HEALTH PROMOTION EVALUATION UNIT

An Evaluation of a Therapeutic Intervention using Music “DRUMBEAT”
Discovering Relationships Using Music- Beliefs, Emotions, Attitudes, & Thoughts with Alienated Youth

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Table of Contents

1 INTRODUCTION
1.1 The Arts and Health 2
1.2 The Holyoake DRUMBEAT Program 3
1.3 This report 4
1.4 The 10 week Holyoake DRUMBEAT Program 5

2 METHODOLOGY
2.1 Student Feedback 6
2.2 Teacher and School Feedback 7
2.3 Qualitative interviews 7

3 RESULTS
3.1 Pre-Post Change in Self-Esteem 8
3.2 Participant Feedback at Week 5 8
3.3 Participant Feedback at Week 10 9
3.4 Social Development Evaluation 11

4 FEEDBACK FROM FACILITATORS AND REPRESENTATIVES FROM SCHOOLS
4.1 Formal training 15
4.2 Involvement in the Holyoake DRUMBEAT Program 15
4.3 Benefits for participants of the program 16
4.4 Benefits for teachers in the normal classroom setting 17
4.5 The Arts as a tool for working with at risk children 18
4.6 Areas in which the Holyoake DRUMBEAT program could be improved 18
4.7 Continued implementation of the Holyoake DRUMBEAT program 21
4.8 Other impacts of the Holyoake DRUMBEAT program 22

5 LIMITATIONS AND SUGGESTIONS FOR FUTURE EVALUATION 23

6 DISCUSSION 24

7 CONCLUSION 26

8 REFERENCES 28

9 APPENDIX ONE 29

10 APPENDIX TWO 30
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Executive Summary

DRUMBEAT (Discovering Relationships Using Music -Beliefs, Emotions, Attitudes, & Thoughts) is a program that uses hand drumming to allow participants to explore and engage connections between making music together as a group and development of healthy relationships. The Holyoake DRUMBEAT program was developed in 2003 by Holyoake in conjunction with the Wheatbelt Community Drug Service Team. Holyoake is a drug and alcohol treatment service and DRUMBEAT was designed as an early intervention strategy to prevent and build up resilience to drug and alcohol use.

This report describes the evaluation of the Holyoake DRUMBEAT program run in WA schools in 2008. A total of 19 schools were involved in this evaluation, including both primary and secondary schools. The evaluation includes data collected from quantitative questionnaires with participating students, reports from schools in relation to absenteeism and behaviour incidents of participating students, written teacher feedback and a qualitative component in which teachers and facilitators of the program were interviewed.

Both the quantitative and qualitative components of the evaluation reflected positive changes on a number of measures that serve as indicators of ‘risk’ for young people. For example there was a 10% increase in self-esteem scores by the end of the program, 29% of participant’s had a decrease in behavioural incidents and 33% had a decrease in half-day unexplained absenteeism’s. The feedback provided by teachers in the open ended questionnaire questions and in the interviews provides a valuable complement to the empirical findings, with many of the comments and quotes capturing insightful glimpses of the way in which the program impacts on both students and the school.

While drumming per se can provide much fun and enjoyment, it is clear that the success of the Holyoake DRUMBEAT program is due to much more than this. Both the content and mode of delivery have been developed with sound consideration of evidence relating to risk factors, student learning models, group processes and behavioural outcomes. Although many arts programs report anecdotal accounts of positively impacting on participant’s wellbeing, there is often a dearth of evidence. DRUMBEAT is an exception in this regard, with a comprehensive range of measurement and evaluation tools used with participants each time the Holyoake DRUMBEAT program is delivered.
1 Introduction

1.1 The Arts and Health
The interaction between arts and health has shared a long history, particularly in using the arts as a way for improving and restoring health [1], with growing interest particularly in relation to arts and mental health. People engaging in arts related activities, often experience a sense of well being, including a combination of physical, social, emotional and physical outcomes, not all of which can be easily described or quantified [2]. The arts and health movement can be defined generally as all activities or programs that use art-based approaches to improve individual or community health [3]. There is a small but growing ‘evidence-base’ and body of literature relating to the nexus between the arts and health, including mounting interest in the mental and health benefits of drumming.

Drum circles have been used as a healing ritual in many cultures worldwide for years, and is now being increasingly used as a contemporary therapeutic strategy [4]. It has been used for a number of different therapeutic purposes, including as a way to treat a variety of behavioural issues, such as anger management, team building, substance abuse recovery, as well as increasing self-esteem and developing leadership skills [5].

Studies have also shown that drumming is a valuable way to treat a number of health and emotional issues, including stress, fatigue, anxiety, headaches, asthma and sleep and emotional disorders [6]. Group drumming specifically gives individuals a sense of cohesion as it teaches individuals coordination and team work, as participants are given different roles and have to work together to coordinate their parts [6]. Individuals who have participated in drumming programs have reported a number of positive psychological and physical effects[7]. Among these is the calming role of drumming and a good way to deal with high stress levels [7]. In addition, drumming is said to simply make individuals feel good and can help people feel that they ‘fit in’ [7].

Drumming is being used internationally and within Australia in a variety of settings to address a number of behaviour and emotional issues, such as isolation, alienation and self-centredness, through creation of a sense of connectivity to oneself as well as with others [7]. Drumming can be used to enhance social support and has been
used to treat addiction, drumming activities used in substance abuse rehabilitation have been widely attested to [7]. Drumming is also being used world-wide to assist people with other health issues, such as Alzheimer’s disease, cancer and multiple sclerosis just to name a few [8].

