one of the biggest improvements. His confidence, self-esteem, his drumming abilities really - you could see he had improved. I think a lot of that was to do with the whole rapport of the group though. Everyone was encouraging each other and they just bonded as a group. So yeah, I think he felt supported there. He missed a session last week before the concert. So he stepped straight in on the dunduns for the concert because he wasn't aware of what everyone was doing because he missed that last session. He jumped straight in on the dundun and I think he took it in his stride and he felt fantastic afterwards, definitely.” (DRUMBEAT Facilitator).

vii. Relationship building

Overall, 90% of prisoners felt the program had given them a better understanding of the skills needed for good relationships with others.

“I just found the whole program to be very positive and helpful with everyday life and relationships. I would recommend it highly to anyone.” (Prisoner; male)

"...I learnt about positive affirmations and understanding how to have better relationships" (Prisoner; male)

"the essentialness of forgiving" (Prisoner; female)

"Learnt that there is more than one type of relationship - like not just with your partner or family, but also relationships at work, friends, in here, all sorts of relationships....You gotta get your relationships right, What we talked about relates to relationships with all types of people." (Prisoner; male)

"More respect, listening, understanding. I think a bit more about others" (Prisoner; male)

"Learnt a lot about communication through the drumming. For example if you drummed too loud it overpowered others. That is the same when we talk and listen. Learnt the importance of listening, tone, taking turns, fitting in with others." (Prisoner; male)

"Promotes good, long and loving relationships" (Prisoner; male)

Prison staff and facilitators also commented prisoners were *"better at forming and maintaining relationships."* (Prison Liaison Staff).

The DRUMBEAT program content uses music as a hands-on therapy, as well as drawing on musical concepts such as harmony, rhythm and listening as an analogy for healthy relationships and positive life skills. By understanding this, prisoners were able to apply these concepts to their own relationships:

"In a relationship you should be in the same rhythm" (Prisoner; male)

"the metaphors between life and the drums made a lot of sense" (Prisoner; female)

"We did a beat that was a rhythm and then we all went around the room and did a rhythm and then it went to just a racket just going flat out. Then I think it was X said okay, at the end of it, right now, what was the difference between that? We said well one was in the harmony and one was just all over the place erratic. Then I finally clicked what he was getting to. Well the harmony's like living your life in harmony and living a life just running amok was the erratic. Which one's better? Well of course the harmony. I didn't click on at first what he was getting at but yeah, once that came out.." (Prisoner; male)

"..the value of listening and flexibility" (Prisoner; female)

"Learn that no matter what, people are really all the same- we all laugh, cry. You learn to understand someone else's journey through life...you learn not to judge others" (Prisoner; male)

"All relationships are made up of communication, so DRUMBEAT can be applied to all areas of life" (Prisoner; male)

In the interviews, a number of the prisoners also commented on the impact of these skills on their relationships with their spouse/partner or children;

"DRUMBEAT has taught me that I think I can be a better role model to my kids and a better husband to my 'missus'" (Prisoner; male)

"I'm on a more adult level since DRUMBEAT with my son... he said "that's good mum. That's all you need"...and now since DRUMBEAT I'm getting through to him more ... he's down on me for the drugs sometimes... but he didn't see it. But now I speak to him on a different level... he understands me as a person more...With other family... I'm dealing with shift with my mum... it's still not adult-adult, it's

child-mother she says that I'm 42 and I know nothing...so emotionally it's a bit slow... I've had a lot of experiences that have taught me things but emotionally I'm a bit behind" (Prisoner; female)

"...with my daughter, I'm asking her more about school and how her day was, and stuff like that. Like about her problems, see if I can help her with her problems. She's nine years old. It's gave me better - like, just to ask her questions I've never asked before, and she loved that. She liked that I was taking more...interest into her daily life." (Prisoner; male)

"I am 44 this year and I need to show leadership. My kids, oldest is 27. I want to teach them to control their emotions and actions. I believe DRUMBEAT is good therapy for them. DRUMBEAT is good to teach kids. This helped me....Helps you have a good soul." (Prisoner; male)

"Helps with family relationships...Learnt things about how to improve life on the outside, about what is missing in life I had before." (Prisoner; male)

The survey also asked if there was any impact on relationships with other prisoners and prison staff. 86.6% of prisoners felt that the program had assisted with improving their relationships with other prisoners, and 76% reported it had helped improve relationships with prison staff.

"If you don't treat [the prison officers] right then they aren't going to treat you right. So we should treat them right" (Prisoner; male)

viii. Self-confidence and improved social skills

A notable benefit attributed to the DRUMBEAT program was the improvement in prisoner confidence. Not only did they feel able to perform in front of others, but there were positive flow-on effects.

"this course gave me confidence to perform in front of others because I felt good about myself and I knew I have the support of the others in the group." (Prisoner; male)

"I am starting to open up a lot more. I feel more organised. I have more self-control and self-belief. I am a lot calmer." (Prisoner; male)

"Having people interested in helping you build confidence in being more able to help yourself." (Prisoner; male)

"find it easier to strike up conversations with people I don't know." (Prisoner; male)

ix. Breaking down barriers, connecting with others, forming friendships

With its informal style and non-academic structure, DRUMBEAT is effective at breaking down barriers and building connections with others:

"[DRUMBEAT] breaks down walls between people. The walls, they're guards that they put up. It definitely breaks that down when they start drumming together and talking with each other and things like that. They all see they're in the same boat. They might feel like they're isolated to a degree but they're actually all sharing the same sort of stuff. That's the whole idea of the program why X developed that using the drum. The drum is definitely that medium that helps break down these walls and get the guys to connect to each other, or get the people to connect to each other." (DRUMBEAT Facilitator)

"Saw changes in some of the blokes, happy, more positive, the shy blokes it brought them out of their shell" (Prisoner; male)

By learning to trust others and open up, prisoners are then open to making new friendships and strengthening support networks with others:

*"..one prisoner I interviewed said to me he doesn't trust anyone in the prison. Doesn't trust the other prisoners or anything.....But DRUMBEAT helped him realise that there are people he could trust"
(DRUMBEAT Facilitator)*

It was evident that the DRUMBEAT program assisted with building friendships which were maintained.

"the bond formed between all these guys was amazing. I think the drumming had a lot to do with that....bringing them together, playing together, having a bit of fun together, open discussions, things like that that they were all sharing very common things....a lot of these guys probably wouldn't have interacted very much outside of the group until we started DRUMBEAT and then just see friendships forming with these fellas as each week passed." (DRUMBEAT Facilitator)

"mateship amongst other prisoners" (Prisoner; male)

"I only knew 2 of those guys in the group before, now I can speak to those boys like I have known them for years.. We play cards together, do sport together... it opened up new relationships with each other" (Prisoner; male)

x. Perception of own behaviour

84% of prisoners responded that they felt more responsible for their behaviour since doing DRUMBEAT. By gaining insights into good and bad patterns of behaviour, appreciating different ways of thinking and learning to listen and respect others, DRUMBEAT promoted changes in prisoner behaviour. These changes were reported by the prisoners themselves, as well as the prison staff and facilitators.

"knowing what the signs are when things are good or bad" (Prisoner; male),

"Learnt about relationships with other people, emotions. Impact drugs and alcohol can have on your life - you can end up in here, you could hurt someone." (Prisoner; male)

"The most important change I have noticed is my ability to listen better and see a situation from another perspective." (Prisoner; male)

"DRUMBEAT has helped my self-esteem by changing my behaviour in a positive way" (Prisoner; male, three months follow-up)

"they are more open with each other and seem a lot more positive in their outlook." (Prison Liaison Staff)

"X was all over place at beginning, no boundaries, no social skills, really changed, found his place in this group, others brought him into line... when he saw benefit of doing what is right, responded well." (DRUMBEAT Facilitator)

6.3.2 Enjoyment of a program

In addition to the benefits gained by participating in the program, prisoners reported they enjoyed the DRUMBEAT program, and many of the prison staff noticed this. This was reflected in the response of prisoners that 97% of DRUMBEAT participants would recommend the program to others.

"I feel better for doing DRUMBEAT" (Prisoner; male)

"The ladies that completed the program advised that they enjoyed it" (Prison Liaison Staff)

"Almost without exception the feedback has been positive" (Prison Liaison Staff)

"Prisoners loved it and were really glad they completed it." (Prison Liaison Staff)

6.3.3 Enduring impact of DRUMBEAT

An important additional program impact was that most participants indicated they would convey some of what they had learnt to others; 93.7% of the prisoners indicated they would pass on what they learnt to other prisoners, friends and families. A number of prisoners indicated they felt more hopeful about life after release and being able to make changes for the better and/or becoming positive agents of change in their communities.

