The effect of music therapy services on classroom behaviours of newly arrived refugee students in Australia—a pilot study

Felicity Baker* and Carolyn Jones

a The University of Queensland, Australia; b Milpera State High School, Brisbane, Australia

This pilot study examined the effects of a short-term music therapy program on the classroom behaviours of newly arrived refugee students who were attending an intensive 'English as a Second Language' secondary school. A cross-over design with two five-week intervention periods was employed with group music therapy sessions conducted one or two times per week. Data from the Behaviour Assessment Scale for Children were used to evaluate a range of positive and negative school behaviours. A significant decrease in externalising behaviours was found with particular reference to hyperactivity and aggression. No significant differences were found in other behaviours. Explanations and implications of these findings are discussed.

Keywords: Classroom behaviour; Externalising behaviour; Music therapy; Refugees

Introduction

Disruptive classroom behaviours of students present teachers with on-going challenges. As they try to create a positive learning environment, teachers are faced with enforcing limits to minimise behaviours such as disrupting the schoolwork of other students, talking back to teachers, bullying other students and not paying attention in class (Reynolds & Kamphaus, 1998). Increasing numbers of highly traumatised refugee students are currently placing strain on the learning environment of classrooms around Australia.

With the emergence of stronger humanitarianism, large numbers of young refugees are migrating to countries across the world and enrolling in their schools. Australia now has 22% of its population born overseas (Chu, 1998), with over 70 different languages spoken in Australian schools (Bryan & Batch, 2002). Every year, thousands of refugees enter Australia having fled their homelands to avoid continuous armed conflict, communal violence, or because of large-scale natural
disasters (Rutter, 1994; Bashir, 2000; Waniganayake, 2001). Statistics from the Australian government’s Department of Immigration and Multicultural Affairs (1999) found that in the year 1997–1998, 8779 people entered Australia classified as refugees. One in three of these new Australians were children.

Any move to a foreign country is stressful for young people and their families and while the migration process is stressful in itself, this level of stress is compounded when the families have been forced to resettle due to fear of persecution (Pryor, 2001). Once these people have taken refuge in the new country, away from fear, war, brutality, persecution, violence, starvation and deprivation of basic human rights, they are faced with the challenge to rebuild their lives. This process involves acknowledging, grieving and resolving past painful life experiences (Bashir, 2000; Cassaniti & Sozomenou, 2000) and adapting, accepting and acculturating to the lifestyle of the new country (Minas, 1990).

While the process of resettlement is challenging for all people, young refugee people present with the added complexity of being at a crucial emotional developmental life stage (Kimmel & Weiner, 1995; Bevan, 2000). In particular, emotional developments include the secure establishment of self-concept, self-perception, identity (including ethnic identity), autonomy and morality (Kimmel & Weiner, 1995). Transitioning into this developmental phase is confusing for the young refugee where ethnic differences exist between the old and the new cultures with regard to acceptable and unacceptable thoughts, attitudes and behaviour (Kimmel & Weiner, 1995; Bevan, 2000).

While a rather simplistic view of the immense difficulties faced by refugee youth has been presented here, it is still not surprising that refugee students within the mainstream school system present with significant and complex problems both in learning and in adjusting to the western school system and are at risk of premature school dropout (Bevan, 2000). For many African refugee school students, this might be their first experience of attending school and formal education (Bevan, 2000).

Young refugees experience serious discontinuities in schooling and this may affect their ability to cope with and adapt to school life (Herman, 1992; Rice et al., 1993). Problems arising include difficulties in concentration (Hepperlin, 1991), learning difficulties, disruptive behaviour, depression (Gong-Guy et al., 1991) and language difficulties (Hepperlin, 1991; Rice et al., 1993). Lack of progress within school potentially affects self-esteem and may lead to feelings of failure, hopelessness, and a low expectation for the future (Bevan, 2000). In particular, the first period following resettlement (one week to six months) is challenging for school learning when students experience disorientation, sadness, anger and guilt (Gonsalves, 1992).