### 1.2 The Holyoake DRUMBEAT Program

DRUMBEAT (*Discovering Relationships Using Music -Beliefs, Emotions, Attitudes, & Thoughts*) is a program that uses hand drumming to allow participants to explore and engage connections between making music together as a group and development of healthy relationships [9]. The Holyoake DRUMBEAT program was developed in 2003 by Holyoake at the Wheatbelt Community Drug Service Team office and continues to be managed through the Holyoake Institute for Drug and Alcohol Addiction Resolutions. Holyoake is a drug and alcohol treatment service and DRUMBEAT was designed as an early intervention strategy to prevent and build up resilience to drug and alcohol use. The Holyoake DRUMBEAT program theory can be found in Appendix One. To date the Holyoake DRUMBEAT program has been delivered in a number of different settings, these include schools (both primary and secondary), youth centres, juvenile detention facilities and drug and alcohol rehabilitation facilities [9].

The Holyoake DRUMBEAT program allows participants to partake in a cooperative process, utilising group discussions, analogies between music and relationships and real life experiences [9]. The primary aim of the program is to reduce levels of alienation by increasing self-esteem and social competencies of participants [9]. In turn the program aims to decrease likelihood of participants experiencing problematic drug and alcohol use, as alienation is identified as a key risk factor in such use [9].

The Holyoake DRUMBEAT program combines musical expression and its potential therapeutic benefit with cognitive behaviour therapy to deliver social learning outcomes [10]. These include emotional control, improved relationships and increased self-esteem [10]. The program was developed as a way of overcoming the difficulties traditional interventions based primarily on cognitive behaviour therapy had in engaging young people, particularly indigenous youth [10]. Building on the therapeutic value of music the program incorporates themes and discussions into the program that increase awareness of social factors that form the basis of forming healthy relationships with others [10].
Participants in the Holyoake DRUMBEAT program Australia wide are split across metropolitan and regional areas, with approximately 60% in metropolitan areas, 30% in regional areas and 10% in very remote areas. In the current study there was an even metropolitan and regional split, with a large number of Aboriginal participants taking part. This large number of Aboriginal youth, is noteworthy aspect to the program as the program was originally designed to engage Aboriginal youth as a way of tackling the increasing social challenges that they continually face.

Currently there are 350 active Holyoake DRUMBEAT programs being run throughout Australia, and over 800 registered facilitators. Facilitators are trained by Holyoake which is a registered training organisation, the DRUMBEAT training is accredited with facilitators given the option of obtaining a certificate four in group skills. In addition the training contains modules on how to address difficult behaviours; these modules are seen as critical to the success of the Holyoake DRUMBEAT program. Of the current programs, approximately 75% are being undertaken in schools, with others being run in youth centres, mental health rehabilitation facilities, drug and alcohol rehabilitation facilities and prisons.

1.3 This report

This report discusses the latest phase in the Holyoake DRUMBEAT program evaluation and relates to the program as undertaken in 19 WA schools during 2008. The evaluation is based on data collected from questionnaires of participating students, reports from schools in relation to absenteeism and behaviour incidents of participating students, written teacher feedback and a qualitative component in which teachers and facilitators of the program were interviewed.
1.4 The 10 week Holyoake DRUMBEAT Program

The Holyoake DRUMBEAT program evaluated in this report consisted of ten weekly drumming sessions in the participating schools. The program was delivered in groups of eight to 10 participants with two facilitators over a ten week period. Students participated in the program for between one and two hours a week over the 10 week period. Class duration varied somewhat, depending on factors such as the school time-table, participant maturity, and level of participants communication skills.

Each session of the Holyoake DRUMBEAT program has a theme that looks at a specific relationship issue. These issues are drawn from the drumming activities using analogies, and conversations that aim to raise participant’s awareness of the factors that contribute to healthy as opposed to unhealthy relationships. Subjects covered by the Holyoake DRUMBEAT program include Peer Pressure, Dealing with Emotions, Identity, Social Responsibility, Bullying, Teamwork, Tolerance & Diversity and Living in Harmony with others.

Throughout the program, students learn set rhythms that build levels of focus and concentration. They also have the opportunity to make up their own rhythms. There are a range of drum games that keep participants engaged and provide additional opportunities for looking at how well the group is working together. The program culminates with the group performing in public during the last week of the program; this provides an opportunity for recognition of their achievement. Many of these performances are conducted outside the school and serve to link participants with their broader community.

2 Methodology

The evaluation included both quantitative and qualitative research components. The University of Western Australia team was not involved in designing the questionnaire tools used as part of the evaluation, and became involved only at the data analysis and report writing stage. The qualitative interviews were however organised and undertaken by the UWA team.
2.1 **Student Feedback**

2.1.1 **Participants**
A total of 19 primary (n=10), secondary (n=5) and Intense English Centres (n=4) were involved in the Holyoake DRUMBEAT program evaluation. Within each school the number of students participating ranged from nine to 27 with the total number of students participating being 180. The average age of participants was 11.75. All participating students were identified for inclusion on the basis that they came from high-risk backgrounds; the risk status of participants was established through assessment using the Holyoake pilot risk questionnaire (see Appendix Two). To be identified as high-risk participants had to score a minimum of five against the criteria of the questionnaire.

2.1.2 **Questionnaire instruments**
All participants completed a Rosenberg Self Esteem scale, prior to commencement and again at the end of the program. The wording of the scale was altered slightly to make it more understandable for the program participants [10]. The Rosenberg Self Esteem scale, is a ten item Likert scale, which measures participant self-esteem through a number of questions in which the participants can select responses from strongly agree to strongly disagree [10]. Questions include for example, ‘most of the time I am happy with myself’ and ‘I feel I have a number of good qualities’.

All participants completed a feedback questionnaire at week five (half-way through the program) and another once the program had finished (week ten) [10]. These questionnaires were designed specifically to elicit participant feedback on the program and, covered perception of participants own learning’s and program enjoyment [10]. The week five questionnaire allowed three responses to questions being yes, sort of and no and included questions such as ‘Were the goals of the group made clear from the start?’ and ‘Do you feel supported and values by the presenters?’. The week ten questionnaire allowed for a scaled response whereby 1 was strongly agree and 5 strongly agree, questions included ‘Have you enjoyed being part of the DRUMBEAT Program?’ and ‘Would you recommend the DRUMBEAT Program to others?’