“I strongly recommend this program to anyone who needs help with their time in prison and to move on with their life in a good and safe way.” (Prisoner; male)

“I really liked it and will take up the instrument when I am out. I want to better myself as a person.” (Prisoner; male)

“When released, I will seek and find new friends and close doors on situations in the past.” (Prisoner; male)

“Feel stronger now to keep away from drugs and alcohol.” (Prisoner; male)

“[DRUMBEAT has helped me with] putting more effort into growing emotionally.” (Prisoner; female)

“I have enquired as to becoming a facilitator of future DRUMBEAT courses and assisting the youth to better understand life and how choices made will affect their future and hopefully steer them away from prisons, drugs and alcohol.” (Prisoner; male)

“X1, X2 and X3 from C1 gave speech, about ‘remember they are aboriginal and take what they have from program to their community when they leave’.....we don’t call for it, those speeches were like a validation of the program.” (DRUMBEAT Facilitator)

“I feel there is hope for me when I get out” (Prisoner; female)

“Having confidence to live a great life without risk of re-offending. Any life is better than being in gaol.” (Prisoner; male)

“DRUMBEAT has made me act and think more pro-social and had made me believe that there is hope for me and my problems.” (Prisoner; male, three months follow-up)

“DRUMBEAT is about contributing to a group, to a society – we all have a part to play that contributes to the overall music, the overall picture. That is the same in society.” (Prisoner; male).

One of the prison staff commented DRUMBEAT helps add to a person’s life/emotional skills:

“The more they do the more they get out of it...eventually they have enough in their toolbox....if they can have a reasonable functioning life and not go back to gaol well then they've done well.” (Prison Liaison Staff)

7 PROGRAM IMPLEMENTATION; SUCCESS FACTORS AND BARRIERS TO SUCCESS

Thematic analysis of the qualitative data was also undertaken to identify the key factors for optimal delivery of the DRUMBEAT program in the prison setting, as well as to identify factors which hindered session delivery, or were perceived to reduce program effectiveness. It is important to note that because the program was implemented across seven prisons, and in 21 different groups, some of the barriers and challenges were unique to a particular prison or group circumstance. This feedback provides insight for anticipating and addressing potential barriers to effectiveness in future delivery of the DRUMBEAT program in prison settings.

7.1 Contributing success factors

Key contributing factors enhancing the effectiveness of the DRUMBEAT program in prisons are summarised in Table 4 below, and illustrated with quotes from the interviews.

Table 4: Factors contributing to DRUMBEAT program success

Contributing success factors	Supporting Quotes
Program structure and accessibility <ul style="list-style-type: none"> ▪ Informal; not classroom/textbook style ▪ Good balance of drumming and talking ▪ Sessions not tied to offence or sentence ▪ Not dependent on literacy or academic competence ▪ Accessible to all 	<p><i>“Yeah well at the start of it we used to do a little bit of banging on the drums and then we'd stop and we'd talk about relationships, communication; stuff like that. I found that good and interesting.”(Prisoner; male)</i></p> <p><i>“The drumming complemented what we were talking about” (Prisoner; male)</i></p> <p><i>“Yep. Just enough of each [drumming and talking].”(Prisoner; male)</i></p> <p><i>“...initially reserved.....But he found something with his drumming and it just really, really clicked with him.” (DRUMBEAT Facilitator)</i></p> <p><i>“It is good to have a program that incorporates fun and isn't focused on offences or based on literacy competence.” (Prison Liaison Staff)</i></p> <p><i>“Discussion time was really important; the more input people had the better the discussion. Everyone had a different way of looking at things –hearing that and sharing that was really valuable.” (DRUMBEAT Facilitator)</i></p>
Program style <ul style="list-style-type: none"> ▪ Relaxed ▪ Fun ▪ Voluntary 	<p><i>“I really enjoyed DRUMBEAT, I found it healing and how to see things in a different light. I liked the atmosphere, like the boys were there to enjoy it. It didn't feel like gaol mode, it was light-hearted. It wasn't intrusive.” (Prisoner; male)</i></p> <p><i>“Prisoners who participated seem to be enjoying a completely different kind of course and were a little buoyed by it.” (Prison Liaison Staff)</i></p> <p><i>“All of the feedback from the prisoners was positive about DRUMBEAT. A number of them did not want the program to end.” (Prison Liaison Staff)</i></p> <p><i>“feel good - drumming made me feel good” (Prisoner; male)</i></p> <p><i>“Loved it!” (Prisoner; male)</i></p> <p><i>“really good fun course. Well run and relaxed environment” (Prisoner; male).</i></p> <p><i>“liked music and new beats on drum. Learnt new thing” (Prisoner; male)</i></p>
Program flexibility <ul style="list-style-type: none"> ▪ Responds to group needs 	<p><i>But if they want to keep talking about [something], we'll keep it going on that direction. We won't stop it just to drum. (DRUMBEAT Facilitator)</i></p> <p><i>“Like with all DRUMBEAT, it goes where they take it. The discussion goes where they want to take it.” (DRUMBEAT Facilitator)</i></p>

"As the weeks went on, they talk more openly and in fact towards the end, we hardly did any drumming. They just wanted to talk." (DRUMBEAT Facilitator)

Facilitators

"The success of DRUMBEAT at Casuarina was the interaction of prisoners with each other and the facilitators. They felt secure in telling their stories to the group and sharing their opinions. As the majority of prisoners at Casuarina Prison were remote prisoners from the Kimberley, Pilbara and the Lands who are normally really shy and quiet in a group setting. The fact that they felt comfortable in opening up was a positive step for the prisoners in their rehabilitation." (Prison Liaison Staff)

"Y is a very patient and friendly facilitator" (Prisoner; female)

"X and Y were excellent with their support and understanding" (Prisoner; female)

"Facilitators were very "upbeat", informed, open and approachable. They built a good rapport with all of the...group" (Prisoner; female)

"facilitators are excellent, we all had great fun" (Prisoner; male)

"They make you feel comfortable. I would have been an absolute nightmare to listen to, to start with, but they were encouraging." (Prisoner; male)

"Facilitators did a good job. Lead by example in the way they listened, paid attention to others, in the language they used." (Prisoner; male)

Group connectedness and trust

- **Non-judgemental**
- **Trust group and facilitators**
- **Confidentiality kept**

"Just to see how they come together when they come to a place they feel safe in. They're not being judged from any of their crimes or anything because we don't know what they're in there for, we don't want to know. So it makes no difference to us why they're there." (DRUMBEAT Facilitator)

"good to have a program where you can voice your opinion without judgement." (Prisoner to DRUMBEAT Facilitator)

"Initially had their guard up, sussing them out, scared. Some putting themselves on the line to do something different. By week 3 more relaxed, laughed, let guard down, trust critical for this (say up front we don't know or care why you are here, believe you are good people who may have made some bad choices...) – group responded well re this. Sowed seed of hope from beginning. By about third week, opening up more and more. Earlier some shy, looked at ground. More comfortable sharing, weren't on edge. Were respectful to each other not just to the facilitators. Big thing that opening up to others didn't even know. Real element of trust. Just got bigger and better." (DRUMBEAT Facilitator)

"X probably came out of his shell a lot more. Was very open to talk about his life and where he has been and where he is now and what he intends to do when he gets out...his self-confidence [improved] and his ability to maybe trust us as facilitators to talk about his stuff. Where there's no judgement no fall back on him. I think that was one of the biggest things that I've noticed with him. He was a lot more candid with what he spoke about towards the last two or three weeks of the group." (DRUMBEAT Facilitator)

"Approach of facilitators critical: Being authentic, being genuine, inclusive, treat them like special human beings with a purpose who have lost way, off track, then they respond to that....." (DRUMBEAT Facilitator)

"...because they were enjoying each other's company as well as the program. It was a real atmosphere of care and nurture.." (DRUMBEAT Facilitator)

Contributing success factors**Supporting Quotes****Unique program**

"...I tried [it] out 'cause it sounded different. Instruments are more different and fun and they keep you occupied. I just went and saw them boys doing it. (Prisoner; male)

"I used to love going to DRUMBEAT every Wednesday and Friday, I was excited about it. I don't usually feel like that about programs..." (Prisoner)

"very different.....good to experience something new" (Prisoner; male)

"I was always looking forward to it, it was good that it was twice a week." (Prisoner; male)

"This is a good program for Corrective services to back – lots of people like music, and they can learn a lot that is helpful through the drumming." (Prisoner; male)

"I have learnt more in this program than any other I have done." (Prisoner; male)

Prison staff offer strong support

- **Getting DRUMBEAT running, promoting DRUMBEAT and encouraging attendance**
- **Informing prisoners about DRUMBEAT**

"I believe [DRUMBEAT] was successful as after the first course word got around of what it was about. Prisoners and myself gained a better knowledge of that it was about so it was better explained." (Prison Liaison Staff)

"X, the transitional manger there was fantastic with the guys. She's a local Noongar woman, an indigenous woman. So she knows these fellas inside and out. So she was very good as far as encouraging them. Even if one didn't turn up she'd be on the phone and just encourage him to come down and have a chat to us before they pulled the pin and all that stuff. So she'd be a big part of that down there at [name of prison]. The staff and that have been great to us there." (DRUMBEAT Facilitator)

"I think everyone will get something out of it." (Prison liaison staff)

"I think the environment was good. The support from staff was fantastic there. X has definitely got her finger on the pulse there. The environment was good, the room was good. We were always there. There were never any interruptions with using that room. It was always available to us." (DRUMBEAT Facilitator)

Flexibility and appropriateness of DRUMBEAT facilitators

- **Re the course**
- **Re prison set up etc**
- **Aboriginal facilitator in all Aboriginal groups**

"It was successfully completed because the instructors were flexible about the hours of the program and extremely professional." (Prison Liaison Staff)

"Learning experience for Holyoake/facilitators too [reference to physical setting, group issues etc]: very good learning experience for us as we learnt about what we need to make sure before program, requirement to make successful [referenced specific issues with noise, rooms].....roll with it... a lot of things out of our control... just need to be patient." (DRUMBEAT Facilitator)

Consistency and stability

- **Program venue**
- **Group members**
- **Facilitators**

"Venue really good, gave them sense of peace as away from all the other programs. No one looking, private place" (DRUMBEAT Facilitator)

"... having that consistent one place dedicated to DRUMBEAT makes a huge, huge difference....Yeah, it's that consistency, that stability for the fellas as well to have the same group, the same room, the same time, the same facilitators, all that comes into play" (DRUMBEAT Facilitator)

"Having a connection within the group and staying with the group for the period they seemed more at ease within that area." (DRUMBEAT Facilitator) [particularly with this group because Kimberley prisoners generally did not have family, thus less visits and increased isolation ; these prisoners were observed to 'stick close together']

Support from the prison staff for the program (seeing its value, knowing its purpose) and helping participants get to the sessions was critical but varied between the prisons. For the prisons where there was proactive support for the program and its evaluation and encouragement of prisoners to attend, this was mirrored in higher program participation and retention rates, and better response rates on the post-program surveys. The critical input and support by staff for program success in prisons has been likewise highlighted in other literature (O'Brien and Bates 2003).