The unique problems of young refugee people threaten schools’ abilities to create a safe, secure and stimulating learning environment. Teachers and school support staff often struggle to meet these students’ educational, social and emotional needs (Gopaul-McNichol & Thomas-Presswood, 1995). Research suggests that psychosocially-based interventions may assist refugee students to transition the early resettlement period (Williams & Berry, 1991; Gonsalves, 1992; Pickering, 2000; Gorman, 2001).
Music therapy is one psychosocially-based intervention which has been applied within school settings to address a wide range of learning problems and school behaviour (Smith & Hairston, 1999). Music therapy techniques such as song writing, group singing, guided imagery and music, music and relaxation techniques, instrumental improvisation, music and movement and music and art activities have been well documented as being effective when working with clients who have experienced trauma, including young refugee people (Pavlicevic, 1994, 2002; Sutton, 2000; Lang & McInerney, 2002; Jones et al., 2004; Day & Jones, 2005). Music can provide a common starting place for the discussion of personal issues and may provide the opportunity to risk trying new experiences and practise behaviours which can be transferred to other areas of life. Trauma survivors are used to feeling misunderstood, lonely and isolated. Music making can break through the walls of isolation and provide a safe space where the authentic voice of the client can come forward (Austin, 2002).

Music also provides a unique opportunity to bridge gaps between people from diverse cultural backgrounds (Jones et al., 2004). As each culture has its own musical history and identity, group musical experiences provide opportunities for sharing and communicating differing beliefs and hopes in a safe and accepting environment (Day & Jones, 2005). Within a music therapy group, opportunities arise for interaction, self-expression, peer-support and group participation across ethnic and language barriers (Jones et al., 2004; Day & Jones, 2005). In the relationships formed through music, young people can create a sense of community and facilitate the development or strengthening of ethnic identity (Reddick & Beresin, 2002).

Research has found that music therapy can facilitate the process of self-expression, provide opportunities to channel frustration, anger and aggression into experiences of creativity and mastery (Montello & Coons, 1998); and improve self-esteem (Kivland, 1986) in adolescents with emotional, learning and behavioural disorders. Similarly, Cripe (1986) found that rock music significantly reduced hyperactivity in boys with attention deficit disorder while studies by Godeli et al. (1996) and Stanley and Hughes (1997) show how background music improves compliance in a group of normal schoolchildren.

While none of the education-based studies focused on refugee students, the findings that music therapy assists in managing disruptive and maladaptive behaviours in young people suggest that it might also be of value in managing the disruptive school behaviours of refugee students. This pilot study sought to investigate the effects of a short intensive music therapy program on classroom behaviours of newly arrived adolescent refugee students.

**Method**

**Setting**

The pilot study was conducted at Milpera State High School, which is the only intensive English-language reception centre and settlement service for newly arrived immigrant and refugee youth in Queensland. Students attend the school five days
per week and remain there until their English skills are of a minimum level required for integration to mainstream Queensland schools. At the time the study was conducted, the school had 221 students and of these 105 (48%) were from African nations, 65 from Sudan. There were 33 nationalities represented amongst the student population with over half considered at risk of not completing Year 12.

Participants

Forty-three students were selected for involvement in the music therapy program from five different class groups. Selection criteria were: (1) refugee status, and (2) expected to remain enrolled in the school for at least another two school terms. From the original 43 students, 31 students and their carers gave informed consent to participate in the research. Stratified randomisation was used whereby students from each separate class group were randomly allocated into Group 1 or Group 2 to obtain balance across age groups and academic level.

Table 1 reports the demographic information for the 31 students who participated in the project. Groups were well balanced across all areas: ethnicity, age, gender, number of weeks since arriving in Australia, number of weeks enrolled in the school, family circumstances and English language skills. The ethnicities of the students were Sudanese \((n=20)\), Iranian \((n=5)\), Liberian \((n=2)\), Rwandan \((n=2)\), Ethiopian \((n=1)\), and Congolese \((n=1)\).