2.1.3 **Analysis**
All questionnaire data were entered into excel and then extracted into SPSS a statistical analysis program. All data were analysed using SPSS version 17 and
primarily involved computation of descriptive statistics and frequencies. T-tests were conducted to test for the significance of differences between means.

2.2 Teacher and School Feedback

2.2.1 Participants
A total of 17 schools provided feedback from teachers (two schools did not provide this information), 15 provided information in relation to student absenteeism or behavioural incidents relating specifically to the period of ten weeks in which the Holyoake DRUMBEAT program was run (four did not).

2.2.2 Teacher feedback
Teachers completed a social development program evaluation sheet for each participant and in addition were asked to provide written responses in relation to the following areas:
- issues facing participants chosen for inclusion
- change or influence the program has made
- overall impressions of the impact of DRUMBEAT
- unforeseen negative consequences of the program on group members

Teachers were chosen to provide this feedback as they had the most interaction with participants [10]. Schools also recorded behaviour incidents and absenteeism of participating students for each DRUMBEAT session over the ten week period and provided this information also for the ten weeks prior to participation [10].

2.2.3 Analysis
Written feedback from teachers was summarised into key themes and key quotes representing these themes were extracted for use in reporting.

2.3 Qualitative interviews
The qualitative component of the Holyoake DRUMBEAT evaluation entailed contacting participating schools and DRUMBEAT facilitators by email to invite them to speak about the program with a researcher from the University of Western Australia. This data had not previously been collected as part of DRUMBEAT evaluations. Nine people were contacted, of whom seven contacted the research team indicating that they wanted to partake. Telephone and face-to-face interviews
were conducted over a period of five weeks due to school holidays and fitting in with the availability of teachers. Interviews lasted for approximately one to one and a half hours.

2.3.1 Analysis
All interviews were recorded and transcribed to assist in the reporting process. Feedback was summarised into key themes with key quotes extracted for use in reporting.

3 Results
3.1 Pre-Post Change in Self-Esteem
Participants completed the Rosenberg self-esteem scale, prior to the commencement of the 10 week program, to provide a baseline measure of their level of self-esteem. The minimum score attainable was zero and the maximum score attainable was 30, with the latter representing the highest level of self-esteem. The average self-esteem score for all participants (n=179) prior to participation was 20.61 (S.D 5.19; range 6-30).

Participants completed the Rosenberg self-esteem scale for a second time in the final week of the program. The average score for participants (n=150) was 23.92 (S.D 4.19; range 14-30), showing a 10% increase in self-esteem scores observed among participants following completion of the program. This increase was highly significant (p=0.00). It is also noteworthy that the minimum score increased from 4 to 14.

3.2 Participant Feedback at Week 5
The week five questionnaire contained seven questions with three response options ‘yes’, ‘sort of’ and ‘no’. Table 1 below shows that the majority of participants responded positively to the program, particularly with respect to the sheer enjoyment of drumming (87% ‘yes’) and ‘feeling supported and valued by the presenters’ (81%). There was least ‘yes’ agreement that the group was working well together (47%), but a further 47% considered there was some progress here (‘sort of’) rather than ‘no’ (6%). In fact very few responded ‘no’ to any of these questions.
Table 1: Week 5 participant feedback

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>Sort Of</th>
<th>No</th>
<th>Not answered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you enjoyed the drumming part of the program (n=155)</td>
<td>87</td>
<td>8</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Do you feel supported and valued by the presenters (n=155)</td>
<td>81</td>
<td>16</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Were the goals of the group made clear from the start (n=155)</td>
<td>68</td>
<td>25</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Do you feel comfortable in the group (n=155)</td>
<td>65</td>
<td>27</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Do you feel you are making progress towards the goals of the group (n=155)</td>
<td>61</td>
<td>34</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Do you get enough time to master a beat before moving on to the next one (n=155)</td>
<td>57</td>
<td>37</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Do you think the group is working well together (n=155)</td>
<td>47</td>
<td>47</td>
<td>6</td>
<td>0</td>
</tr>
</tbody>
</table>

3.3 Participant Feedback at Week 10

At the end of week 10, participants were presented with nine questions and asked whether they agreed or disagreed with each. Table 2 below shows there was an overall positive view of the program, with almost two-thirds or more ‘strongly’ agreeing with six of the nine statements. Very few participants disagreed with any of these statements. Overall, there was most agreement for enjoyment of being part of the program and the team, learning new skills, and the presenters being helpful and understanding.

Not unexpectedly, responses to questions about relationships were somewhat lower than measures relating to enjoyment or team work. Nevertheless, 41% ‘strongly’ agreed that their knowledge of relationship issues had increased (*know more about people and how they get on with each other; more aware of what things make relationships work*).