Barriers and challenges faced when implementing the DRUMBEAT programs were discussed during interviews and within written feedback by prison liaison staff. These have been categorised and are displayed with supporting quotes in Table 5 below.

Table 5: Barriers and challenges to DRUMBEAT program delivery

Barriers and challenges to success	Supporting quotes
<p>Lack of support from prison staff</p> <ul style="list-style-type: none"> ▪ Not co-operative ▪ misperceptions/lack of understanding of DRUMBEAT program ▪ Drums and program instruments locked away – only for use at certain times/programs 	<p><i>“I think [DRUMBEAT] could have run better with a more comprehensive briefing or overview to Transitional managers as to the methodology and benefits of the course.” (Prison Liaison staff)</i></p> <p><i>“more background information to me (to pass onto prisoners) about the purpose, intent, process, desired outcomes etc and what exactly it tapped into to make a difference to the participant” (Prison Liaison staff)</i></p> <p><i>“I suppose one of the other hindrances - the guys don't always get let out on time if there's something going on. The second week that we were there, there was a union meeting....[only] some of the guys...got let out*. So I think that had a big impact on the group as well initially as far as forming a bond because we started and then we stopped...I think that definitely had a bit of an impact on the group.” (DRUMBEAT Facilitator)</i></p> <p><i>*Let out = “Released from their unit to come to us. Because they're all in separate units, released to come down. Sometimes some units get let out and other units don't.”</i></p>
<p>Timing of session delivery</p>	<p><i>“I think the format has made a big difference. Doing it again I wouldn't do it the way - we were down there on Monday, which I wouldn't do again, especially not a Monday morning. We were running two sessions... in one hit. I think - I suppose it's not enough time to take in what we're discussing because you've got two different themes going on there in the one morning or whatever. I wouldn't - if we were going to do that format, I'd say let's shift it to another day to start with, definitely not a Monday straight after a weekend. I don't think we saw huge changes in these guys from the fact that I think if we did it twice a week like we did with every other group, I think we would have noticed more - they would have had more time to absorb the discussion points and the different challenges that we did.” (DRUMBEAT Facilitator)</i></p>
<p>Competing demands on prisoner time</p> <ul style="list-style-type: none"> ▪ Prisoners risked losing their jobs if they attended the program ▪ Because DRUMBEAT voluntary, 	<p><i>“One difficulty in [name of prison]...was enabling prisoners to be excused from their workplaces one day a week. This caused difficulties for some workshop instructors.” (Prison Liaison Staff)</i></p> <p><i>“Participants needed to be at the prison for the duration of the program - we had a few difficulties as sometimes prisoners need to</i></p>

Barriers and challenges to success	Supporting quotes
<p>mandated courses, other compulsory events took precedence over DRUMBEAT attendance</p> <ul style="list-style-type: none"> ▪ Transfers to other prisons, paroles, releases meant attendance impacted, which effected whole group 	<p><i>be transferred for medical or other appointments.” (Prison Liaison Staff)</i></p> <p><i>“...one of the biggest issues with all the prisons is that priority's given to other programs. So some guys missed sessions and things like that because they were required to do different courses, or short courses and things like that.....some of them are mandated programs. They're on the management plan, they have to attend. Or as these guys are about to be released they get certificates to do a course which might be only a one day course....so sometimes that clashes with what DRUMBEAT is doing. Obviously because this is a volunteer course.... these guys usually give priority to these other courses.” (DRUMBEAT Facilitator)</i></p> <p><i>“If you have a look at [the attendance sheet] you can see that...three guys got transferred and two guys got released. So there's five guys straight out of the program.” (DRUMBEAT Facilitator)</i></p>
<p>Prisoner Perceptions</p> <ul style="list-style-type: none"> ▪ Of what DRUMBEAT was ▪ Anxiety about what might be required of participants ▪ Thought had to be musical to do ▪ Benefit of program not understood 	<p><i>“I think that the ladies did not feel confident enough to be in the group. I think that they were worried that they could not do it and would be embarrassed in front of the others”. (Prison Liaison Staff).</i></p> <p><i>“Why bother doing stuff when you are not going to get parole? That is the general opinion of them there...They don't want to put an effort into the program if they don't get parole.... Some did the program because they had to do it rather than to create a change in themselves....one wanted the certificate for their parole plan to submit.” (DRUMBEAT Facilitator)</i>“In general most participants had to be coerced or at least convinced that it would be fun/interesting” (Prison liaison staff)</p> <p><i>“Unfortunately the take up was very low and keeping participants was difficult” (Prison liaison staff)</i></p>
<p>Physical and prison operational issues</p> <ul style="list-style-type: none"> ▪ with room changes or lack of dedicated space ▪ unsuitable venues eg. not able to be closed off/separate, eg no air-con in heat of summer ▪ interruptions (lockdown) ▪ distractions ▪ remand 	<p><i>“Well changing in rooms, number 1 impact, we were changed four times.. the main room always distractions, dogs out back, guys walking through bringing dogs through, hard place to have confidentiality. One of the other rooms, twice in closed classroom with air-con and carpet [meant] two best sessions we ever had. Closed off isolated.... drumming good discussion better..the number one reason the program broke downanother session room had been double booked left, as nowhere else to do it. Some guys had come down to start program but nowhere to run. There were three times in that 4 week period that we couldn't run program so that pushed program out bit. missed out 3 rooms and changing room contributed to program not being like the other” (DRUMBEAT Facilitator)</i></p> <p><i>“..the first session we ran we were locked down had to leave and then leave the prison.” (DRUMBEAT Facilitator)</i></p> <p><i>“A big hindrance to us...was the weather. Because the room they were using, the cultural centre, the spiritual centre there, it's very, very hot and no air-conditioning, only a couple of fans. These girls had air-conditioning and that in their rooms. The couple of days that we went there it's 38-39°C and people didn't want to come out, which I can understand. Some of the girls had children inside</i></p>

Barriers and challenges to success	Supporting quotes
	<p><i>living with them. So they didn't want to bring these kids out into that temperature, which I can understand as well. So that had a bit of an impact on the group as well.” (DRUMBEAT Facilitator)</i></p> <p><i>”X actually tried to get them on to DRUMBEAT just to actually give them something to do and get them in the group environment. Most of these guys will get sentenced and they'll stay there, but then they can only do their programs once they get sentenced. Some of them have been in there nine, 10 months, just sitting there.” (DRUMBEAT Facilitator)</i></p> <p><i>”I'd highly recommend anyone that's on remand - and this is what X and I spoke about - or anyone that's sitting in Hakea and looks like they're going to be sentenced, that they do the DRUMBEAT program straight up. If they get released, great, they've got some skills. If they don't get released, they've already done a group program so they've got a bit of an idea what group work's like, how to work with other people, the skills that they've learnt through DRUMBEAT as well.” (DRUMBEAT Facilitator)</i></p>
<p>Irregular attendance</p>	<p><i>“That group....did fall apart a little bit because as with other prisons the transitional manager and people like that make sure these guys can turn up, if they can turn up. So they chase them up if they're not there and things like that. Boronia's a little bit different where it's a bit more about self-responsibility. So it's really up to the girls if they want to turn up or not.” (DRUMBEAT Facilitator)</i></p> <p><i>“The only difference there is because it's sort of a village and they're preparing to leave they're responsible to turn up to their own appointments and of course we had to sometimes round them up to get there. But once they were there it was great.....I don't think...the transitional manager or the staff at that prison were helpful in rounding them up or reminding them. I think it was sort of something you could do if you like and it's voluntary and there's the time and date and the place it's being done and off you go sort of thing. There was no sort of real back-up. Whether that's part of the plan there, whether they're trying to teach them responsibility for appointments and times and - you know what I mean? I don't know if that's part of the strategy.” (DRUMBEAT Facilitator)</i></p>

8 EVALUATION STRENGTHS AND LIMITATIONS

The evaluation methodology for this project had to be developed within a tight time-frame and on a limited budget and thus has some limitations, but also some strengths that merit noting.

8.1 Strengths

Foremost, and in line with best practice models of program evaluation (Hawe, Degeling et al. 1990), evaluation data was collected pre- and post-intervention. In addition, this evaluation incorporated a three month follow up for those still contactable. As an evaluation study, the emphasis was on detecting change pre- and post-intervention (Nutbeam and Bauman 2006).

