Reporting on Outcomes: An Adaptation of the 'AQR-instrument' Used to Evaluate Music Therapy in Autism

Martin Lawes

Abstract

This article introduces an adaptation of the music therapy and autism specific AQR-instrument (Assessment of the Quality of Relationship) (Schumacher & Calvet 2007). The author developed this adaptation following the requirement to report on the outcomes of his work at a school for children with autism.

After introducing the AQR-instrument, the author describes how his adaptation enables him to produce bar charts illustrating client progress. This is done by drawing on the procedures of the Developmental Disabilities - Children's Global Assessment Scale *(Wagner et al. 2007). A case example illustrates the format used for the therapy plans, termly reports and annual review reports in which the bar charts are incorporated.*

Keywords: music therapy, autism, evaluation, outcomes, AQR-instrument

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Introduction

At a school for children with autism in the UK, I found myself being required to report on the outcomes of my work as well as produce therapy plans and brief termly reports. This was in addition to the annual review[1] reports I was accustomed to providing. The context was a developing therapy provision with increasingly formalised procedures being adopted to 'measure' progress. In particular, colleagues in the psychology, speech and language therapy and occupational therapy professions were developing the use of outcome measures, with the results presented in reports using bar charts. The data produced and its significance needed to be presented concisely and in a way that was straightforward for others to understand.

I noted that my colleagues both drew on existing validated outcome measures but at the same time found they needed to modify some of these or develop new ones so as to have something appropriate for 'measuring' change. Looking into how I might respond to what was required of me, it was soon clear that there was no existing outcome measure suitable for me to use. Yet I was encouraged by my colleagues' modifying of existing tools or developing new ones to think that I might be able to do something similar and even produce bar charts of my own comparable to theirs.

I have been able to do this by adapting the AQR-instrument (Assessment of the Quality of Relationship). This was developed by the music therapist Karin Schumacher and developmental psychologist Claudine Calvet specifically for use with children with autism for purposes of

[1] In the UK clients with special needs such as autism have annual reviews every year attended by key professionals and parents/carers. Educational, therapy and other reports are written for this purpose.

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assessment, diagnosis and evaluation (Schumacher & Calvet 2007). What I needed to do was to develop a way of applying it to help me report on the outcomes of my work given the culture of the school and the kind of approach being taken by my colleagues. The problem with the AQR-instrument was that it was not designed for a purpose quite like this. Thus the kind of information it produced, whilst useful for my own evaluation purposes as clinician, would have been too complex and specialised to present in a report and taken too much time to produce.

After introducing the AQR-instrument, I describe how I adapted its method of application to make it suitable for my purpose, drawing on the procedures of the *Developmental Disabilities - Children's Global Assessment Scale* (DD-CGAS) (Wagner et al. 2007). This is a validated outcome measure similar in format to the AQR-instrument. By drawing on its procedures, I was able to produce bar charts illustrating client progress and thus meet my employer's requirements in the kind of way they expected. I illustrate this with the format I use for therapy plans, termly evaluation reports and annual review reports. Bar charts are incorporated into the reports alongside descriptions of client engagement and progress.

Being a UK therapist, the various plans and reports that I produce are also useful in helping evidence how I meet the *Standards of Proficiency* for music therapists set by the Health and Care Professions Council (HCPC[2]). These standards stipulate that it is necessary to "formulate specific and appropriate management plans" and "evaluate practice systematically". The process should involve being "able to make reasoned decisions to initiate, continue, modify or cease treatment or the use of techniques or procedures, and record the decisions and reasoning appropriately" [3]. The standards refer to the gathering of qualitative and quantitative data to help evaluate client response to therapy and the use of recognised outcome measures.

Although the procedure I have developed integrates qualitative and quantitative types of evaluation, it would be misleading to say that I 'measure' progress or the outcome of therapy. For it might then be assumed that objective 'measurement' has taken place and that a scientifically validated tool has been used, which it has not. Indeed, a client's gains in self-awareness or in the ability to communicate and interact, or in emotional well-being as I aim to promote as a music therapist do not lend themselves easily to quantitative measurement (Christie et al. 2008). Because of this and the fact that the adapted AQR-instrument has not been externally validated, I avoid characterising it as being an outcome measure. Rather, it is essentially a systematic method of evaluation. The bar charts illustrating client progress are produced using subjective clinical judgment based on observation as I explain.