Overall, nearly two thirds (63%) ‘strongly’ agreed that they would recommend the DRUMBEAT program to others.
### Table 2: Week 10 participant feedback

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Not answered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you enjoyed being part of the DRUMBEAT program (n=157)</td>
<td>71</td>
<td>24</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Do you feel you were part of the DRUMBEAT team (n=157)</td>
<td>68</td>
<td>21</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Did you enjoy being part of a group (n=148)</td>
<td>67</td>
<td>25</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Have you learnt new skills (n=157)</td>
<td>62</td>
<td>31</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Did you impress yourself with the beats you could master (n=148)</td>
<td>53</td>
<td>29</td>
<td>10</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Were the presenters helpful and understanding (n=148)</td>
<td>62</td>
<td>28</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Was your input encouraged (n=148)</td>
<td>50</td>
<td>35</td>
<td>9</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Do you feel you know more about people and how they get on with each other (n=157)</td>
<td>41</td>
<td>36</td>
<td>17</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Do you feel you are more aware of what things make relationships work (n=148)</td>
<td>41</td>
<td>31</td>
<td>22</td>
<td>3</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Would you recommend the DRUMBEAT program to others (n=148)</td>
<td>63</td>
<td>20</td>
<td>10</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

### 3.3.1 Behavioural incidences and absences

All of the participating schools have systems for recording behavioural incidents and absences. Behaviour incidents are incidents of a serious nature and usually involved aggression or violence; incidents of a minor nature do not get recorded. Teachers provided these data from school records for the period over which the program ran. Comparison of the number of behavioural incidents prior to and during participation in
the program showed that there were significantly less behavioural incidents whilst participants were in the program then prior to the program (Mean 1.24, SD 3.43 and Mean 2.38, SD 6.70 respectively; \( p = 0.00 \)). Of 162 students who completed this part of the evaluation, 29% had a decrease in behavioural incidents, 61% had no change in behaviour incidents and 10% had an increase in behavioural incidents.

A similar pattern was seen in relation to half day absences with the number of half days absences showing a near significant decrease whilst participants were taking part in the program as opposed to prior to the program (Mean 3.74, SD 6.32 and Mean 4.49, SD 7.52 respectively; \( p=0.92 \)). Of the 162 students who completed this part of the evaluation, 39% had no change in the number of half-day unexplained absences, 28% had an increase, and 33% had a decrease in half-day unexplained absences.

### 3.4 Social Development Evaluation

Teachers were asked to fill out a Social Development Program Evaluation, whereby for each participant they identified how they had changed over the past term across a variety of measures such as their relationships with peers and self-esteem. Teachers responded through use of a scale whereby 1 indicated a detrimental change, 5 no change and 10 the most positive change. The average of all measures indicated a positive change in participants, with self-esteem being the most positive (Mean 6.87, SD 1.53). The results are shown in table 3 below.

<table>
<thead>
<tr>
<th>Measure</th>
<th>n</th>
<th>Minimum score recorded</th>
<th>Maximum score recorded</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-esteem</td>
<td>169</td>
<td>4</td>
<td>10</td>
<td>6.87</td>
<td>1.53</td>
</tr>
<tr>
<td>General Mood</td>
<td>169</td>
<td>4</td>
<td>10</td>
<td>6.86</td>
<td>1.45</td>
</tr>
<tr>
<td>Group participation</td>
<td>169</td>
<td>4</td>
<td>10</td>
<td>6.79</td>
<td>1.64</td>
</tr>
<tr>
<td>Relationships with peers</td>
<td>169</td>
<td>3</td>
<td>10</td>
<td>6.66</td>
<td>1.44</td>
</tr>
<tr>
<td>Relationships with adults/teachers</td>
<td>169</td>
<td>3</td>
<td>10</td>
<td>6.58</td>
<td>1.41</td>
</tr>
<tr>
<td>Focus and concentration</td>
<td>169</td>
<td>4</td>
<td>10</td>
<td>6.50</td>
<td>1.45</td>
</tr>
<tr>
<td>Emotional control</td>
<td>169</td>
<td>4</td>
<td>10</td>
<td>6.31</td>
<td>1.41</td>
</tr>
</tbody>
</table>

Note: Missing responses were excluded.
In addition, teachers were asked to provide written feedback in relation to general issues that the participants face on a day to day basis, how the program had influenced participants, and any changes that had occurred with participants as a result of the program. Teachers were also invited to comment on the overall impact the program had on the school and any unforeseen negative consequences from the program. Their responses are presented below.

3.4.1 Issues facing participants
The majority of teachers reported that participants were facing many challenges in their life on a day to day basis, not only at home but within the school environment. Issues faced at home included disruptive home lives resulting from loss of a parent through death or separation and being cared for by someone other than their parents. Some teachers highlighted that some of the participating students were in abusive situations and some were associated with the Department of Child Protection.

“One student has come to the school after being in a very abusive situation for the previous two years. He found it difficult to ‘get into’ school at all”

Participants also had challenges facing them in the school environment. These included withdrawn behaviour, being bullied or bullying others, experiencing learning difficulties and aggressive tendencies. Teachers expressed that in many cases participants lacked social skills and were often socially isolated. This in turn resulted in attention seeking behaviours, low self-esteem, negative attitudes towards life, difficulties in accepting responsibility for own behaviours and difficulties in developing relationships with peers.

3.4.2 Change or influence the Holyoake DRUMBEAT program has made
Overall, teachers felt that the program had a very positive influence on participants and that it affected their behaviour for the better. Feedback indicated that participants became more comfortable in working with others in a group environment. Moreover, they changed in being more responsible, responsive and actively involved in working as a team with others. In addition, participants became more open about discussing problems and began to understand how their behaviour affected others.

“Learnt that her behaviour is what made others act negatively towards her”
“One student came up to me after performance at high school, he said he couldn’t believe that he had taught the high school kids a rhythm and the high schools kids had listened to him”

On an individual level, teachers felt that participants’ confidence grew, as did feelings of self worth, which was reflected in participants having more positive aspirations for the future. In addition, there was a sense of pride for the individual accomplishments, the ability to reach out and relate to other participants. It was noted that participants were building better relationships with teachers. Teachers reported that participants looked forward to the DRUMBEAT classes, learnt to cooperate with others and became accustomed to participating regularly.