The study used both quantitative and qualitative methods, with this mixed method approach strengthening the evaluation; an approach which has been used successfully in other research with

prisoners (Liebling 1999) giving strength and validity to the data gathered. Triangulation of data allowed survey findings to be confirmed via interview and qualitative responses from multiple sources. Triangulation recognises the benefits of different sources and types of complementary data which, when synthesised, provide richer insight into the program evaluation than just quantitative or qualitative measures alone can do (Brownson, Fielding et al. 2009).

As a significant proportion of program participants were of Aboriginal background, the research team was very aware of the need for sensitivity regarding cultural differences. Additionally, as English was not the first language for many of the Aboriginal prisoners (particularly those from rural and remote WA), the research team recognised the possibility of the written surveys being challenging to comprehend and complete. Previous Western Australian research with Aboriginal people from the Kimberley has highlighted the challenges of cross culturally applying psychometric tests developed with mainstream populations, with implications both for item wording and for interpretation of results (Smith, LoGiudice et al. 2007). Moreover, within Aboriginal populations there is diversity of language, custom, history and land affinity and these are all contextual factors, and 'one size fits all' measures of mental wellbeing lack important contextualisation (Hunter 2007).

The questionnaires incorporated scales and measures with established validity and reliability, with new items only developed where existing measures were not available in the published literature or were needed to evaluate a specific aspect of the program. For all of the scales included, a review of literature was undertaken to ascertain whether they had been used with Aboriginal people. For this reason a modified version of the K-5 was used (AIHW. 2009) and a modified version of WEMWBS which is one of the instruments included in the Healing Assessment tools (Aboriginal and Torres Strait Islander Healing Foundation) that have been used in Indigenous populations. Research into Aboriginal health/mental health issues is an expanding field. However, one of the recognised shortfalls is the paucity of good quality, well researched, suitable and validated instruments for screening and assessing health/mental health domains for Aboriginal populations, not just those in the prison system (Schlesinger, Ober et al. 2007, Smith, LoGiudice et al. 2007, Fleming, Gately et al. 2012)

The DRUMBEAT program was evaluated in multiple prisons within both metropolitan and regional settings. DRUMBEAT was delivered and evaluated to a large range of prisoners, including those with long and short sentences. Although the multiple sites is noted as a strength for the generalisability of the evaluation, it is pertinent to note that the evaluation was ambitious in its spanning of seven different prisons (with limited evaluation resources) as this did entail considerable work to establish risk management agreements, relationships, and research recruitment processes, and learn the differing security protocols for multiple prison settings.

This evaluation was also underpinned by a knowledge mobilisation framework (Sudsawad 2007) that advocates for the importance of engagement in the research process of stakeholders involved in program development, delivery and the future uptake of evaluation findings. In the case of this project, this encompassed inclusion of DRUMBEAT program staff and facilitators from the outset in the research framework such as the development and refinement of data collection tools and development of prisoner interview questions. The research team was also proactive in building relationships with prison staff.

Due to the number of prisons and variable circumstances at each prison where the program was being delivered, it was essential that the evaluation had some capacity to be flexible, and to make some modifications from early learnings. For example, the number of in-person visits to the prisons was increased so that members of the research team could assist with survey queries and personally invite participants to be involved in the interview component of the evaluation. The research team also made a number of suggestions to the DCS regarding the risk management processes for participants who scored higher on the K-5. As noted by Hunter, there are dangers in computing summary measures of mental health status that are decontextualized from other factors that influence Aboriginal wellbeing (Hunter 2007).

8.2 Limitations

Research within the prison environment has a number of particular complexities which make such research complicated, difficult and time-consuming. A number of studies (Newman 1958, Liebling 1999, O'Brien and Bates 2003) have examined these issues, and whilst it was not the aim of this evaluation to consider these constraints, the challenges this research team faced do reflect international findings and recommendations on this type of research. The areas commented on below are not exhaustive, but they do highlight a number of the constraints of this type of research, and thus the limitations of this evaluation.

For this program evaluation, limits to generalizability include that the data were collected from male only prisons in mainly metropolitan Western Australian prisons. Participants self-selected to participate in the program and the evaluation, and a control group was not available to compare changes in mental wellbeing and psychological distress scores. Without a comparison group it is difficult to ascertain purely from the survey data if other programs or factors led to changes in prisoner mental wellbeing and/or psychological; however data from the qualitative component of the study suggest that DRUMBEAT did impact mental wellbeing and psychological distress. Objective data related to behavioural changes were not available and participant movement between prisons and release led to incomplete data for some participants (who were subsequently excluded from analysis). Additional limitations to be considered include that some of the participants for whom English was not the first language may not have understood the survey questions and that interview data were mainly recorded with handwritten notes.

These limitations are described in detail below, and while not exhaustive, they do highlight a number of the constraints of this type of research, and thus the limitations of this evaluation. It is important to note however, that while these limitations are evident, the triangulation of research methods does alleviate some of the interpretation constraints that exist when survey-only data is collected.

In addition, the DCS Research and Evaluation Committee requirement for prisoners to tick consent for each aspect of the research created problems; some prisoners did not tick any boxes yet indicated consent for all aspects of the research and then signed the form, while others started ticking the list then stopped after a few ticks but still signed the form.

The research team had planned to gather data from a comparison (control) group (i.e. prisoners who did not attend a DRUMBEAT program); however this was unable to be done due to difficulties encountered by DCS in retrieving demographically matched prisoners. The original proposal to recruit comparison groups from prisoners who were on waiting lists for DRUMBEAT programs was

not able to be implemented, as there were no waiting lists until just two months before the end of the series of DRUMBEAT programs, which was insufficient time to survey, interview and follow-up such a group. Attendance rates for the programs varied considerably and were sometimes thwarted by factors outside of the facilitator or prison staff control such as clashes with mandatory courses, work schedules, other prison constraints (e.g. musters, lock-downs, different units being out of their cells at different times). As DRUMBEAT was a voluntary program, competing demands for mandated courses, work requirements or other prison requirements impacted upon some prisoners' ability to attend sessions and/or complete the program. This was a particular problem within female prisons where rates of attrition were such there was insufficient data gathered for inclusion in the analyses. Competing demands also impacted on the ability to interview all of those prisoners who had indicated a willingness to be interviewed. This issue is one which faces all prison research, and needs to be carefully factored into the design and execution of future studies.

The issue of poor literacy and comprehension of the written questionnaires was particularly evident at Casuarina, most likely due to the higher percentage of Aboriginal inmates for whom English is their second language. Due to the large number of participating prisons and number of programs being delivered, research staff were only able to attend some sessions to assist participants with survey completion, and DRUMBEAT facilitators were trained to assist prisoners with comprehension queries in these instances.

Prima facie approval to record interviews was provided in the DCS ethics approval, but was subject to approval from each individual prison. Only one prison (Karnet) allowed the research team to bring in recording devices, and there were strict protocols about the security of transcribed data (refer to Appendix 9). For interviews at the other prisons, although a second member of the research team took notes in most cases, a number of interviews required the interviewer to both ask questions and take notes, which inevitably impacted the flow of conversation and feedback from prisoners. While every attempt was made to record comments verbatim, it is possible inaccuracies have occurred as a consequence of this manual note-taking.

Initially the research team had intended to collect behaviour report data (such as behaviour incidents). It became evident, however, that these data were not collected by prisons using simple mechanisms, as well as such data appearing to be quite subjective. To gather and assess this complex prison report data was beyond the means of this research project.

While the majority of people imprisoned in WA prisons are male, Holyoake and the research team attempted to deliver and evaluate the program in Perth's two female prisons (Bandyup and Boronia). Unfortunately, various difficulties with recruitment and attrition in these prisons meant the final number of participating females was too small to include in the formal quantitative analyses. This evaluation report does, however, include qualitative comments/feedback from the women who participated. While the available data, prisoner interviews and facilitator feedback from the female prisons indicated the program was also well received and beneficial for female prisoners, it is important this be further evaluated in the future. There may also be a need to make small modifications to the program delivery for female prisoners; it was noted for example, the female prisoners enjoyed the weekly group drumming sessions but expressed more reluctance than their male counterparts to participate in any kind of end of program performance.

9 CONCLUDING DISCUSSION AND IMPLICATIONS

Overall, the evaluation observed significant improvements in mental wellbeing among the study population in both the immediate and longer term and increased resilience and decreased psychological distress in the short term. Qualitative feedback from the prisoners, prison staff and facilitators provided additional evidence of positive outcomes post DRUMBEAT relating to their mental health.

Feedback from surveys and interviews from all three groups (prisoners, facilitators and prison staff) indicated DRUMBEAT was well received, considered worthwhile and had many benefits for the prisoners. Furthermore, some of the qualitative data from interviews indicated some flow-on effects to interactions with other prisoners, relationships with families/partners and a desire to change for the better, both now and after release.

The underlying philosophy of DRUMBEAT meant prisoners felt valued, listened to and respected in a non-judgemental, non-threatening way. This appeared to generate strong feelings of trust, connectedness and friendship between the members of the group and the facilitators. One of the great strengths of the DRUMBEAT program is its relaxed informal structure. This makes it accessible to all prisoners, regardless of language, literacy, sentence length, offence, age or gender. Prisoners found the DRUMBEAT approach helped them look at their own lives and problems in a new way. By realising the drumming/rhythm/harmony/teamwork are analogies for life and relationships and that drumming is a tool which can aid in improving these things, prisoners gained insight into their own situations, and explored alternative ways of thinking and dealing with issues.