For ease of exposition, the male gender is used throughout for both client and therapist. The client's name and other details in the case example have been changed to preserve anonymity.

The AQR-instrument (Assessment of the Quality of Relationship)

The AQR-instrument (Schumacher & Calvet 2007) is designed to identify the developmental level of a client's functioning and relating in music therapy for the purposes of assessment, diagnosis and evaluation. In particular, it serves to assess a young person's tolerance of, and ability to engage in communicative interaction at a non-verbal level. This is significant because of the implications it has for the regulation of arousal/emotion (and consequently behaviour), personality development (the development of a sense of self), the development of functional communication in general (including verbal) and well-being. Its theoretical basis derives from developmental psychology and attachment theory. Although the AQR-instrument has not been externally validated, its inter-rater reliability has been successfully tested with 84 raters (Schumacher, Calvet & Stallmann 2005).

The instrument features four different scales. The first three focus respectively on the instrumental, vocal-pre-speech and physical-emotional dimensions of a client's engagement. Each scale has six or seven 'modi' which correspond to stages of the developmental process during the first year of life. The first three modi of the instrumental scale illustrate how the scales are not only music therapy but also autism specific (see Table 1).

[2] In the UK the profession of music therapy is regulated by the government appointed Health and Care Professions Council which publishes *Standards of Proficiency* to which all registered practitioners must adhere.

[3] HCPC: *Standards of Proficiency - Arts Therapists*, pp. 9-11. Retrieved on 18th June 2010, from: www.hpc-uk.org/assets/documents/100004FBStandards_of_Proficiency_Arts_Therapists.pdf

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Modus 0: Lack of contact / contact refusal / pause
There seems to be no awareness of the musical instruments in the room; they are not inviting. Despite therapeutic intervention they do not lead to any obvious intervention-related contact and relationship stimulating reaction. A third kind of behaviour in this modus is to need a pause in order to regulate the affective tension.
Modus 1: Contact – reaction
A first awareness of the instruments develops. It is handled in the form of a short reaction whereby as by chance a sound becomes audible. If it's a moveable instrument it is often touched and after that totally neglected.
Modus 2: Functional – sensory – contact
The instrument is handled either in a sensory, destructive or stereotype way: • sensory: touch, smell, taste instead of hearing • destructive: the instrument is in danger of being damaged • stereotype way of playing: monotone, unchanging, apparently meaningless.
Similarly up to **Modus 7 . . .**

Table 1: Instrumental Quality of Relationship Scale, Modi 0-2[4]

Schumacher and Calvet designed the fourth therapist scale to be used by the therapist to assess the level of his intervention and determine whether it is appropriate for the client or whether the therapist needs to modify his approach. The first three modi of the scale illustrate it (see Table 2).

Modus 0: Musical space – surrounding
The child shows no visible reaction yet to the therapist and his offers, sometimes making a pause. Music is offered with the intention of creating an atmosphere that makes a relationship potentially possible, but without forcing direct contact. The therapist feels unacknowledged.
Modus 1: Perception – connecting
The child moves (mostly stereotyped) around the room and notices the therapist's intervention for a short time. His movements become audible by an appropriate musical improvisation. The therapist feels mobilised by the short positive reaction of the child.
Modus 2: Affect attuning / allowing oneself to be functionalised
The focus is on the child's affect. The therapist attempts to find attunement with the child and to form him by physical, musical, or verbal means. The therapist puts himself thereby totally at the service of this problem and therefore feels functionalised in this respect.
Similarly up to **Modus 7 . . .**

Table 2: Therapeutic Quality of Relationship Scale, Modi 0-2

The scales are applied utilising a process of video microanalysis[5]. Schumacher and Calvet (2007) illustrate this referring to the AQR scales in their description of a client's engagement as seen in a short video extract (included with the book's web-based resources[6]). What is apparent in particular is that his engagement is not simply assessed as being in one modus but in different modi at different times even in such a short extract, as is likely in fact to be the case for any client. Used in this way, the AQR-instrument is very useful in helping the therapist identify and understand changes in the level (modus) of a client's engagement so that he can support the client's process in the most helpful way.