Research design

A cross-over design was employed where all students recruited to the program received two five-week blocks of music therapy and two five-week blocks with no music therapy treatment (Table 2). This design was employed to meet ethical requirements of the school; that is, all eligible students received the service. The research project was conducted over 20 weeks (two ten-week school terms).

| No. of males | Group 1 \((N=15)\) | N=5 | N=6 |
| No. of females | \(N=10\) | \(N=10\) |
| Mean age | \(13.8 \pm 2.21\) | \(14.06 \pm 1.91\) |
| Mean time in country (in weeks) | \(12.87 \pm 11.87\) | \(13.31 \pm 10.77\) |
| Mean time at school (in weeks) | \(9.56 \pm 9.89\) | \(9.87 \pm 10.91\) |
| Good receptive English skills \((N=)\) | \(N=10\) | \(N=10\) |
| Good expressive English skills | \(N=3\) | \(N=3\) |
| Nil spoken English skills | \(N=5\) | \(N=6\) |
| No. students with father deceased | \(N=4\) | \(N=3\) |
| No. students with both parents deceased | \(N=0\) | \(N=1\) |
| No. students with father missing | \(N=0\) | \(N=2\) |
| No. students with both parents missing | \(N=0\) | \(N=1\) |
Music therapy groups were scheduled two times per week, with each session lasting between 30 and 40 minutes. Due to occasional disruptions to school routines, on average, students in each group participated in approximately the same number of sessions over each five-week intervention period (Table 3).

Following allocation to either Group 1 or Group 2, students were further divided into smaller music therapy treatment groups of between two and six members based on age and gender, and these were balanced across both groups (Group 1 = 4.2 ± 1.5; Group 2 = 4.4 ± 1.9 students per group).

Music therapy interventions were tailored to meet the individual needs of each group. During the first intervention periods when English language skills were minimal, themes addressed within the sessions included sharing of musical cultures, exploration of self-identity, developing appropriate social skills, experiencing a sense of agency and developing impulse control. Typically, the sessions during this period involved instrumental improvisations, dancing, song learning and singing and students sharing pre-recorded music from their cultures or current popular music charts. Improvisation techniques were initially designed to foster a sense of safety within the group and later to promote self-confidence and creativity, improve impulse control and explore peer relationships. While improvisation was rarely followed by discussion, it was often recorded and played back to the group.

During the second intervention period when English language skills were higher, additional themes included adjustment and acculturation, anti-racism and feelings of failure in the classroom. Typically, sessions during this period involved greater verbal techniques such as song singing, discussion and song writing. During the song writing process, students brainstormed content ideas around a given (or self-initiated) theme. The therapist then structured their content into verses and chorus and offered the material back to the group for revision. At times this revision discussion enabled exploration of important issues for the students. Once complete, all songs were rehearsed, recorded and each student given a CD copy of the song to keep.

### Table 2. Research design

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1 (N=15)</td>
<td>Music therapy</td>
<td>Baseline</td>
<td>Music therapy</td>
</tr>
<tr>
<td>Group 2 (N=16)</td>
<td>Baseline</td>
<td>Music therapy</td>
<td>Baseline</td>
</tr>
</tbody>
</table>

### Table 3. Number of therapy sessions attended per student

<table>
<thead>
<tr>
<th>Treatment Phase 1</th>
<th>Treatment Phase 2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1 (N=15)</td>
<td>7.8 (±1.6)</td>
<td>7.8 (±1.4)</td>
</tr>
<tr>
<td>Group 2 (N=16)</td>
<td>7.1 (±1.7)</td>
<td>7.1 (±1.0)</td>
</tr>
</tbody>
</table>
Data collection

Teachers working with the students were asked to complete the Behaviour Assessment System for Children (BASC) (Reynolds & Kamphaus, 1992). At the time this study was implemented, there were no scales available that had been specifically tested on children from migrant or refugee backgrounds. As such, the BASC was selected for its assessment of a broad range of both adaptive and maladaptive behaviours; a fact that became problematic in this study. The BASC assessment requires teachers to rate student behaviour in the classroom and playground across 138 items. The scores from the 138 items are grouped according into 13 subscales (hyperactivity, aggression, conduct problems, anxiety, depression, somatisation, attention problems, learning problems, atypicality, withdrawal, social skills, leadership and study skills) and later converted into composites (externalising behaviours, internalising behaviours, behavioural symptom index (BSI), school problems and adaptive problems).