“He was able to lead a group in drumming, organising them to practice at a time outside of DRUMBEAT. Normally he finds it hard to work in a group and is not usually a leader”

“One student who suffered from low self-esteem came through at the end of the performance with a glow of pride and achievement”

“He will now voice his opinions and does not appear to be intimidated by others”

3.4.3 Overall impression of the impact of the Holyoake DRUMBEAT Program

Many of the responses given in relation to the overall impact of the program reiterated comments that were made in relation to the change or influence the program had on participants. Consistent with the increased Rosenberg Self-Esteem scores, recurring themes related to positive changes in the participants’ self-esteem along with an increased sense of pride and belonging. Teachers observed improvements in participation, cooperation and increased levels of social confidence.

Teachers reported that participants looked forward to their end-of-program performance. In addition, it was stated that students not involved in the program were often envious. Teachers observed that the program gave participants the opportunity to be part of a team, which in turn built group cohesion and improvement in interaction with others. This improvement was not only confined to group members but expanded to improvement in interacting with peers and teachers outside of the program.

“Even the most withdrawn student participated volunteering beats”
“Group realisation that whole performance relied on each individual’s ability to co-operate and work as part of a team; each one had a role to play in the group’s success”

3.4.4 Unforeseen negative outcomes

The evaluation provided teachers with an opportunity to identify any unintended negative outcomes associated with the program. Overall, very few such outcomes were observed. Negatives that were mentioned reflected three main themes: fear of failure; negativity from staff members who were not actively involved in the program; and time away from regular classes. Some teachers commented that from the participant perspective, the program could be a scary prospect due to the innate feeling of failure that could occur. This was reiterated by one teacher who stated that a student had given up due to feeling they lacked the rhythm required to participate. In addition, teachers reported that if students were unable to follow through with the course, or were not able to remain in the course for its full duration they were being exposed to failure.

“Possible students who can’t remain in course have been exposed to yet another failure

“Fear of failure”

Whilst it was acknowledged by facilitators that drop-outs are rare, participants are given a choice at the end of week one as to whether they want to continue to participate for the remaining weeks of the program. If they do wish to continue then it is made clear that that is a commitment to the DRUMBEAT team and they are bound to honour that. Notwithstanding, it is important to note that participants in the DRUMBEAT program are often from dysfunctional homes, which often affects their schooling and attendance levels which in turn can impede their ability to remain in the 10 week program.

Teachers also mentioned negative comments of other staff members that they didn’t like students being withdrawn from other classes to undertake the program as they were missing class work. In addition, comments showed that some staff members felt that students should not be rewarded for their misbehaviour and lack of participation in the normal school setting by being able to participate in what they perceived as a fun program.

“Some staff resent having the students withdrawn”
4 Feedback from facilitators and representatives from schools

4.1 Formal training
Staff members from all participating schools had undertaken the DRUMBEAT course that trained them on how to facilitate the program [11]. The DRUMBEAT training program runs for three days and equips attendees with the necessary skills to present the DRUMBEAT early intervention program. The training covers practical skills of working with alienated youth, including defiant and other difficult behaviours, in addition to facilitation skills, therapeutic factors of group work and the implementation of the DRUMBEAT program itself. DRUMBEAT is made up of four main elements which are drum songs, drum games and analogies, discussion areas linked to healthy relationships and a performance. Overall, approximately 50% of the training is drum instruction; no prior musical training is required.

The first day of the training comprises about 50% theory, focusing around facilitating successful groups with young people - particularly defiant youth [11]. Sessions deal with facilitation skills, ethical conduct, values, dealing with problem behaviours and discipline. The training utilises attendees own experiences to look at what works and what doesn't. The other 50% of day 1 is an introduction to the djembe - simple rhythms and a couple of exercises that are used in the program [11].

The second day of training is approximately 30% theory around the DRUMBEAT intervention, this includes: program theory, objectives, strategies, group composition, assessment and evaluation and the therapeutic factors of group work. The other 70% involves a drumming practical - core rhythms, games and exercises as well as the analogies drawn from these to raise awareness of relationship issues[11].

The third and final day is a session by session look at how to implement the program - rhythms, exercises, conversations and themes. It includes a half day role play where participants team up to deliver part of a session in front of their peers [11].

4.2 Involvement in the Holyoake DRUMBEAT Program
In speaking with representatives from the participating schools and other organisations involved in the program, a variety of triggers for involvement emerged. Sometimes the person facilitating the program was the one encouraging their school
to get involved, while in other instances, the school encouraged a particular staff member to pursue it. Sometimes a school's involvement was a result of having been involved with the program in a previous school setting. In addition, there were schools that mentioned that they had received information from district education offices about the program. There was also a strong word of mouth component influencing awareness of and involvement in the program.

“So I found out about the DRUMBEAT program through a few different friends and a colleague”

Of the school personnel spoken to, most made the decision to be involved as a way of addressing issues that children in the school were facing.

“We wanted to improve the sense of cooperation and acceptance in class”

“I discovered the DRUMBEAT program as a great way of delivering group work and the core life skills of respect, communication and relating to others safely”

4.3 Benefits for participants of the program

When asked about the benefits of the program those interviewed mentioned the immediate satisfaction and reward of playing the drums, which worked hand in hand with increasing self-esteem and self-confidence.

“The immediate satisfaction of being able to drum together”

“I think initially it’s their self-esteem”

Beyond this immediate impact on self-confidence and satisfaction associated with drum playing, those interviewed acknowledged the broader scope and longer term impact of the program. As articulated by those spoken to, the program encourages participants and assists them in thinking about broader life concepts, such as respecting others, working as a team and getting them to understand that they can do this, and that they have a sense of worth. As the program operates outside of the normal class room environment, it allows the students who don’t usually excel and
receive awards and affirmation to actively participate in a program that allows them to learn interpersonal skills and life skills in a fun and supportive environment.