Everyday evaluation and reporting: An adaptation of the AQR-instrument

In thinking about how to respond to my employer's requirements, the attraction of the AQR-instrument for me was that it is both autism and music therapy specific. On the other hand, whilst the information produced may be very useful from the perspective of clinical evaluation, my employer would not have been willing to fund my spending significant amounts of time undertaking and documenting the microanalysis process on a regular basis for every client seen. Furthermore the AQR-instrument does not produce information that is simple to present and understand in a report – a purpose for which it was not designed anyway. This was especially pressing in the light of the way my colleagues were producing simple bar charts illustrating a client's level of functioning, accessible for others to understand without specialist knowledge. The AQR-instrument in contrast produces a more complex as well as subtle profile. As already discussed, this concerns the way a client typically functions at different levels at different times, elaborated in relation to a very specific context – which is that of music therapy. This means, I suggest, that it would only be possible to understand and fully appreciate the meaning and significance of the shifting levels of functioning through having specialist knowledge as those other than music therapists could not be expected to have.

Whilst in my adaptation I use the AQR scales in their original form and benefit from appreciating the subtleties of the shifting levels of client engagement the instrument highlights, I am able at the same time to present the results of the evaluation process in a simplified way that is

[4] The material presented in Table 1, 2 and 3 originates from Schumacher and Calvet (2007). This material is reprinted here with permission of Jessica Kingsley Publishers.

[5] Microanalysis focuses on "minimal changes in relationships or interactions between people or minimal changes in the music and in dynamic forces" (Worst & Wigram 2007: 14).

[6] Retrieved on 15th August 2012, from: www.jkp.com/catalogue/book/9781843104698/resources/

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designed to be accessible to those without specialist knowledge.

Required reading

In order to use my adaptation, or develop something similar, the reader will need to refer to several of Schumacher and Calvet's texts. These are firstly their chapter in the book *Microanalysis in Music Therapy: Methods, Techniques and Applications for Clinicians, Researchers, Educators and Students* (Schumacher & Calvet 2007). This introduces the AQR-instrument and includes the full scales and the clinical illustration (with video clip) referred to above. For more detailed information on the theoretical underpinning and practical application to clinical work, drawing as it does on Stern's work, the reader is referred to the DVD Schumacher and Calvet have produced (Schumacher & Calvet 2008). Their paper *Music Therapy with Children Based on Developmental Psychology, Using the Example of 'Synchronization' as Relevant Moment* (Schumacher & Calvet 2008a) is included on the DVD. A further publication about the AQR-instrument has recently appeared in German (Schumacher, Calvet & Reimer 2012). This includes a DVD and is due to be published in English possibly in 2013 (K. Schumacher, personal communication, 7th March 2012).

Although the adaptation of the AQR-instrument as I describe is not time consuming to use in the context of everyday clinical work, it is unavoidable that anyone wishing to use it does need to spend time to thoroughly familiarise himself with the instrument and especially the developmental theory underlying it. On the other hand, this cannot but benefit the therapist's work in what is a specialist, if common, area of practice. Whilst music therapists work in different ways depending on their training, I imagine that all those who work with clients with autism using an improvisation based approach will recognise the different modi of engagement described in the AQR scales, and that these would potentially be meaningful in terms of providing a framework for the evaluation of their work.

Developmental Disabilities - Children's Global Assessment Scale (DD-CGAS)

The development of my adaptation of the AQR-instrument began with the realisation that with its scales following a developmental sequence, the format is similar to the *Developmental Disabilities - Children's Global Assessment Scale* (DD-CGAS), a validated outcome measure (Wagner et al. 2007). Furthermore, when a scoring is made using the DD-CGAS, the fact that clients function at multiple levels is taken into account with a single score being produced that represents a kind of average level of functioning. By adopting its procedures, therefore, I realised that I could produce something similar using the AQR-instrument.