Additional benefits from the DRUMBEAT program included improved mood and emotional control, better understanding of themselves, and ways in which to improve relationships. A large number of prisoners mentioned gaining skills in listening and communicating better, boosted self-confidence and esteem, greater respect and understanding for different opinions and backgrounds, empathy towards others and new/improved friendships with other prisoners.

Other important themes emerging from the feedback was that DRUMBEAT breaks down barriers, fosters a strong sense of belonging to a team, and encourages members to work as a team to achieve a common goal.

There is indication that DRUMBEAT impacted upon familial relationships for the prisoner participants, although this was difficult to measure objectively and was not able to be assessed within this evaluation. Most prisoners believed DRUMBEAT would have long-lasting benefit for them on release, with nearly all indicating they would pass on some of what they had learnt to others. The three month follow up surveys confirmed these aspects, and suggests DRUMBEAT program can make an important and lasting change on lives and behaviour.

On the basis of this evaluation, the research team notes the following implications and considerations:

9.1 Continuation of the DRUMBEAT program in WA prisons

- 9.1.1. It is recommended the DRUMBEAT program is implemented within Australian prisons with ongoing evaluation. Results of this evaluation underscore the contribution

of the program to improving prisoner mental wellbeing and reducing psychological distress, both in the shorter term, and with the potential positive impact on their life, outlook and relationships post release.

- 9.1.2. It is recommended that the DRUMBEAT program is promoted throughout Australian prisons but with participation remaining voluntary rather than it becoming a mandated program. Although some participants felt DRUMBEAT should be compulsory and all (new) prisoners should do it, the wider view was the voluntary nature of the program is important and one of the ingredients of its success. If the program was made mandatory, reluctant prisoner participants may detract from the group. With openness to explore new ideas, self-reflection and willingness to talk and share being key factors in the DRUMBEAT program, members who are not willing to engage in these ways could inhibit the development of the environment necessary for the success of these sessions.
- 9.1.3. It is recommended that DRUMBEAT is offered on a continuing/regular basis within prisons. Word of mouth was a significant factor in getting prisoners to 'sign up' for the program, hence recruitment was the most challenging for the first round of the program at each prison. Once DRUMBEAT was positively received amongst the prisoners, many more wanted to join – in fact, many missed out because the program came to an end. Maintaining the momentum helps address the problem of loss of positive feedback caused by high prisoner turn-over.
- 9.1.4. The benefits of the DRUMBEAT program are likely to be enhanced by providing participants with the opportunity to be involved in DRUMBEAT and to have its learnings reinforced after release from. A number of participants indicated a desire for this, and several others were keen to be trained as program facilitators with a view to being involved in program delivery back in their own community.

9.2 Program content and delivery

- 9.2.1. Within groups consisting only of Aboriginals, DRUMBEAT programs would ideally incorporate an Aboriginal and non-Aboriginal facilitator. Having an Aboriginal facilitator at the all-Aboriginal groups at Casuarina was perceived to be important, especially when discussion about culture was raised or included in sessions.
- 9.2.2. Provision of pertinent information about the DRUMBEAT program to prison staff is likely to assist the program. Prison staff turnover is such that it cannot be assumed staff remain consistent throughout the running of a program, and thus support for the program would be expected to fluctuate. In particular, background information about the value and factors underpinning the program, along with suggestions for promoting and encouraging participation in the DRUMBEAT would assist with prison staff support for DRUMBEAT and thus help encourage participant attendance at the first session.
- 9.2.3. It is recommended DRUMBEAT is run as two sessions per week over five weeks (ideally), but with flexibility to adapt the program duration and scheduling of sessions to meet prison and participant needs where possible. Although DRUMBEAT was designed to be run once a week across 10 weeks, a five week (twice a week) version of the program was instigated within the prison setting to try to reduce attrition due to prisoner release or commencement of other mandated programs. It was found that the shorter number of weeks with more frequent sessions was optimum timing in the prison setting.

- 9.2.4. It is recommended that DRUMBEAT program information background resources and recruitment methods are developed which will encourage prisoners to enrol and attend sessions. This could be optimised by engaging prisoners (DRUMBEAT ‘Champions’ or ‘Mentors’) who have already completed the DRUMBEAT program to assist with strategies to recruit new participants.
- 9.2.5. It is recommended that each prison has an appropriate venue in which DRUMBEAT sessions can be held. This needs to be private and not too close to other areas within the prison. Air-conditioning also assists with ensuring prisoners attend and remain in the sessions.

9.3 Future DRUMBEAT evaluation

- 9.3.1. It is recommended the impact of the DRUMBEAT program be evaluated within female prisons. This is particularly pertinent given other studies in Australia and overseas have highlighted the higher rates of psycho-social distress, self-harm and mental health issues in female prisoners (Suter and Byrne 2000, ABS. 2007, Fleming, Gately et al. 2012).

9.4 Future evaluation of programs in custodial settings

- 9.4.1. Conversations with various prison staff and with the Department of Corrective Services during the course of this project confirmed the great merit of Holyoake’s efforts to ensure the DRUMBEAT program was rigorously and independently evaluated, with general consensus regarding the need for more evidence to support effective programs in custodial settings in Australia. While this evaluation was designed for the DRUMBEAT program, the overall mixed methods methodology, the strategies for research recruitment and retention and some of the learnings from the implementation process may be usefully considered for the evaluation of other programs in prison settings.

9.5 Conclusion

It can be concluded from this comprehensive evaluation that DRUMBEAT is an effective program for improving prisoner mental wellbeing in the immediate and longer term and in reducing psychological distress, increasing resilience and fostering the development of positive relationships skills, confidence, teamwork and self-insight. The results indicate that prisoner engagement in the program was enhanced by DRUMBEAT’s unique use of drumming, music and analogies to the rhythm of life, and this approach seemed to particularly resonate with imprisoned Aboriginal people who may be less likely to engage in other more traditionally delivered mental health programs. The strengths and potentially far reaching impact of the program as highlighted in this report augur for ongoing support and funding of program in the prison system.

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Appendix 1 – Participant Information Sheet and Consent form

Program Participant Information Sheet

TO BE READ ALOUD

We would like to invite you to be part of the **DRUMBEAT Evaluation** to help us work out if the DRUMBEAT program has had an impact upon your wellbeing. For this project we are asking people what they think of the DRUMBEAT program by talking with them and getting them to fill in some questionnaires. The aim of the project is to work out if DRUMBEAT can make a difference in the wellbeing of prisoners and if any changes that are needed to the program so that it may help people as much as possible. Being part of the project does not bring any risks and it is unlikely that answering the questions will be uncomfortable for you. We want to use the information from you and from other people in a report to describe the impact of the DRUMBEAT program on the wellbeing of prisoners in WA.

You do not have to speak to me or fill in the questionnaires if you don't want to. This is completely your choice. You can stop talking to me or filling in the questionnaires at any time by telling me you want to stop. Speaking to me will make no difference to your release or any other part of your sentence.

There are a variety of things that can be said that I do need to report, these include; 1) If you say something about harming yourself or someone else I will have to report this to a staff member, 2) If you talk about an offence you have committed for which you have not been charged or convicted I will have to report this, 2) If you tell me something about any activities that threaten the security or good order of the prison such as a plan to escape, I will have to tell a prison officer.

If you answer my questions and the questionnaires, I will not tell the people at this office/prison what you have said. All the information we get will be put together as a written report and will be printed, but your name will not be on any of the printed reports or anywhere else. If any of your answers indicate you are at risk of emotional distress, we must provide your name to support services in your prison.

If you have any questions, worries or complaints about the project, about being interviewed or about filling in the questionnaires, you can contact ACCESS (Administration of Complaints and Compliments and Suggestions) using the

- Free-call Prisoners Telephone System (PTS) available in all prisons; or
- Confidential yellow envelope available in all prisons.

For more information on ACCEESS please talk to any prison staff or peer support members.

Thank you for your help.



Appendix 1 – Participant Information Sheet and Consent form

Program Participant Consent Form

TO BE READ ALOUD

Research Title: DRUMBEAT Evaluation

	Yes ✓
I have read the information sheet. I have been able to ask questions about the project.	
I know that I do not have to talk to the research person and I that I can stop talking at any time	
I know this interview and questionnaire is for research only and will not make any difference to my release or any other part of my sentence.	
I know that what I say may be used as part of a report but that my name will not be in any report. My answers and anything I say will not have my name next to it.	
I give permission for the research team to be provided with details about my prison sentence including my charge, the number of times I have been in prison, the length or prison term and incidence reports.	
I know that if I say something about hurting myself or someone else the researcher will need to tell a staff member.	
I understand if I discuss crimes that I have committed, but have not been charged or convicted for, that the researcher will need to report this.	
I understand that if I talk about something that threatens the security or good order of the prison the researcher will need to report this.	
I know that if I have any questions or worries about this research I can contact the designated contact person on the information sheet or using the ACCESS system.	
I am happy to be contacted to be involved in an evaluation follow up in 3 months' time	

Initials of Participant: _____

Signature of Participant: _____

Date: _____

Signature of Researcher: _____

Date: _____

Appendix 2 – Participant Pre-program survey



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TIME 1

FINAL Pre-program Survey Version: MARCH 2013

DRUMBEAT EVALUATION

The University of Western Australia is using this survey to find out about the impact of a program on the wellbeing of people in prisons.