“It enables them to consider the broader concept of life skills and how they function not only with themselves but also when it comes to other people, so there is an immediate sensory pleasure which comes from playing the drums but there is a long term pay off for them as well”

4.4 Benefits for teachers in the normal classroom setting

The interviews also explored whether there are flow on benefits for teachers not involved in the program itself. Both facilitators and teachers involved in the program described a resultant improvement in behaviour in general classroom settings by those students who had taken part in the program. The program made them more settled in class and also played a role in increasing class attendance, by increasing participation during classes.

“Those students that are quite shy are starting to speak up”

The program also provides a window through which teachers can see and perceive students in a different light, and therefore may help to counter the stereotypes given to some students, such as a ‘bully’ or the ‘one that always disrupts the class’.

“I had quite a few teachers come up to me afterwards and said that it was amazing we never thought those boys had it in them, so it might give them a different outlook.

“I think for the classroom teachers these kids have never been good at anything. The new confidence that they bring with them after having achieved something in the DRUMBEAT program has flown on to benefit the rest of their work”

For teachers involved in the program it was viewed as a great learning experience for them in their role as a teacher, as they were being taught and becoming involved in a new group process. Some teachers mentioned using the content outside of the DRUMBEAT class. For example, teachers were able to refer to and the use
techniques such as reminding students of how they are listening to each other and encouraging ideas.

4.5 The Arts as a tool for working with at risk children

Those interviewed were asked for their views about the arts as a means of working with those students who were perceived to be ‘at risk’ and whether they felt the arts was a good way of indirectly addressing mental and emotional health. One of the main benefits mentioned by all of those interviewed was the fact that the arts provides a vehicle for learning that is not academic in structure, participants are not being asked to read and write to be able to participate, and is therefore a non-threatening setting.

“They have an opportunity to succeed very early on its not so much hard yakka for them as reading and writing. It just makes them feel good, it's a good release for them”

“You can intermingle the drumming with talking…if they are getting bored with the drumming we talk and if they are getting bored with the talking we do the drumming…you have the facility to coax them back again”

The Arts were also seen as a way to express views or communicate. Drumming was described as a helpful way of expressing positive emotions, as uplifting and as a way in which life issues can be reflected.

“If you don't want to talk you can just bang it on the drum. It's giving children a different way of out letting anything they want to say”

“I think young people think young people feel the arts/music is different to the traditional ‘chalk and talk’ method and therefore respond more positively”

4.6 Areas in which the Holyoake DRUMBEAT program could be improved

4.6.1 The evaluation process

Some schools’ representatives mentioned that some of the participants involved in the program had trouble filling out the questionnaires, specifically the Rosenberg
scale. Other schools mentioned that this was not an issue for them. Schools that found students had trouble filling in the survey had different ways of accommodating this. Some went through the questionnaires and checked that they had been filled out correctly and helped students who needed assistance, whilst at another school the teacher spoke to the students instead (and acknowledged that this may have affected what they said).

“I started to realise I could get roughly the same sort of information from them just by having a chat and I know that they do feel as free to say what they think but we weren’t getting anywhere with the Rosenberg’s”

4.6.2 Feedback from staff and non-participating students

The facilitators of the program acknowledged that where negativity was encountered by school staff not involved in the program, it primarily related to staff having very high expectations, for instance that all ‘problems’ would be fixed during the course of the 10 week program, rather than recognising that addressing underlying issues among at risk students needs to be an ongoing process. Interviewees acknowledged that the DRUMBEAT program should not be viewed as a quick fix; instead it should be seen as a tool that can help students. It was also highlighted that schools need to think about ways to continue to encourage the students when the program ends.

“Some teachers say why are you spoiling these kids by giving them fun things to do? They miss the point really, the successful students get the rewards from their parents and teachers patting them on the back but these kids aren’t getting any rewards- they need stimulation”

“I see the DRUMBEAT program as a building block”

“These kids have been put up on a pedestal at the end of their performance and they feel fantastic. People see these kids in a new light and see their potential and hopefully this potential will continue to be built on”

All of the school representatives acknowledged that the program overall has been a positive experience for both the schools and the individual participants. In many there has been very little negative feedback from other teachers in the school; this was mostly attributed to the whole school approach that was being taken, in that all
staff members have been exposed to the program, either formally involved or trained in the program, or alternatively through informal exposure to it.

For example, one teacher spoke about how they had taken the drums to a staff meeting one day and how all staff participated. Another school had removed the possibility of negativity from teachers, as a result of students being taken out of class, by involving the whole class. As noted previously, some schools and facilitators reported that students not involved in the DRUMBEAT program were sometimes jealous.

4.6.3 The program

The main issues in implementing the program experienced by schools were in relation to the staffing support required to continue running the program, or alternatively to ensure it was implemented effectively. Some staff also expressed a desire to adapt the program to beyond the 10 weeks.

In addition, staff who had a musical background and were implementing the program, expressed a desire to have the beats written as sheet music, although they acknowledged that not everyone implementing the program would have this musical background and this would not work for everyone.

“But that wouldn’t work for everybody as not everybody has a musical background”
Those that had been involved in the program for many years expressed a desire for some new rhythms, though again acknowledged that this was a personal thing.

“That's for my own personal benefit though, not the children’s as every group is new so they are all learning, it's all new for them”

4.7 Continued implementation of the Holyoake DRUMBEAT program

All the school representatives interviewed said that they would continue to implement the Holyoake DRUMBEAT program, in some shape or form. Some indicated that due to lack of staffing they may not be able to implement the program as a sole separate component, so instead they choose to weave the program into their everyday classroom teaching. It was recognised by all that the adaptability of the program was one of its strengths.

“You take the bits you know the kids need if you don’t have time to fit in the whole program”

“I have added an extra component to it, through a story board. Each week I put up the objectives and during the week get them to draw pictures and write words. It gets them thinking about DRUMBEAT during the week”

It was also recognised that the program allowed the participating students to become the teachers themselves, another feature of its adaptability.