What made me consider drawing on the procedures of the DD-CGAS in particular was that it is a validated tool with proven inter-rater reliability (Wagner et al. 2007) which is yet not time consuming to administer. Indeed, complex video analysis is not required. Rather the rater makes a quick clinical judgment, using a standardised procedure, to determine the developmental level of a client's functioning.

The DD-CGAS is described as being a dimensional scale with scores ranging from 1 to 100, where 1 represents the most impaired functioning and 100, superior functioning. Each decile (e.g., 1–10, 11–20) corresponds to a level of functioning and has a descriptive header. Examples of behaviours that might be seen at each level are given. When a scoring is to be made, initially a decile is selected as the rater judges is the 'best fit' in terms of the client's functioning. Once this has been determined, the rater considers the adjacent levels in order to give a specific rating. For example, if the client fits best into 51-60 level: *"Moderate impairment in functioning in most areas"* but has some similarity to the 41-50 level, the rater chooses a number in the lower half of the range (i.e., 51-54). Conversely, if the client has some strengths consistent with the next higher level, the rater chooses a number in the top half of the range (i.e., 56-60) (Wagner et al. 2007). Although the rater draws on his observations of the client (as well as any available caregiver or educational reports and the results of standardised tests), it is always subjective clinical judgment that determines the actual score given.

It is expected that the initial rating will take 5 to 10 minutes to produce and even less time on subsequent occasions (Wagner et al. 2007). Given the excellent inter-rater reliability achieved using this method of application with the DD-CGAS, it is reasonable I believe to think that a similar level of inter-rater reliability could potentially be achieved with my adaptation of the AQR-instrument which uses an analogous procedure. This is especially given the good inter-rater reliability of the instrument as it stands (Schumacher, Calvet & Stallmann 2005).

Rating procedure for the adapted AQR-instrument

The modi within each of the four different scales of the AQR-instrument correspond to one another. Thus whilst each scale focuses on a different aspect

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of engagement, they are all associated with the same sequence of developmental levels. Therefore, in determining the client's general level of functioning in music therapy, the scales can be used in combination or different scales used at different times if the focus of the client's engagement changes. I have found it useful, in fact, to gather all four scales together into a single subdivided scale. For example modus five (see Table 3):

Instrumental quality of relationship: Relationship to others / lnteractivity
The instrument is played in form of a dialogue, as in question and answer games, often also in connection with vocal expressions.
Vocal-pre-speech quality of relationship: Relationship to others / interactivity
An internal motivation develops to form a dialogue. An ability to imitate becomes audible. These imitative periods are of longer duration. This dialogue develops further in the form of a question-and-answer game. The alternate picking up on motifs and a joint creating of form are evident.
Physical-emotional quality of relationship: Relationship to others / interactivity
The main feature of this modus is the mutually desired physical contact with a dialogue character. The child begins to enjoy the physical contact. The exchange is relaxed and accompanied by positive affect. The child regularly exchanges eye-contact with the therapist. However, he can also regulate himself by averting his gaze.
Therapeutic quality of relationship: Musical dialogue - musically answering and questioning
The child shows the ability to join in and imitate. A conscious initiation of music and dance ideas, independent from each other, becomes evident. The therapist considers himself as a person separate from the child and as dialogue partner.

Table 3: Modus 5

In assigning a score, which I do twice a term during the period in which a client receives therapy, I use a procedure that draws on both on the DD-CGAS and Schumacher and Calvet's guidelines for using the AQR-instrument:

1. Initially, one of the first three scales is chosen depending on whether instrumental, vocal or physical-emotional expression is most in the foreground during sessions around the time that the scoring is being made (this is the procedure Schumacher and Calvet suggest).
2. If the client neither plays nor sings, but shows significant emotional features, the physical-emotional scale is preferred with its focus on the client's affective state expressed through gesture, posture and movement, and the quantity and quality of his eye contact (this again is as Schumacher and Calvet suggest).
3. The fourth therapist scale is used for further clarification. Whilst it was originally intended simply to assess the level of the therapist's response to the client and its appropriateness, because it also describes how the client interacts, it can be used to further clarify his level of functioning. For example, whilst the instrumental scale focuses on the way the *musical instruments* are engaged with (the AQR scale reflecting the disturbed relationships with objects in autism as well as with people), the therapist scale describes in addition how the *therapist* is related to in the music.
4. If there is a discrepancy between the identified level at which the client is engaging and at which the therapist is responding, the therapist may need to modify his intervention (this is as Schumacher and Calvet suggest).
5. A modus, or level of functioning, is selected by the therapist as he determines 'best fits' the client's level of functioning and engagement around the time the scoring is to be made (this is the procedure of the DD-CGAS). This is based on his observations and experience of the client.
6. To produce a score, each modus of the scale is divided into 10^{ths} of points (starting at 0 in Modus 0). Similar to the DD-CGAS, a lower or higher score is given within the modus selected as 'best fit' (e.g., 3.2 or 3.7) dependent on a combination of factors:
    a. How far the modus of engagement / relationship is established and developed in sessions (bearing in mind that it may begin only as a momentary quality).
    b. Linked to this, whether the client's engagement also has characteristics of higher or lower modi of engagement (for example, for a percentage of the time during sessions as is often the case).

Whilst video analysis may be useful to support the process and it is recommended to undertake it from time to time, it is not necessary in my opinion to undertake on every occasion a score is made. Indeed I would anticipate, as I have already intimated, that if it were to be tested, there would be good inter-rater reliability using the procedure I have developed, just as there is for the DD-CGAS which also uses clinical judgment based on observation and experience to assign a score.

The bar charts and their presentation

Bar charts are created incorporating the scoring made over a term or more using, in my case, a *Microsoft Office Excel* worksheet. These are never

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presented in isolation but are always accompanied by a description of client engagement and progress. It is this that each bar chart illustrates and which justifies the scorings made (bearing in mind that they are not based on objective 'measurement' but on subjective clinical judgment). It is then through integrating qualitative (descriptive) and quantitative (bar chart) aspects of the evaluation process that I am able to respond to my employer's requirement. This is specifically as the evaluation process is documented in the therapy plans, termly evaluation reports, and annual review reports I produce.

Therapy plan

Along with an initial AQR score, the therapy plan includes a description of the client's presentation and engagement during the assessment period (see Figure 1, p. 117). In this I aim to clarify aspects of musical and interpersonal behaviour bearing in mind the framework that the AQR-instrument and its underlying developmental model provides. In other words, I aim to write an account of the client's initial engagement in therapy that makes sense of the score I assign. Also included in the plan is referral information, the aims of the work (determined during the assessment period) and the 'intervention plan' which sets out the length of sessions and when they will take place. Although it is difficult to obtain informed consent to therapy from a low functioning client with autism, I include evidence I have observed (or have had relayed to me by other staff) of the client's motivation to attend and engage.

Termly evaluation reports

Scoring is completed at the time of assessment and then every half term[7]. At the end of each term during which the client receives therapy, I produce a brief evaluation report (see Figure 2, p. 118). This includes a short description of the client's engagement and progress during the term linked to the aims of the work. This description should clarify any specific changes and developments which have resulted in an increased AQR score.

Annual review reports

While the therapy plans and termly evaluation reports are only intended for internal use within a school**,** annual review reports are designed for a wider audience and may be consulted beyond the school including in future years. For this more formal purpose, it is necessary to include a brief explanation of the bar chart and the adapted AQR method of evaluation to which it is linked, including references. This means that anyone who wants to find out more can do so by following up these references which are to Schumacher and Calvet's book chapter (Schumacher & Calvet 2007) and my article in this journal. Annual review reports are relatively quick to produce as I am able to use the descriptions of client engagement and progress previously produced for the termly evaluation reports.