Thank you for agreeing to complete this survey. We are very interested in what you have to say.

Your answers will be kept confidential, and your name will not be used in any report.

Instructions



If you make a mistake, cross out the mistake and tick or write your new answer.



This is not a test and there are no right or wrong answers.



Please answer all the questions as honestly as you can.



If you don't want to answer any questions or do not want to complete the whole survey, you don't have to.



If you have any questions about the survey, please ask.

Thank you for your help.

PLEASE FILL IN YOUR DETAILS

1. What are your initials?

2. What is your gender (please circle)?

Male 0

Female 1

3. What is your date of birth? __ __ / __ __ / 19 __ __

4. Are you of Aboriginal and/or Torres Strait Islander descent (please circle)?

No 0

Yes 1

5. a) Are you participating in any programs other than DRUMBEAT in the prison (for example Pathways- please circle)?

No 0

Yes 1

b) If yes, which program/s _____

6. a) Have you been in prison before (please circle)?

No 0

Yes 1

b) If yes, how many times have you been in prison not including this time?

_____ times

7. How long is your current sentence?

_____ years _____ months

8. How long have you served of this sentence so far?

_____ years _____ months

Appendix 2 – Participant Pre-program survey

A.

Below are some statements about feelings and thoughts.

Please circle the number that best describes your experience over the last 2 weeks.

Circle only <u>ONE</u> number for each statement.		None of the time	Rarely	Some of the time	Often	All of the time
1.	I've been feeling optimistic (positive) about the future.	1	2	3	4	5
2.	I've been feeling useful.	1	2	3	4	5
3.	I've been feeling relaxed.	1	2	3	4	5
4.	I've been feeling interested in other people.	1	2	3	4	5
5.	I've had energy to spare.	1	2	3	4	5
6.	I've been dealing with problems well.	1	2	3	4	5
7.	I've been thinking clearly.	1	2	3	4	5
8.	I've been feeling good about myself.	1	2	3	4	5
9.	I've been feeling close to other people.	1	2	3	4	5
10.	I've been feeling confident.	1	2	3	4	5
11.	I've been able to make up my own mind about things.	1	2	3	4	5
12.	I've been feeling loved.	1	2	3	4	5
13.	I've been interested in new things.	1	2	3	4	5
14.	I've been feeling cheerful.	1	2	3	4	5

Appendix 2 – Participant Pre-program survey

B.

The following questions ask about how you have been feeling during the **past 30 days**. For each question please circle the number that best describes how often you had this feeling.

During the past 30 days, about how often did you feel....	None of the time	A little of the time	Some of the time	Most of the time	All of the time
1.nervous?	1	2	3	4	5
2.hopeless?	1	2	3	4	5
3.restless or fidgety?	1	2	3	4	5
4. so depressed that nothing could cheer you up?	1	2	3	4	5
5. that everything was an effort?	1	2	3	4	5

Appendix 2 – Participant Pre-program survey

C.

Circle the number which best indicates your feelings about that statement. For example, if you strongly disagree with a statement, circle "1". If you are neutral, circle "4", and if you strongly agree, circle "7", etc. There are no wrong answers.

Circle the number in the appropriate column	Strongly disagree				Strongly agree
1. I usually manage one way or another.	1	2	3	4	5
2. I feel proud that I have accomplished things in life	1	2	3	4	5
3. I usually take things in my stride.	1	2	3	4	5
4. I am friends with myself.	1	2	3	4	5
5. I feel that I can handle many things at a time	1	2	3	4	5
6. I am determined.	1	2	3	4	5
7. I can get through difficult times because I've experienced difficulty before.	1	2	3	4	5
8. I have self-discipline	1	2	3	4	5
9. I keep interested in things	1	2	3	4	5
10. I can usually find something to laugh about.	1	2	3	4	5
11. My belief in myself gets me through hard times.	1	2	3	4	5
12. In an emergency, I'm someone people can generally rely on.	1	2	3	4	5
13. My life has meaning.	1	2	3	4	5
14. When I'm in a difficult situation, I can usually find my way out of it.	1	2	3	4	5

Appendix 2 – Participant Pre-program survey

D.

Circle the number which best indicates your feelings about that statement. For example, if you strongly disagree with a statement, circle "1". If you are neutral, circle "3", and if you strongly agree, circle "5", etc. There are no wrong answers.

	Strongly disagree				Strongly agree
1. My overall physical health (the health of my body) is good	1	2	3	4	5
2. I often feel stressed or worried	1	2	3	4	5
3. I am getting along well with my family	1	2	3	4	5
4. I am getting along well with my friends	1	2	3	4	5
5. I find it easy to ask for advice or help if I have a personal problem	1	2	3	4	5
6. I enjoy being part of a team or group	1	2	3	4	5
7. I feel safe talking about myself in a group	1	2	3	4	5
8. I feel comfortable sharing my problems or worries with other people	1	2	3	4	5
9. I feel comfortable talking about my relationships in a group	1	2	3	4	5
10. I have the confidence to give new things a go	1	2	3	4	5
11. I feel proud of myself when I learn something new	1	2	3	4	5

Appendix 3 – Post-program survey*

*This is the last page of the post-program survey – the additional pages of the survey are as above (sections ‘A’ – ‘D’ of the pre-program survey)

Program Feedback						
Circle the number which best indicates your feelings about that statement.						
		Strongly disagree				Strongly agree
1	My input was encouraged in sessions	1	2	3	4	5
2	I felt part of a team while doing DRUMBEAT	1	2	3	4	5
3	The drumming skills I have learnt in DRUMBEAT have helped me to feel good about myself	1	2	3	4	5
4	I find some problems easier to work through since doing DRUMBEAT	1	2	3	4	5
5	I feel more responsible for my behaviour since doing DRUMBEAT	1	2	3	4	5
6	I now have a better understanding of the skills needed to have good relationships with others	1	2	3	4	5
7	DRUMBEAT has assisted with improving my relationships with other prisoners	1	2	3	4	5
8	DRUMBEAT has assisted with improving my relationships with prison staff	1	2	3	4	5
9	Since doing DRUMBEAT I aim for more harmony in my relationships	1	2	3	4	5
10	DRUMBEAT has helped me identify the importance of having values	1	2	3	4	5
11	DRUMBEAT has helped me learn about myself	1	2	3	4	5
12	I will pass on some of what I have learnt though DRUMBEAT to other prisoners, friends or family	1	2	3	4	5
13	I would recommend the DRUMBEAT Program to others	1	2	3	4	5
14	The 3 main things DRUMBEAT has helped me with are:	<hr/> <hr/> <hr/>				
15	Any other comments you have about DRUMBEAT (if you run out of room write on back)	<hr/>				

Appendix 4 – Three month follow up survey*

*These are the final pages of the three month follow up survey – the additional pages of the survey are as above (sections ‘A’ – ‘D’ of the pre-program survey)

Impact						
Please indicated how much you agree or disagree with the following. no right or wrong answers.						There are
Please circle only <u>ONE</u> number for each statement.					Strongly disagree	Strongly agree
1.	DRUMBEAT has had a lasting effect on how I think about relationships	1	2	3	4	5
2.	I have felt calmer since doing DRUMBEAT	1	2	3	4	5
3.	DRUMBEAT has helped me to be more understanding of other people's situations	1	2	3	4	5
4.	DRUMBEAT has had a lasting impact on how I behave	1	2	3	4	5
5.	I communicate better with other people since doing DRUMBEAT	1	2	3	4	5
6.	DRUMBEAT helped me to develop skills in team work	1	2	3	4	5
7.	Through DRUMBEAT I have got to know people I can talk to	1	2	3	4	5
8.	I will use some of what I have learnt through DRUMBEAT when I am released from prison	1	2	3	4	5

Appendix 4 – Three month follow up survey*

*These are the final pages of the three month follow up survey – the additional pages of the survey are as above (sections ‘A’ – ‘D’ of the pre-program survey)

INPUT	
Please let us know if DRUMBEAT has made any lasting changes to you	
1. You may have noticed some changes in how you feel or think about things since doing DRUMBEAT. If so, what is the most important change you have noticed ?	
2. Being part of DRUMBEAT may have helped you develop skills in communication or relationship building , if so what skills have you learnt?	
3. Some programs have an impact on how people behave . If DRUMBEAT has changed your behaviour, what is a lasting change you have noticed ?	
4. Please write any other comments you have about DRUMBEAT ?	

Appendix 5 – Participant Interview schedule

Initials: _____ Prison _____ Date _____

Thank you for agreeing to be part of this study, the information you provide is important for us to review the DRUMBEAT program. With this information we will be able understand if the program is working well in prison settings and to make any changes needed to improve the program. We would like to work if the DRUMBEAT program has had an impact upon how you feel. For this project we are asking people what they think of the DRUMBEAT program and how they may have changed from the program. Being part of the project does not bring any risks and it is unlikely that answering the questions will be uncomfortable for you.

