

The Value of Music: Music in Rugby Grounds



Two studies by Dr Adrian C. North

Introduction

This is a summary of the full paper which was prepared by Dr Adrian North for The Performing Right Society (PRS for Music) in February 2003.

The report details the results of two studies carried out by Dr North into the value of music played at top class rugby matches and reveals the benefits of using music as a key part of the match day entertainment for supporters, as well as music creating the right atmosphere to help players maximise their performance.

The first study used two professional Edinburgh Rugby matches played in the Welsh-Scottish League at Meadowbank Stadium (versus Cardiff and Ebbw Vale respectively). The second was an international match featuring Scotland versus Wales at Murrayfield Stadium in the 2003 Six Nations Championship.

The studies measured and compared the attitudes of supporters and players to the music played and the results showed that:

- Supporters and players consider that music is important in creating a lively atmosphere
- People are more likely to come along to matches as a result of the music that is played
- Crowd noise is higher at times when music is played
- Music can help players to perform better
- Supporters rate music as being worth around 25% of the ticket price

Study One – Meadowbank Stadium

The first study compared responses at the two 'high' and 'low' music games respectively.

Both games were played at the Meadowbank Stadium, Edinburgh and featured Edinburgh Rugby playing their Welsh-Scottish League matches against Cardiff on 19th April 2002 and Ebbw Vale on 23rd April 2002 respectively.

The 'high music' game featured a lot of music that was selected to maximise crowd enjoyment, whereas the 'low music' game featured a minimal amount of music.

The Cardiff match was designated as the 'high music' game. Accordingly, in conjunction with Edinburgh Rugby's existing off-field entertainment organisers, Event Mechanics, the following music programme was played.

1. Pre-match / half time – "YMCA" Village People
2. Pre-match / half time – "Roll With It" Oasis
3. Pre-match / half time – "Let Me Entertain You" Robbie Williams
4. Music before the segment by pre-match presenter – "500 Miles" The Proclaimers
5. Indicating the teams are about to come out – "Two Tribes" Frankie Goes to Hollywood
6. Opposition run-on music – "Too Rockin' For One Hand"
7. Edinburgh run-on music – "Waterfront" Simple Minds
8. As the match kicks off – "Ready To Go" Republica
9. When EDINBURGH try is scored – "Celebrate" Kool & The Gang / "Fiesta" The Pogues / "Walking On Sunshine" Katrina and The Waves
10. When EDINBURGH conversion / penalty / drop goal is scored – "Can I Kick It sequence" (taken from 'Rock DJ' by Robbie Williams)
11. When OPPOSITION score – "Tubthumping" Chumbawumba
12. Substitution – "Theme from 'Superman'"
13. Edinburgh player sin-binned – "No More Mr. Nice Guy" Alice Cooper
14. Opposition player sin-binned – "Na Na Hey Hey Goodbye" Bananarama
15. Crowd builder – "Can You Feel It" The Temptations
16. Crowd builder – "We Will Rock You" Queen

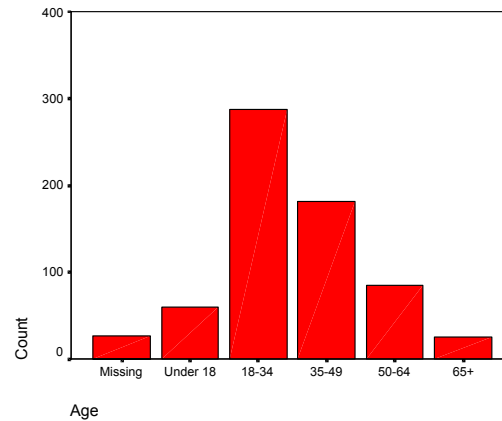
The Ebbw Vale match was designated as the 'low music' game, at which a minimal amount of music was played (in agreement with the Edinburgh Rugby administrators). Accordingly, the only music played at this match was the presenter's introductory music (track 4 above), when the teams came out onto the pitch (tracks 6 and 7), and when Edinburgh scored a try (track 9).

A questionnaire was distributed to approximately one quarter of the crowd at halftime in both matches (with arrangements being made to ensure that nobody completed the questionnaire on both occasions). The majority of the items in the questionnaire asked supporters to rate various aspects of their reaction to the music using a 5-point labelled scale. In addition to this, a questionnaire was given to Edinburgh Rugby staff and players.

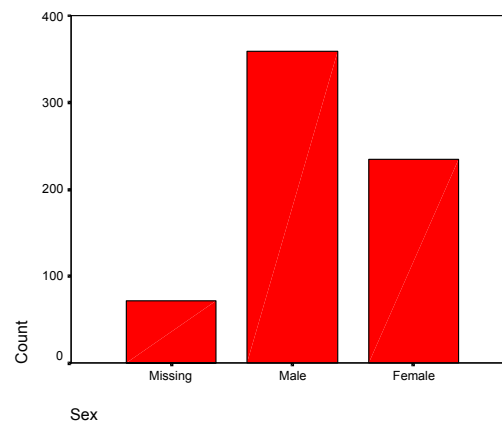
Supporters views at the 'high music' game

665 supporters completed questionnaires at the 'high music' game and their responses were collated.