“The beauty of the program is that you can get the kids to make up different rhythms themselves as well, so they can be teaching us so you can say now you can teach us that”

There was a continued acknowledgement that the underlying themes of the program apply to all settings within the school and life, and hence the DRUMBEAT program should be a whole school process.

“The underlying themes of the DRUMBEAT program deals with other themes that perhaps teachers could probably learn to implement in the class whether or not they have time to do the program”
It was identified that the continued implementation of the program required support and general investment in the ability of the program to make a positive change in participants, especially in schools that have not previously been exposed to the program. With an increasingly crowded curriculum in high schools, and so many different programs available, teachers and facilitators have to encourage schools to give DRUMBEAT a go so as to realise the program’s potential.

“I know that it brings such benefits and I am already convinced but it’s trying to convince others around me to invest in it the same way”

### 4.8 Other impacts of the Holyoake DRUMBEAT program

All interviewees were asked if they had a particular story in relation to the Holyoake DRUMBEAT program or an account of how it had changed a particular participant. All had a different story to tell.

Some spoke generally about how student’s behaviour had changed for the better by seeing their own behaviour reflected in the drumming routines.

“Extremes of behaviour either very quiet or very loud it seems to allow them to see their behaviour”

Others spoke on a more personal level. For example, one school implemented the program to help one particular boy and the teacher openly admitted that they dreaded having him in their class. However involvement in the DRUMBEAT program made him a different person.

“He was a bully before…but then there were many occasions where you would see him help other students in the playground rather than hitting them”

“In class he had himself under control very well, putting in 100% and became one of the kids I could really count on to become really focused in the music room”

Some teachers reflected on how the DRUMBEAT program had had a significant impact on a participant’s life both in and outside the school environment. One teacher
recounted how a participant had approached and confided that they were being abused and as a result the child was removed from that abusive environment. The teacher believed strongly that this would not have occurred had it not been for their participation in the DRUMBEAT program and the supportive environment that it provided.

Others talked about student’s enthusiasm for the drums, for example how one ex-participant had gone on to teach others the drums as a result of being involved in the program. All agreed that there were many positive impacts and changes that had been seen as a result of the program. In addition they themselves get great enjoyment from being involved and seeing these changes.

“It’s an enjoyable way of engaging with young people…you can have fun and a few laughs”

5 Limitations and suggestions for future evaluation

Undertaking this evaluation and report has provided insight into the way in which the program has been evaluated and its impact. This has provided an opportunity to assess the evaluation design, in which limitations were identified along with suggestions for future evaluations. Overall, the measurement tools and evaluation mechanisms embedded into the design and delivery of the Drumbeat program serve as one of its strengths, and are comprehensive relative to many other arts based programs. Nonetheless, a number of limitations were identified, including;

- Student by student comparisons of actual growth across measures were not able to be established as an ID number for participants was not recorded. This could be useful in the future to establish the impact the program has on
individual students as opposed to only looking at between-group comparisons. A mechanism for matching data without compromising confidentiality has been discussed with the Drumbeat coordinator and has been incorporated into the revised questionnaire now being used.

- There was no consistent collection of demographics, such as gender and age, as some questionnaires required this and others didn’t. This limited the amount of analysis that could be done.
- The layout of the Rosenberg self-esteem evaluation questionnaire was another area in which it was suggested that changes could be made to simplify the questionnaire and make it more user friendly. These suggestions were discussed with the program manager and have now been incorporated.
- Incomplete data
  - Inconsistent data at each stage due to drop outs absenteeism etc
  - Some schools didn’t provide teacher written feedback or absenteeism sheets

Future evaluations would be strengthened by:

- The inclusion of an ID for all participants to allow for a more thorough evaluation process and more extensive analyses.
- Collecting basic demographics such as age, gender, ATSI and location for each of the participants under the ID to allow for comparisons by location and gender.
- Teachers checking surveys to ensure that they have been filled out correctly with no gaps (many of the questionnaires had missing gender and age information).
- Doing a follow up survey with DRUMBEAT participants a few months after the program, to establish whether or not there has been lasting behaviour change. access how they are going.
- Collecting information from participants in regard to these at risk behaviours such as (though not limited to) drug and alcohol use, as the program is being used a tool to deter risk behaviours.

6 Discussion

While the determinants of detrimental health behaviours such as alcohol and drug abuse or dependence are complex, research indicates that these can be prevented
by reducing or eliminating risk factors in individuals [12]. Risk factors associated with unhealthy behaviours such as smoking, drinking and drug use include low self-esteem, alienation and school absenteeism [13]. As such there are a growing number of interventions focusing on promoting protective factors and reducing risk factors as a way of addressing the underlying determinants of at risk behaviours [12]. The use of the arts is one of the more creative ways (no pun intended) in which these risk factors are being tackled [5]. The Holyoake DRUMBEAT program adds to the growing evidence base around the positive benefits of engagement in the arts, and the role that the arts, including drumming can play in addressing health issues and support social and emotional development.

Both the quantitative and qualitative components of the evaluation reflected positive changes on a number of measures that serve as indicators of ‘risk’ for young people. For example there was a 10% increase in self-esteem scores by the end of the program, 29% of participant’s had a decrease in behavioural incidents and 33% had a decrease in half-day unexplained absenteeism. The feedback provided by teachers in the open-ended questions and in the interviews provides a valuable complement to the quantitative data, with many of the comments and quotes capturing insights into the way in which the program impacts on both students and the school.

While drumming as an arts medium is the tool through which students are engaged in the program, it is important to note that the other elements relating to communication skills, interacting with others, working as a group etc are just as integral although more ‘off stage’. Moreover, while the program may not be overtly addressing problem behaviours, such as drinking or drug use, many of the principles and core elements of the program are designed around enhancing protective factors and reducing risk factors among students. Self-esteem, school participation, social alienation and truancy are among risk factors for alcohol and drug misuse identified in the literature, and which are embedded within the Holyoake DRUMBEAT program.