You do not have to speak to me if you don't want to. This is completely your choice. You can stop talking to me at any time by telling me you want to stop. Speaking to me will make no difference to your release or any other part of your sentence. When you answer my questions I will not write down your name, or tell the people at this office/prison what you have said. What you tell me will not have your name attached to it, and will be added to what other people have told me. All the information we get will be put together as a written report and will be printed, but your name will not be on any of the printed reports or anywhere else.

There are a variety of things that can be said that I do need to report , these include; 1) If you say something about harming yourself or someone else I will have to report this to a staff member, 2) If you talk about an offence you have committed for which you have not been charged or convicted I will have to report this , 2) If you tell me something about any activities that threaten the security or good order of the prison such as a plan to escape, I will have to tell a prison officer.

1. Why did you decide to do DRUMBEAT program
2. Tell us about your experience of doing DRUMBEAT
3. Is there anything different about how you *feel* since doing DRUMBEAT?
Pride
anger management
self control
insight
self belief
4. Has anything changed in your *relationships* since doing DRUMBEAT?
 - **Prompts**
 - i. *your with other prisoner*
 - ii. *prison officers*
 - iii. *your family?*
5. What did you get out of the *talking* during DRUMBEAT sessions?
6. What did you get out of the *drumming* during the sessions?
7. What are some of the mental health issues in prisons?
8. Do you think DRUMBEAT has helped you or others with such mental health issues?
9. Will DRUMBEAT have a lasting effect for you in prison or when you are released? What??
How?
10. Do you think that you will take some of what you have identified or learnt through drumbeat to family friends etc
11. How did DRUMBEAT compare to other programs you have done before?
12. Any suggestions to improve DRUMBEAT or other comments you have about the program?

Appendix 6 – Facilitator feedback measures

DRUMBEAT in Prisons Facilitator Feedback: Pre- and post-program

Prison _____ Program Start Date _____

Program start/finish times _____

Facilitator _____ Date of assessment _____

How would you rate this group overall on the following (circle):

	Very poor	Poor	Average	Good	Excellent
Peace within themselves	1	2	3	4	5
Willingness to talk about feelings/issues	1	2	3	4	5
How they face challenges	1	2	3	4	5
Cooperation with each other	1	2	3	4	5
Participation in the group activities	1	2	3	4	5
Enthusiasm	1	2	3	4	5
Relationships (with other prisoners)	1	2	3	4	5
Confidence	1	2	3	4	5
Interaction with fellow prisoners from different cultures?	1	2	3	4	5

General comments about this group

Post-program – Interview Questions

Prison name:

Interview with:

Conducted by:

Date:

1. How many groups have you run previously in prison setting?
2. Thinking about this prison and group-----
 - a. for the participants as a group, did you observe any significant changes or impacts in the group overall during the course of the program? (if so describe)
 - b. now thinking about the individual participants in this group, can you tell us about any significant changes you noticed.
3. In running this particular group where there
 - A) Particular challenges or barriers to running program or its effectiveness
 - B) Positive factors that enabled group to run well./more effectively
4. Any other overall observations about this group?
5. As you are aware, the evaluation is looking particularly at the impact of the program on mental wellbeing. Without disclosing names, what were some of the challenges for mental wellbeing you observed among participants in this group (eg isolation from family, first time in prison, etc)
6. What did you see are the main benefits of the program in terms of mental health?

Appendix 7 - Distribution displays

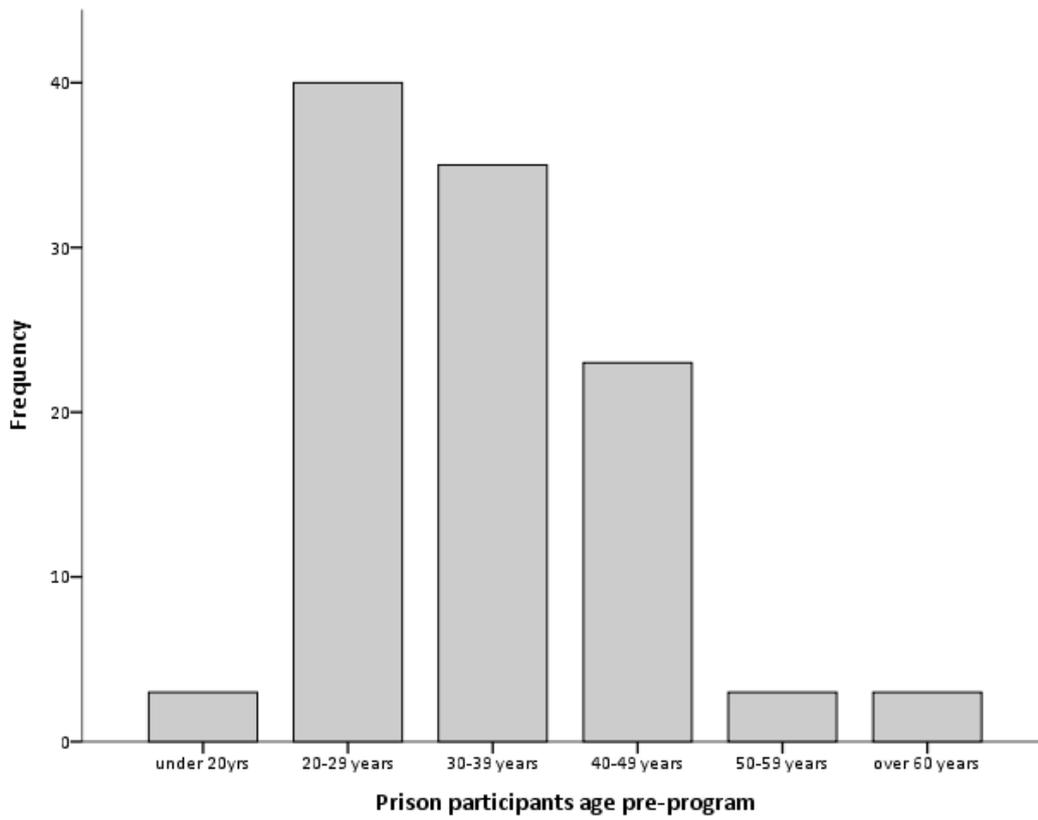


Figure 4. Average age of Drumbeat prison participants*
* N=107 (7 missing information)

Appendix 7 - Distribution displays

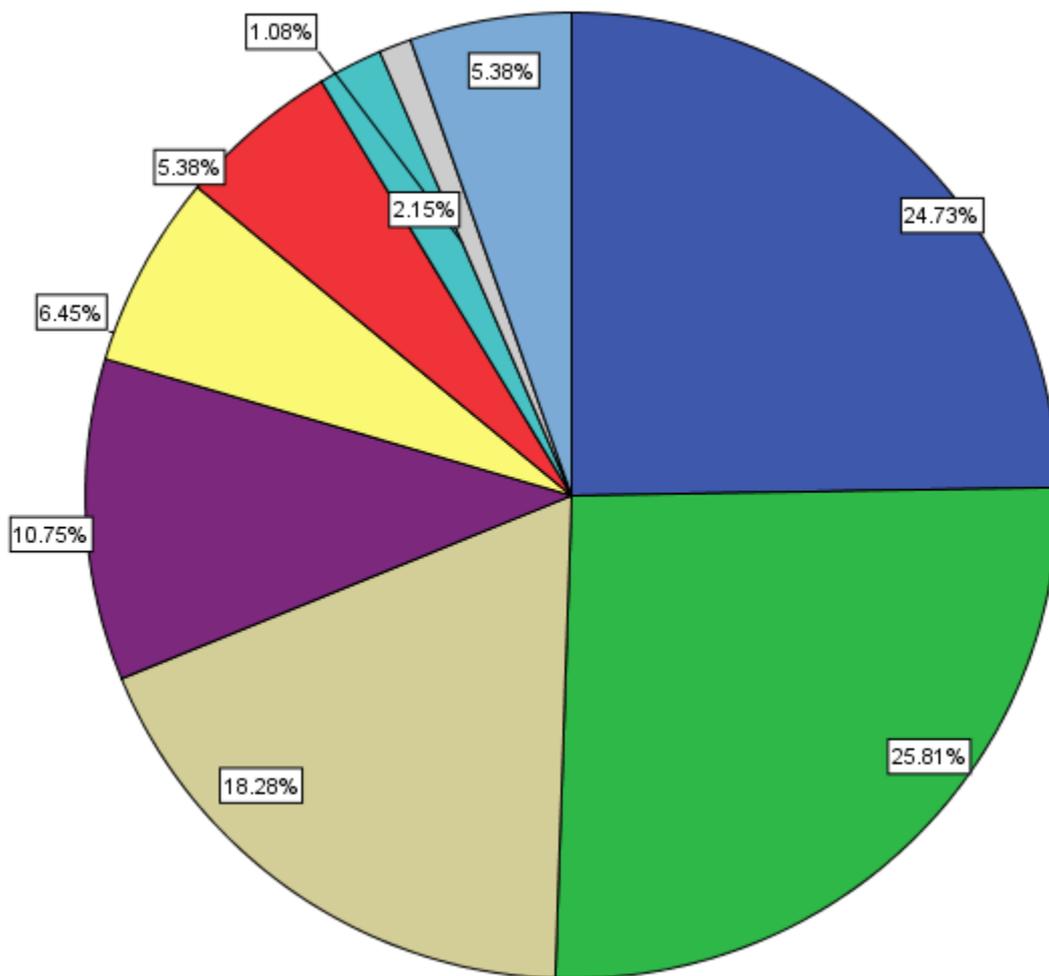
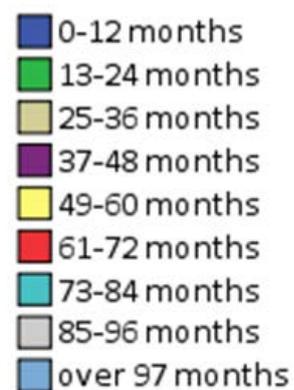