Age: Respondents were asked to indicate their age - the majority of the respondents were aged 18-34 years (45.1%).



Sex: Answers indicated that the respondents were predominantly male (60.4%)
The answers to the main questionnaire produced the following findings:



- 67.8% of supporters thought the music helped to create a lively atmosphere either 'a bit' or 'a lot'.
- 58.4% of supporters thought the music helped to create a family atmosphere.
- 63.0% of supporters thought that music helped to contribute to the match as a spectacle.
- 21.5% of supporters said they were either 'more likely' or 'much more likely' to come along to future matches as a result of the music.
- 20.9% of supporters said they were 'more likely' or 'much more likely' to encourage a friend to come along to future matches as a result of the music played.
- When asked to state the financial value of the music played at the game, supporters gave a mean price of £2.43.
- 77.4% of supporters thought that the music played was 'OK' or better.

Correlations with liking for the music

Pearson product-moment correlations were calculated between ratings of liking for the music and ratings given in response to all the other questions. The resulting correlation coefficients were all significant and positive.

In practical terms this means that the more supporters liked the music, so the more: a) they thought that music created a lively atmosphere b) they thought that music created a family atmosphere c) they thought that music contributed to the match as a spectacle d) they said they were likely to come along to future matches e) they would encourage a rugby-loving friend to come along to future matches f) they were prepared to pay for a ticket g) financial worth that supporters attached to that music h) that supporters regarded themselves as ardent fans of the team

These findings have important implications.

First, they demonstrate a direct relationship between enjoyment of the music played in the ground and several other aspects of the game and supporters' reactions to it: The more they like the music, the more they get from the match.

Second, these results have important implications regarding supporters' responses to several questions. In answering the questions, the great majority of the supporters claimed that the music had no influence either way in terms of whether they would come to future matches, encourage a rugby-loving friend to come to future matches, or make them a less or more ardent fan. The correlations described here however indicate that this is not the case. Instead it seems that supporters *were* influenced by the music when answering these questions: The more they liked the music, so the more positive was the answer they gave to each question.

The positive relationship between liking for the music and all the other questions has one final important implication. In short, the strength of the positive effects of music is determined by the extent to which the crowd like the music played. If supporters really liked the music then the effects of that music were really positive across the board: If supporters really disliked the music then the effects of that music were negative. The careful selection of music for use in the present research meant that most people responded positively to it and that the music subsequently had a positive effect on answers to the other questions. Had the crowd disliked the music played then the correlations described in this section mean that we would expect that music to have had negative effects: *In short, it is crucial to select music that the crowd will like.*

Players' attitudes

23 Edinburgh players completed a questionnaire about the impact of music at games.

Players believed that music:

- helps to create a lively atmosphere
- contributes to the match as a spectacle
- makes people more likely to come to future games
- has some impact in getting supporters to encourage friends to come to future games

Most interestingly, when asked to what extent music played before and during matches helps or hinders their performance, the majority of players thought that music helped them: 13 players said that the music helped their performance either 'a bit' or 'a lot'.

Comparison of supporters' responses from the 'high music' and 'low music' matches

438 supporters at the 'low music' match completed a questionnaire about the (nonsporting) entertainment offered at the match, and these responses were compared with those given by supporters attending the 'high music' match.

- When comparing the 'high music' and 'low music' matches, the former led to ratings that were typically 8%-9% higher in terms of creating a lively atmosphere; creating a family atmosphere; contributing to the match as a spectacle; whether attending the game had made the supporter a less or more ardent fan; and enjoyment of the entertainment in question. The 'high music' match also led to supporters also being willing to pay a higher entrance fee.
- Supporters were also asked to rate the financial value of the (non-sporting) entertainment offered to them. These ratings were over 400% higher in the 'high music' match (average = £2.43) than they were in the 'low music' match (average = £0.48).

Crowd noise at both games

Measures of crowd noise were also taken at both games. The 'high music' match led to much greater degrees of crowd noise both when the teams came onto the pitch and immediately after kick off. In the 'high music' game, crowd noise at these points was approximately 50% above the baseline noise level, whereas in the 'low music' game, crowd noise at these points was on average only about 5% above baseline. 'Crowd building' music used in the 'high music' game succeeded in raising crowd noise to approximately 50% above baseline.