According to Reynolds and Kamphaus (1992), the scale has high internal consistency averaging above $r = .80$ for all scales and composites and test-retest reliability correlations were also high (median values of $r = .89$). The BASC also was found to have reasonably high interrater reliability correlations (median scale values between $r = .63$ and $r = .71$).

Students were evaluated by their classroom teachers five times throughout the program – prior to commencing the study and after each five-week block.

Results

Assessments of four students (two from each treatment group) were not completed prior to commencing the study as the teachers felt that they had not observed these students for sufficiently long to make an accurate assessment. However, all other assessments were complete. Mean scores were calculated for each composite and are presented in Table 4 and represented in Figure 1. Larger standard deviations scores were generally found for Group 1 when compared with Group 2, in particular during time point 3 (just after Group 1 had their first 5-week period of no music) for the composites of externalising and BSI. SDs were large for both groups for the composite of school problems.

Figure 1 illustrates that with the exception of adaptive skills, the composites for Group 1 follow a similar pattern. Initially there is an increase in behaviours, particularly during the first non-treatment phase (between assessments two and three). During the second phase of music therapy treatment (between assessment three and four) there is a decrease in behaviours which continues to decrease during the second phase of non-treatment. Group 2’s response to treatment is less consistent. For externalising, there is an increase in externalising behaviours during the two non-treatment periods and a decrease in the treatment periods. School problems have a tendency to increase throughout the program. BSI scores also increase except for the final treatment phase where the display of behaviours decreases. Internalising behaviours tend to increase during the first phase of
Multiple Analysis of Covariance (MANCOVA) were calculated for each composite to determine treatment effects, and are reported in Table 5. Significant changes over time were evident for externalising, internalising, BSI and school problems but not for adaptive skills. However a significant long-term treatment effect was only found for externalising behaviour, indicating that music therapy had an effect on the externalising behaviours of the students. Long-term treatment effects approached significance for the BSI.

Discussion

The results of the music therapy program provided to recently settled refugee students suggest that music therapy treatment reduces the severity of classroom
externalising behaviours (hyperactivity, aggressive behaviours and conduct problems). Perhaps the music therapy program allowed students to channel their frustration, anger and aggression into the music experiences in the same way that Montello and Coons (1998), Cripe (1986) and Kivland (1986) found in adolescents with behavioural and conduct disorders. For some students, exploring issues of self-identity, adjustment, acculturation, anti-racism and feelings of failure allowed for their appropriate verbal and non-verbal expression, thereby reducing the incidence of their inappropriate expression within the classroom and playground. For others, the same outcomes were achieved by providing opportunities to practice behaviours such as impulse control, turn-taking, listening and respecting each other within a highly motivating, non-verbal group context.

Such findings have important implications for the education of students within mainstream and receiver schools world-wide. Externalising behaviours within the

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Effect</th>
<th>F</th>
<th>df</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Externalising</td>
<td>Time</td>
<td>4.92</td>
<td>21</td>
<td>.01*</td>
</tr>
<tr>
<td></td>
<td>Time × Condition</td>
<td>2.21</td>
<td>21</td>
<td>.01*</td>
</tr>
<tr>
<td>Internalising</td>
<td>Time</td>
<td>3.73</td>
<td>21</td>
<td>.02*</td>
</tr>
<tr>
<td></td>
<td>Time × Condition</td>
<td>.32</td>
<td>21</td>
<td>.86</td>
</tr>
<tr>
<td>Behaviour Symptom Index (BSI)</td>
<td>Time</td>
<td>9.30</td>
<td>21</td>
<td>.00*</td>
</tr>
<tr>
<td></td>
<td>Time × Condition</td>
<td>2.57</td>
<td>21</td>
<td>.07#</td>
</tr>
<tr>
<td>School Problems</td>
<td>Time</td>
<td>6.28</td>
<td>21</td>
<td>.00*</td>
</tr>
<tr>
<td></td>
<td>Time × Condition</td>
<td>.89</td>
<td>21</td>
<td>.49</td>
</tr>
<tr>
<td>Adaptive Skills</td>
<td>Time</td>
<td>.44</td>
<td>21</td>
<td>.78</td>
</tr>
<tr>
<td></td>
<td>Time × Condition</td>
<td>.53</td>
<td>21</td>
<td>.71</td>
</tr>
</tbody>
</table>