The format for these reports includes a brief explanation of what music therapy is as well as information about referral, initial presentation, aims and the number of sessions received. After this a description of the client's engagement and progress is presented on a term by term basis followed by the explanation of the adapted AQR-instrument (see Figure 3, p. 119). The report finishes with a summary and recommendations.

Use of the chart in evaluation

Not only does the bar chart document progress but it also shows when a client reaches a plateau of progress or when a client does not progress as hoped for. By representing the contour of the client's progress visually, the bar chart can help support decision-making around whether to continue with or end therapy. From a UK perspective, where such decision making and its associated reasoning needs to be documented to meet HCPC *Standards of Proficiency*, the bar charts as they are incorporated into the various reports I produce are useful in justifying the decisions I make. They are also useful in helping to justify to parents and other professionals why therapy might be continuing or ending which can sometimes be points of contention.

Limitations

The AQR-instrument and my adaptation of it is more suitable for evaluating work with generally lower functioning clients (who are non-verbal or who have limited language) than for evaluating work with complex higher functioning clients with autism where the focus of the therapeutic process may be in areas of engagement not addressed by the AQR-instrument. For example, musical and verbal aspects of the work linked to the evolution of the transference / counter-transference dynamic or aspects of the work linked to the development of symbolic play elaborated in and around the musical process are not assessed. Thus the instrument is designed to evaluate 'music *as* therapy' more than

[7] In the UK the school year is divided into three terms. I rate each client twice a term and thus six times a year if seen for that long.

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'music *in* therapy'[8] (Bruscia 1998). On the other hand, I have found that even in complex multi-faceted work involving much in the way of 'music in therapy', the adapted AQR-instrument can sometimes usefully be used to evaluate the purely musical dimension of the client's relating and engagement ('music as therapy'). On occasion, I have generated bar charts for reports in such cases but always stressing that these do not illustrate progress in all the dimensions of the work I consider clinically significant.

It is also a fact that, as Schumacher and Calvet (2008a) point out, progress in therapy does not always occur in the linear sequence of the AQR scales. In that sense a bar chart may be misleading if it is assumed that progress is always represented by a higher score although it generally is. In such circumstances, the accompanying descriptive element is essential in clarifying scorings that may move up as well as down so that the bar chart and what it signifies is not misinterpreted. Indeed the bar charts should not be presented independently of the description of client engagement and progress that they illustrate, for it is the description that justifies and makes sense of the scores assigned.

There are also circumstances when a client may not progress in terms of developmental level (or have reached a plateau of progress) and it may not be reasonable to expect further progress, but continuing therapy be justified because of the assessed positive general impact of sessions in maintaining the client's well-being each week. In such a case, the AQR-instrument may not be applied to produce scores and bar charts. This is where it would be misleading in conveying the benefits or focus of the work.

Further applications

A procedure similar to that I have adopted may be able to be used where ratings scales have been developed for other client populations or for more general use in music therapy. On the other hand what I have developed is specific to the setting where I work and what has been required of me. I hope, therefore, that other practitioners may be able to draw on the approach I have taken so as to develop something useful for their own work settings and suited to their own way of working.

[8] In 'music *as* therapy', the work is done entirely through the music with verbal discourse, if it is engaged in at all, being only employed to guide, interpret, or enhance the music experience and its relevance to the therapy process. In 'music *in* therapy' the work is done equally musically and verbally, either alternately or simultaneously, with music being used for its unique nonverbal advantages, and words used to enhance insight (Bruscia 1998). Work in other creative modalities may also feature.

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Music Therapy Plan

Name: William James
Date of Birth: 3 April 2005

Referred by: Sarah Brightman (speech and language therapist) and Ruth Ledger (class teacher).
Date of Referral: 6 September 2011
Reason for Referral: To help William to "tolerate more closeness with others" as he is very isolated at present and "very difficult to reach". He seldom looks at other people. His reported "love of music" is a relative strength within his autistic presentation.

Intervention Plan:

1. Weekly 30-minute sessions at 2:30pm on Tuesdays during term time.
2. Three assessment sessions initially. If appropriate on-going therapy offered for one term (autumn 2011) with possibility of extension subject to termly review of progress made and of the expected benefits of continuing.
3. Adapted AQR-instrument for half-termly evaluation if appropriate.