Study Two – Murrayfield Stadium

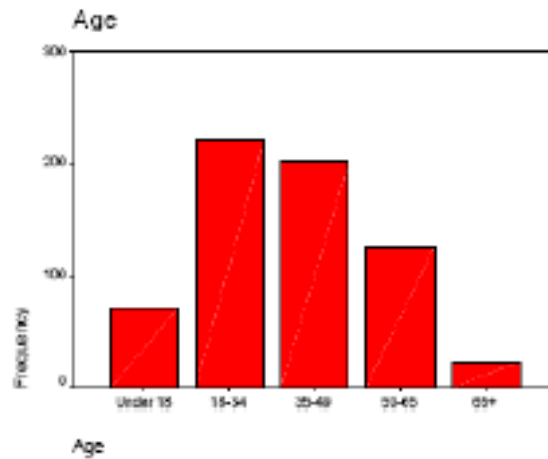
A second study was conducted at the match between Scotland and Wales played on 8th March 2003 at Murrayfield, Edinburgh as part of the Six Nations championship.

The following music programme was played.

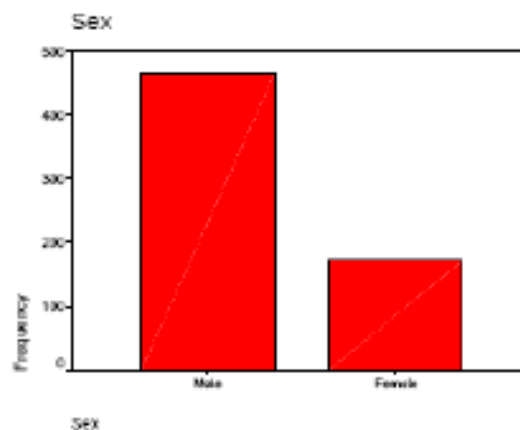
Pre-game outside the ground	
From 14.00	Two pipe bands walking around ground 32 piece Royal Navy brass band by main gate 45 piece pipe band by main gate
Pre-game inside the ground	
15.10	Pre-recorded Scottish bagpipe music Video footage of Scotland rugby team's great tries
15.30	Male voice choir singing Scottish and Welsh music
15.45	All bands from outside the ground march onto pitch
15.52	Sound of heartbeat played throughout ground
15.53	Wales team come on to 'Carmina Burana'
15.54	Male voice reads patriotic Scottish poetry Bagpipers on stadium roof Fireworks from stadium roof Scotland team come on to pitch
15.56	Welsh anthem played by Royal Navy brass band and sung by male voice choir
15.59	Scottish anthem played by bagpipes and sung by choir
16.02	Kick off
During the match	
16.15	Scotland try followed by excerpt of '500 Miles' by The Proclaimers
16.22	Scotland try followed by excerpt of '500 Miles' by The Proclaimers

A great deal of music was played prior to and during the game and a questionnaire was distributed to 677 members of the crowd at half time to assess their reaction to this music. The majority of the items in the questionnaire asked supporters to rate various aspects of their reaction to the music.

Age: Respondents were asked to state to which of five age groups they belonged. Answers to this indicated that 10.5% of respondents were under 18, 32.5% were aged 18-34 years, 29.7% were aged 35-49 years, 18.5% were aged 50-65 years, and 3.4% were aged 65+ years. 5.5% of respondents declined to answer.



Sex: Respondents were asked to state their sex. Answers to this indicated that 68.5% of respondents were male and 25.3% were female. 6.2% of respondents declined to answer.



The key findings from the main questionnaire were;

- 98.2% of respondents said that the music helped to create a lively atmosphere, and 24.2% felt that music helped 'very much' to achieve this.
- 91.9% of respondents said that the music helped to create a family atmosphere, and 48.3% thought that music helped either 'a lot' or 'very much' to achieve this.
- 94.4% of respondents said that the music contributed to the match as a spectacle, and 59.5% thought that music helped either 'a lot' or 'very much' to achieve this.
- 33.0% of respondents said that the music would encourage them either 'a lot' or 'very much' to attend future matches.
- 33.0% of respondents said they would be 'a lot' or 'very much' more likely to encourage a rugby-loving friend to come to future matches as a result of the music.
- 92.5% of respondents said that the music helped to create a uniquely 'Scottish' atmosphere, and 25.8% felt that the music helped 'very much' to achieve this.

- 90.1% of respondents said that the music helped to get the crowd behind the Scotland team, and 54.0% thought that the music helped either 'a lot' or 'very much' to achieve this.
- 65.9% of respondents said that the music was either 'good' or 'very good' with a further 29.4% saying that it was 'OK'.
- When asked to state the financial value of the music played at the game, supporters gave a mean price of £2.88.

Conclusion

These two studies demonstrate the potential benefits of music that is used at sports events or in sports grounds and stadia.

- Music can help create the right atmosphere
- Music is popular and can enhance peoples enjoyment of an event
- Music makes it more likely that people come along to events
- Music can help encourage and increase crowd noise and excitement
- Music can help players to perform better
- Music has a financial value