Schools often elect to participate in the program because of concerns about more at risk students, and the evaluation indicates that the program does engage and impact positively on such students, both in and outside the school setting. Teachers’ reporting of the home, family and peer problems faced by many participants exemplifies the way in which problematic school behaviour often masks underlying issues. Yet on the brighter side, the recount of the student empowered to report an
abusive home situation following participation in DRUMBEAT illustrates the ripple effect that such a program can have.

Both the current program content and delivery appear to be effective and well regarded by teachers, facilitators and participants. The combination of immediate sensory or hedonistic affective benefits (i.e. enjoyment of the drumming), a sense of belonging and group cohesion, along with self-concept enhancement (e.g. self-esteem, self-worth) is a powerful combination within a single program, and gives the program an edge over other strategies to address emotional and self-esteem issues that may not have the same immediacy of reward for participants. It was noted however that implementation of the program relied heavily on having a school’s support, and that as a program it may often be competing with a crowded curriculum and other demands on teacher time. Engaging the whole school in knowing about and supporting the program seems vital, and, in the few instances where negativity was encountered, it primarily derived from non-involved staff who lacked adequate knowledge about the program and its benefits.

Ironically, the success of the program in connecting with and enthusing students, and in particular those who are often less engaged in school or have troublesome school experiences, does in some ways present a double edged sword. As identified by a number of teachers, there seems to be a need to continue the program in some shape or form after the ten weeks have been completed, not only to ensure that the benefits are sustained, but also, so that the students involved don’t resume being the marginalised or ‘problem’ ones in the eyes of staff or other students.

7 Conclusion

While drumming per se can provide much fun and enjoyment, the success of the Holyoake DRUMBEAT program is due to much more than this. Both the content and mode of delivery have been developed with sound consideration of evidence relating to risk factors, student learning models, group processes and behavioural outcomes. In addition, school staff who are trained and involved in delivering the program are reinforced by the positive impacts evident in students at the individual, classroom and school level.

Although many arts programs report anecdotal accounts of positively impacting on participant’s wellbeing, there is often a dearth of evidence. DRUMBEAT is an
exception in this regard, with a comprehensive range of measurement and evaluation tools used with participants each time the Holyoake DRUMBEAT program is delivered. While there is scope to further strengthen some of these measures, they serve as a useful example to other arts based interventions seeking to develop an evaluation framework.

Finally, the program has a very positive impact on many children and youth whose lives are improved by their participation in the program. The sheer enjoyment of the drumming, the drumming skills learned, the feeling of being involved in and successfully achieving a group task, and the resulting self-esteem enhancement in participants is clear to others in the school, such that, as one individual put it: “Everyone wants to do DRUMBEAT”.
8 References


10. Faulkner, S., *An Evaluation of the Music Therapy Intervention 'DRUMBEAT' with Alienated Youth In the Wheatbelt of Western Australia.


9 Appendix One

PARTICIPANTS
(Identified with ‘at risk’ Behaviours)

Fearful of group members, and social interaction: increased anxiety

Group focus and communication through drumming reduces hypervigilance. Cathartic drumming to release stress

Greater ease in group
Improved effect – more reactive, brighter
Greater stability of mood

Increased contribution to group
Increased level of social interaction
Increased levels of social confidence

Reduction in psychotic episodes, panic attacks and other social anxiety. Reduction in anti-depressant medication, & other problematic drug use

Participate in DRUMBEAT program with trained facilitators & other group members

Play drums and have fun – reduced negativity or apathy.
Increased interest leads to increased aptitude
Improved levels of concentration, perseverance & commitment

Increased feelings of self-worth. Improved attitude towards others.
Improved musical outcomes for group

Recognition of the rewards of positive group membership.
Positive feedback from others
Increased self-regard

Recognition of the rewards of positive group membership.
Positive feedback from others
Increased self-regard

Improvements in social participation in other learning situations.
Improved school performance
Reduced school absenteeism

Exposed to positive role-modeling, and supportive relationship with facilitators

Interact with others, listening, problem-solving, sharing, tolerating difference, empathasing.
Developing social skills

Improved communication skills.
Opportunities for altruism
Increased awareness of the effect our behaviours have on others

Facilitated discussions on relationship issues.
Raised self-awareness around relationship issues.
Increased potential for behavioural change

Increased self discipline of behaviour
Improved relationships with others.
Reduction in social isolation/alienation

PERFORMANCE

HAPPIER, HEALTHIER LIFE
10 Appendix Two

‘AT RISK QUESTIONNAIRE’

- Fails to follow reasonable requests
- Resents rules, regulations & reasonable boundaries
- Uses violence or threats of violence
- Can isolate self from group situations
- Bullies or intimidates others
- Chooses not to or cannot cooperate with given instruction
- Has experimented with drugs or alcohol
- Displays anti-social behaviour towards others
- Has few friends
- Withdrawn behaviour
- Self harming
- Cruelty towards animals
- Interest in adult themes
- Unpredictable mood swings
- Regularly distracted in class
- Intolerance of others’ opinions
- Disinterest in ‘normal’ activities for age group
- Poor school attendance
- Invades others privacy and personal space
- Disrespectful towards adults
- Easily frustrated with self or own ability
- Negative self image
- Low self opinion / self esteem
- Can be dishonest unnecessarily
- Has a diagnosed behavioural disorder
- Has no role model
- Finds it difficult to express feelings
- Has no concern for consequences for self or others
- Is disruptive in class
- Depends upon ‘rewards’ to complete tasks
- Is ostracised by groups
- Displays no altruistic or helping behaviour

These questions come from a variety of sources and are designed to identify young people ‘at risk’ of negative social & health outcomes