Date of Initial Assessment Session: 13 September 2011

Presentation During Assessment Sessions:

William attended with his teaching assistant in support and stayed the full 30 minutes. He chose to sit in front of the drums and cymbal on entering the room. His play was generally more at a sensory level of exploration (e.g., uncoordinated, a-rhythmic 'rubbing' of the drum stands with the drum sticks), than at a level where he recognised the instruments as being 'musical' instruments that could be used for affective (emotional) expression. However there was, from time to time, an emergent sense of the possibility of play at this latter level evolving (e.g., more organised rhythmic beating of the drum skins).

William only acknowledged the therapist's presence very fleetingly, occasionally glancing his way. He also resisted musical interaction to begin with. Thus he tended to stop playing when the therapist joined in and established a connection in the music. This changed towards the end of the session when he began to tolerate brief moments of rhythmic connection before breaking off.

William seemed to need quite long periods of withdrawal in between relatively brief episodes of engagement with the instruments (and with the therapist). He also went over to the piano and pushed the therapist's hands off the instrument's keys when he wanted the therapist's music to stop. He then paced around the room blocking his ears. Later in the session, William did accept the therapist playing instrumental music quietly in the background when he wasn't playing himself. He blocked his ears when the therapist sang to try and draw William into interaction again. William began to vocalise quietly towards the end of the session, however, (unmodulated humming sound) attuned to the piano harmonies provided by the therapist demonstrating an indirect musical connectedness.

William's potential and motivation to engage in more sustained episodes of musical play and interaction began to emerge in the second and third assessment sessions (attended alone). He initiated some of these episodes of engagement and was also able to begin to respond to the therapist's musical and other invitations to re-engage. There was a brief episode of synchronised play together (shared pulse) in the third session based in the rhythm of William's body movement which William seemed to register through the way he looked at the therapist in a more sustained way. On one occasion William sat by the therapist at the piano though he only played very briefly before moving away.

The therapist's assessment was that William would be likely to benefit from on-going therapy for one term initially with aims as set out below.

Initial Adapted AQR-instrument score: 2.3

Aims:

For William:

1. to participate in expressive and communicative interaction at a non-verbal level using music as therapeutic vehicle. To engage in a range of modalities: instrumental involving playing the percussion instruments and the piano, and vocal work. Also movement and music based work.
2. to develop awareness of self and other: to "tolerate more closeness with others" and become more motivated to interact. To initiate interaction, and respond to the therapist's invitations to interact. To move from episodes of self-absorbed non-communicative and fragmented musical (sensory) play to episodes of more sustained and organised interactive musical play. To develop the capacity to interact musically underpinned by a shared sense of pulse. To learn to turn-take.
3. to develop the capacity for contained affective (emotional) expression through participation in music-based interactive play.

Therapeutic Approach:

Student led involving improvised musical interaction to achieve therapeutic goals. Psychodynamic approach within developmental framework.

Student consent	Not able to understand concept but seems motivated to attend, e.g., gets up immediately the therapist arrives in class to collect him (unusual for him).
Parental consent	Yes

Plan devised by Martin Lawes, Music Therapist	**Signed:**	**Date:**

Figure 1

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Music Therapy Termly Evaluation

Name: William James
Date of Birth: 3 April 2005

Term: 1 (Autumn 2011)
Number of Sessions Attended in Term: 11
Number of Sessions Attended in All: 11

Evaluation of Progress in Relation to Aims:

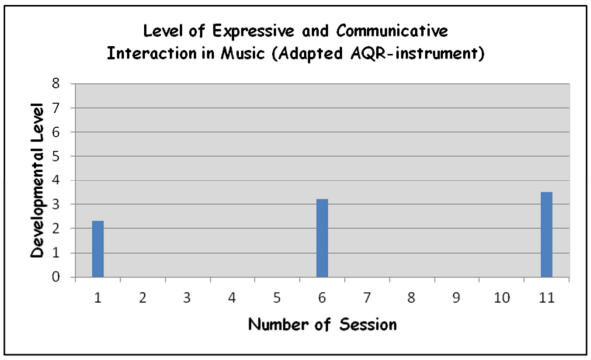
William always seems highly motivated to attend sessions, getting up immediately he sees the therapist arrive in the classroom and walking with him to the sessions.