Figure 5. Drumbeat prison participants sentence length*

* N=93 (21 missing information)



Appendix 7 – Distribution displays

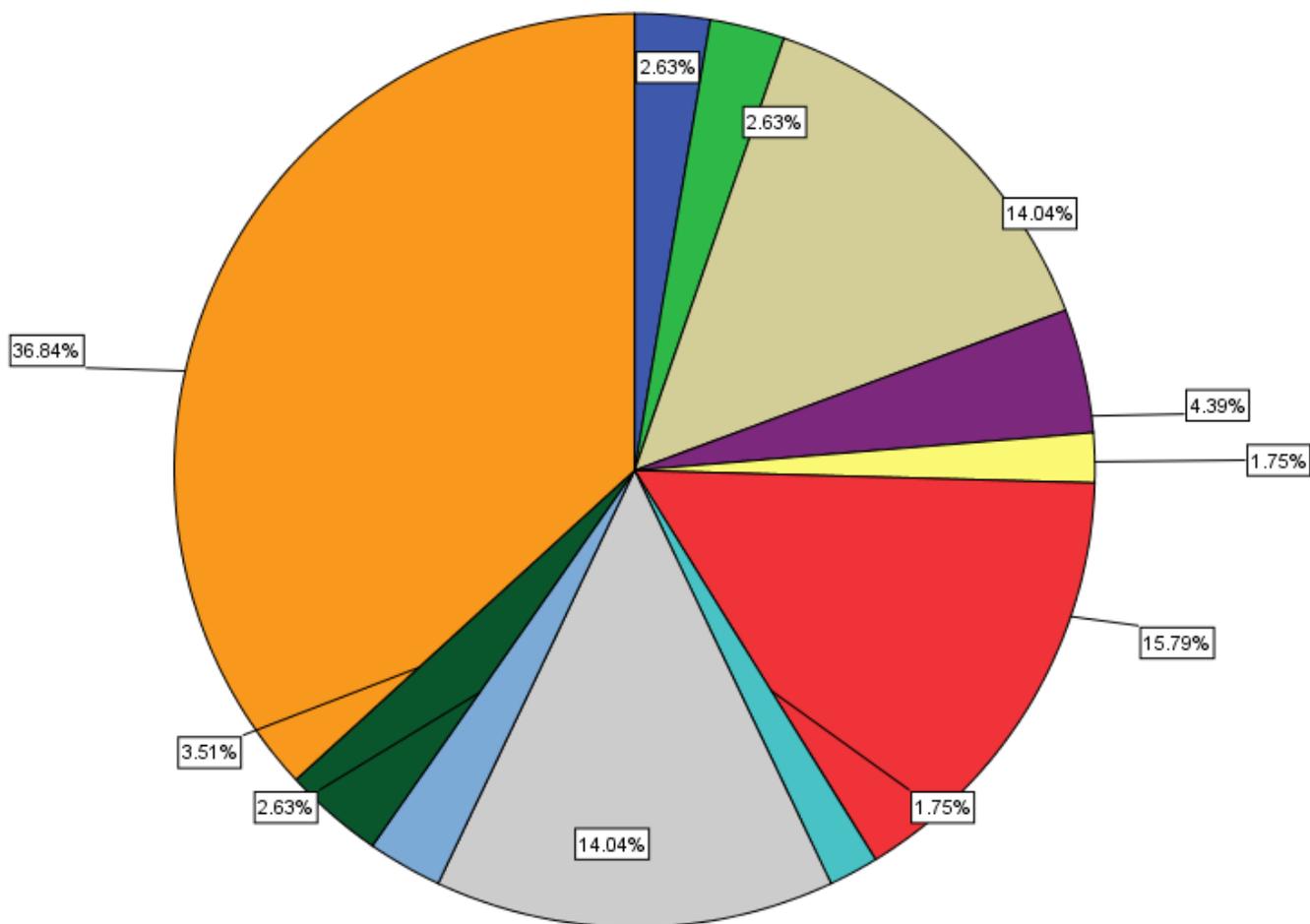


Figure 6. Distribution of prisoners by ASOC code
*N=114



Appendix 8 –DRUMBEAT Program feedback responses from prisoners at post-program

Table 6. DRUMBEAT Program feedback responses from prisoners (n=114) at post-program

	DISAGREE	NEUTRAL	AGREE
	N (%)	N (%)	N (%)
Input encouraged in sessions	1 (0.9)	8 (7.1)	103(92.0)
Felt part of a team	2 (1.8)	0 (0)	108 (98.2)
Drumming skills help me feel good about self	1 (0.9)	6 (5.4)	105 (93.8)
Helped with working through problems more easily	4 (3.7)	11 (10.1)	94 (96.2)
Feel more responsible for behaviour	0 (0)	18 (16.1)	94 (83.9)
Better understanding of skills needed for good relationships with others	1 (0.9)	10 (9.0)	100 (90.1)
Assisted w improving relationships with other prisoners	2 (1.8)	13 (11.6)	97 (86.6)
Assisted w improving relationships with prison staff	9 (8.3)	24 (22)	76 (69.7)
Aim for more harmony in relationships	3 (2.7)	14 (12.6)	94 (84.7)
Helped me identify importance of having values	3 (2.8)	10 (9.2)	96 (88.1)
Helped me learn about myself	3 (2.7)	10 (9.0)	98 (88.3)
Will pass on what learnt to other prisoners, friends, family	2 (1.8)	5 (4.5)	104 (93.7)
Would recommend to others	1 (0.9)	2 (1.8)	109 (97.3)

Appendix 9 – Protocol for recording prison interview – DCS approved



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Lisa Wood
Associate Professor

School of Population Health
Centre for the Built Environment and Health
M431, The University of Western Australia
35 Stirling Highway, Crawley WA 6009

T +61 8 6488 7809
E lisa.wood@uwa.edu.au

Courier address: 10 Stirling Hwy Nedlands WA 6009

Drumbeat prison evaluation – recording of post-program follow up interviews with participants and key prison staff

Where permitted, the evaluation research team requests permission to record interviews with prisoners and/or prison staff, to eliminate the inaccuracies of note taking during interviews. The following protocol for security and confidentiality will be applied:

Protocol:

We are advised by the Department of Corrective Services that interviews can be recorded provided that oral recordings are not taken off the prison property, and that security clearance is provided by the Prison to bring a recording device into the prison. We are also advised by the Department that transcription of recordings can be made by a service that meets DCS security requirements – one of these identified by the Department is Pacific Solutions.

Therefore, we will follow the process below:

- Permission will be requested in advance from each prison to record interviews with prisoners or staff and approval requested to bring blank recording devices into the prison. A copy of this protocol will be provided to the prison staff contact person at the time of making this request.
- If approved, the research team will advise prison front desk staff on arrival that they have recording devices that will be brought in, and the laptop for uploading recordings will be stored in a secure locker at prison reception.
- Interviews will be recorded only with a) prison permission and b) participant permission. If permission is not granted, hand written notes will be taken during the interview.
- The interviews will be recorded onto a blank digital recording device, and the interview uploaded into a UWA laptop prior to leaving the prison so that it can be provided directly and securely to the approved transcription provider (Pacific Solutions)
- The recordings will be deleted from the digital recording device and UWA laptop as soon as they have been provided to the secure transcription service
- The transcription agency (approved as secure by the Department of Corrective Services) will assign an X where any name is referred to in the course of a recorded interview
- Any quotes or information used from the interviews in the project report will not identify the name of the prisoner or staff person, nor the name or location of the prison.



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- The prisoners who participated in the DRUMBEAT program and were willing to complete surveys and be interviewed.
- The prison staff who assisted at the prisons where the DRUMBEAT program was offered, and to those who also completed surveys and/or made themselves available for interviews.
- The WA Department of Corrective Services for ethics approval for this research and for permitting access to the prisons, staff and prisoners for the purposes of this research.
- The Holyoake DRUMBEAT facilitators; Mr Brian Zoch, Mr Geoff Parker, Ms Vanessa Trengove and also Mr Ben Moodie (Alcohol and Drug Services) for their time, input, assistance with the program evaluation.
- Ms Estee-Matilde Lambin (Research Assistant, UWA) for her assistance with the evaluation and this report.
- DRUMBEAT Prison Evaluation Advisory Group – who provided input to research design and instruments, and were available to provide advice relating to undertaking research with Aboriginal prisoners: Pam Thorley, the Manager of Program Delivery at The Aboriginal Alcohol and Drug Service Inc (AADS), Mr Geoffrey Winmar from the Holyoake Institute, Mr Laurie Coffey - Community Mental Health worker, Department of Health, and Dr Sashya Gunasekera - Clinical psychologist working at Balga High School.

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As required by the WA Department of Corrective Services Research and Evaluation Committee Researcher Code of Conduct we include the following statement *‘The research results are not endorsed by, nor are they an expression of the policies or views of, the WA Department of Corrective Services.’*