*indicates significant finding, # indicates approaching significance
classroom lead to problems in learning for the refugee students and for the students
around them who share the same classroom. They also create challenges for the
teaching staff who may not know how to manage and discipline students who have
such complex backgrounds and who are at risk of breakdown and mental illness
following unimaginable trauma. If such short and intense treatment programs can
have a significant effect on externalising behaviours of refugees, long-term benefits in
their learning and education may result. Future research employing an experimental
design should evaluate the longer-term benefits of such a program. Also worth
investigating is whether there is a direct relationship between the use of a music
therapy program and a reduced cost in the use of school resources specifically
employed to deal with behavioural issues and discipline.

Non-significant findings and trends for the composite of internalising behaviours
were found within this study. Internalising behaviours which include anxiety,
depression and somatisation, are often difficult to observe and a lack of language
skills may have prevented students from communicating their feelings and
symptoms. Subsequently, these subscales were rarely scored by teachers.
Similarly, cultural differences in behaviour and symptom presentation might also
have impacted on the accuracy of this composite being assessed by teaching staff.
This is an ongoing concern for mental health professionals in terms of both diagnosis
and treatment and unfortunately research in this area is still in its infancy.

Anecdotal reports of improved behaviour management were reported by school
staff, in particular, the average monthly number of behaviour incidents requiring
intervention reduced from 22 prior to music therapy being employed, to five
(Milpera, 2005).

While the results of treatment were not significant for the Behaviour Symptom
Index, a trend in positive treatment effects was evident (Figure 1). Perhaps a longer
treatment period would be necessary to establish the efficacy of such a treatment.
Establishing an appropriate length of treatment and treatment frequency requires
greater investigation. This is especially the case when students may be processing
extremely traumatic past experiences. It is unrealistic to expect grief resolution of past
experiences and adjustment to resettlement to take place in the period of 20 weeks.

This research did not show that short-term music therapy treatment affects school
problems and adaptive skills. This is perhaps not surprising given the short treatment
period. It is possible that a reduction in the display of externalising behaviours, those
disruptive to these students’ school learning and adaptive skills, needs to occur first
(a prerequisite) before an effect begins to be seen in other areas of functioning within
school. Again, providing longer-term treatment might shed light on this theory.

It should be noted that none of the 31 students within this study ever displayed
composite scores approaching clinical concern (BSI scores 70+) and therefore the
potential for this treatment to greatly benefit those extremely disturbed refugee
students warrants further investigation. In fact, the absence of extreme scores limited
the potential to find a significant treatment effect.

Future studies with follow-up assessments at three, six and twelve months are
recommended which would illustrate if there is a carry-over to adaptive skills,
supporting the idea presented here that reducing negative behaviours may be a prerequisite before adaptive skills and improved learning occurs. Future research should also incorporate a control group rather than using a cross-over design to establish what normal fluctuations in behaviour could be expected when refugee students adjust to their new home and struggle through acquiring English proficiency skills.

Future research should examine more closely the effectiveness of this treatment for externalising behaviours, examining variables such as severity, length and frequency of treatment and group versus individual therapy. Investigating the appropriate timing for commencing the intervention is warranted given that young refugee people often experience an emotional crisis at periods of six months to three years following resettlement. At this time there is a period of destabilisation where refugees may experience hostility, resistance to the new culture and denial (Gonsalves, 1992). The impact that this period might have on students’ schooling and behaviour within the schoolyard may be significant. Perhaps music therapy might be more effective at this time when students would have the possibility to explore painful issues which might otherwise be expressed in destructive classroom and schoolyard behaviours.

Conclusions

The findings of this study suggest music therapy is a viable intervention for managing externalising behaviours and it is recommended that this treatment be used as an alternative to medication and other forms of school discipline. Further, a reduction in disruptive behaviours is likely to enhance the learning environment for all students, not just those directly involved in music therapy. This is important because students who do not progress quickly develop self-esteem problems. It is possible that such adoption of music therapy within the school system might reduce the level of school resources devoted to behaviour management and discipline.

References:


Herman, J. (1992) *Trauma and recovery: the aftermath of violence from abuse to political terror* (New York, Basic Books).