His music-making has generally become less tentative and more confident. His exploration of the instruments is less at a sensory level and now more at a musical level, beginning to express his shifting affective state. This is through musical patterning and shaping supported by the therapist's music (e.g., development of rhythmic beating and variation of rhythmic patterns, changes in the intensity and speed of the music and an emergent sense of musical phrasing). Thus William has overcome his resistance to engaging in musical interaction to a significant degree. He initiates episodes of musical play more frequently than he did to begin with and is also able to respond to musical or verbal cues from the therapist to re-engage. William plays the drums and cymbal and increasingly the piano (sitting alongside the therapist) during the sessions.

Whilst William seems to be increasingly motivated to interact, at the same time the therapist needs to remain in a musically supportive role, closely following William's musical ideas and the rhythm, flow and speed of his playing. If the therapist introduces musical ideas of his own or changes the speed of the music, for example, at this stage William is restricted in his ability to attune and respond. William does look at the therapist more than he did to begin, however. This is especially when the musical play is synchronised together or matched in some other way. Indeed William's response to the therapist's musical support has involved his own playing becoming more organised (rhythmically grounded), confident (louder) as well as sustained (playing for longer periods before breaking off). It is clear that music therapy is beginning to help him "tolerate more closeness with others", one of the reasons for which he was referred.

There are also periods during which William withdraws from instrumental based musical interaction altogether. However these periods last less time than they did to begin with and he also generally blocks his ears less in sessions. This means that even when not playing the instruments, William seems less withdrawn than he did to begin with. He remains aware of the therapist and his music, looking his way occasionally as he paces around the room. Indeed William increasingly engages vocally at these times, and seems to be encouraged to sustain his engagement as a result of being supported by the therapist's piano harmonies and vocalisations. Characteristic expressive melodic shapes are beginning to emerge, though he does not yet seem ready for vocal dialogue. Recently William has begun to 'dance' at times supported by the therapist's accompanying music.

Adapted AQR-instrument (Assessment of Quality of Relationship):



Beginning of term score	2.3
Mid-term score	3.2
End of term score	3.5

Recommendations - Revised aims / intervention plan:

William has progressed well during the first term's work and further progress can be expected. Another term's work will be undertaken with the possibility of extension subject to review of progress made next term and of the expected benefits of continuing after that. Same aims and intervention plan.

Signed: **Date:**

Martin Lawes, Music Therapist

Figure 2

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Evaluation of Progress: Adapted AQR-instrument

William's progress was regularly evaluated using an adaptation of the music therapy and autism specific AQR-instrument (Assessment of the Quality of Relationship). This was used to assess the developmental level of his non-verbal expressive and communicative interaction every half-term. The bar chart produced illustrates how he progressed. It represents numerically what is described in the report. His initial score was 2.3 and his final score 4.5. It should be noted that because of their autism, many students (especially those who are non-verbal or who only have limited language) would not be expected to reach the top levels of the scale.

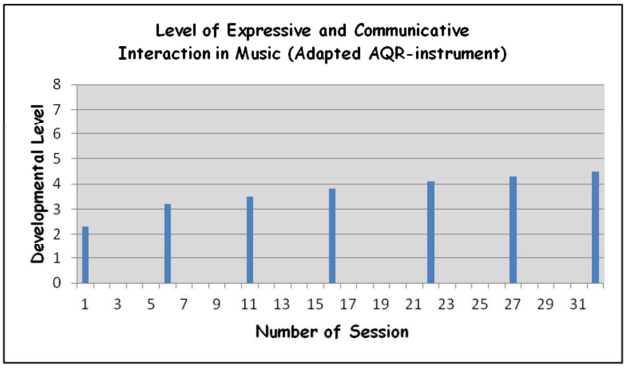

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Figure 3

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