

An empirical field study on sing-along behaviour in the North of England

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Introduction

- Strong historical tradition of singing along in England
- 20th century technologies & professionalisation of singer suppress public singing
- Singing along in leisure contexts is one of few public music-making opportunities today

Past Research

- Social bonding, expression of identity, 'neo-tribes' (Maffesoli, 1988; Finnegan, 1989; Bennett, 1997; Björnberg and Stockfelt, 1996; Malbon, 1999 Jackson, 2004)
- Positive effects of vocalising (Clift and Hancox, 2001; Freeman, 2001; Unwin, Kenny and Davis, 2002; Kreutz, et al, 2004; Clift, et al, 2007)
- 'Singable' melodies (Stefani, 1987)

Research Aims

- What motivates people to sing along to a song in a leisure context?
- Do songs have intrinsic features that make them 'singalongable'?

Methods: Field Research

- Participant observer
- *Quantitative & qualitative* data
- 30 nights of research
- 5 venues:
Manchester, Leeds,
York & Kendal
- DJed & live music



Qualitative Results: Typology of sing-along behaviour

- Jaw-clencher
- Daydreamer
- Transient
- Conversational
- Flirtatious
- Stylised
 - I'm Always Here 📢
- Reveller
 - Livin' on a Prayer 📢
- Tribal
 - Chelsea Dagger 📢

Still, disengaged

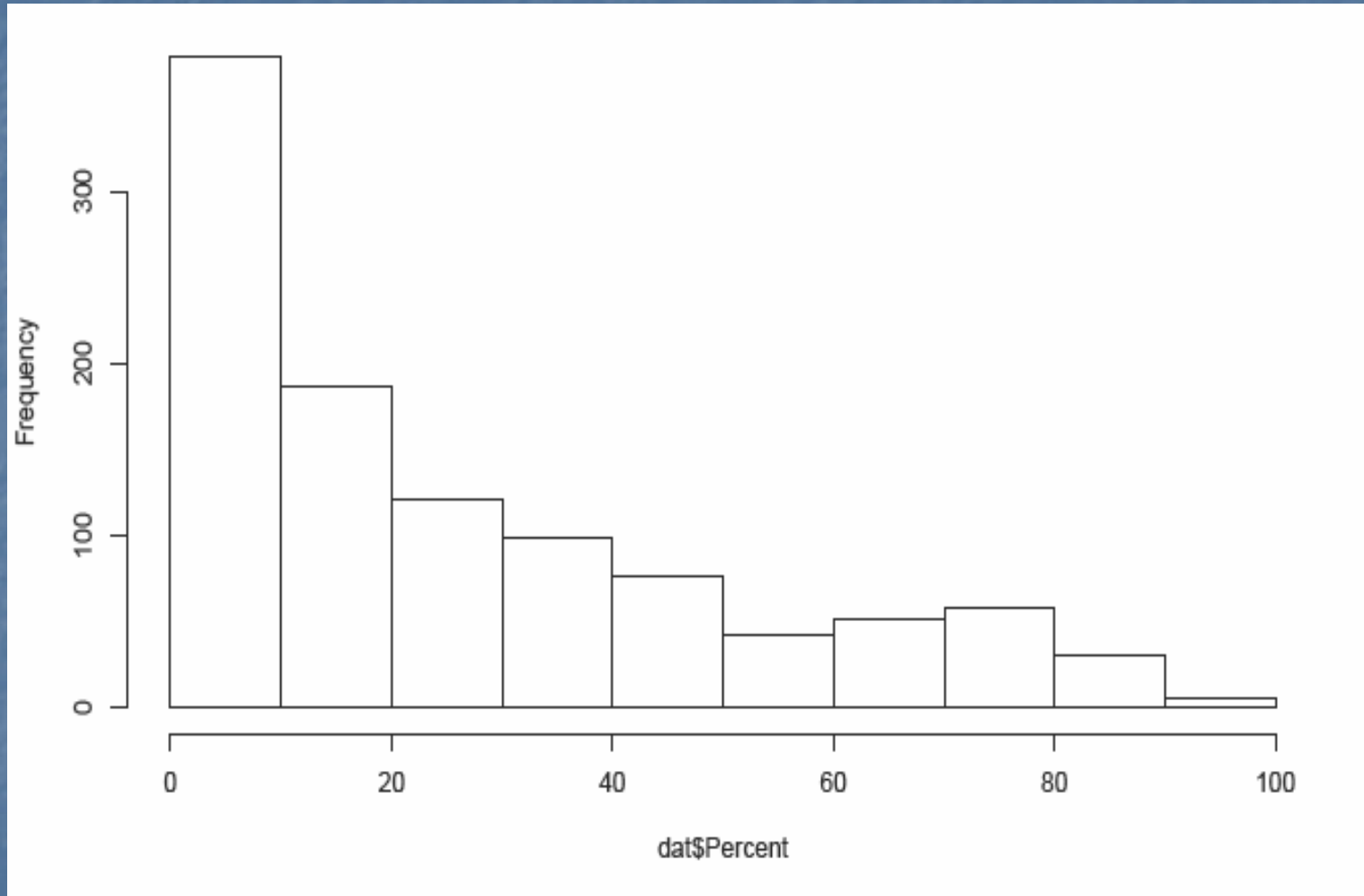


Dancing, enthusiastic

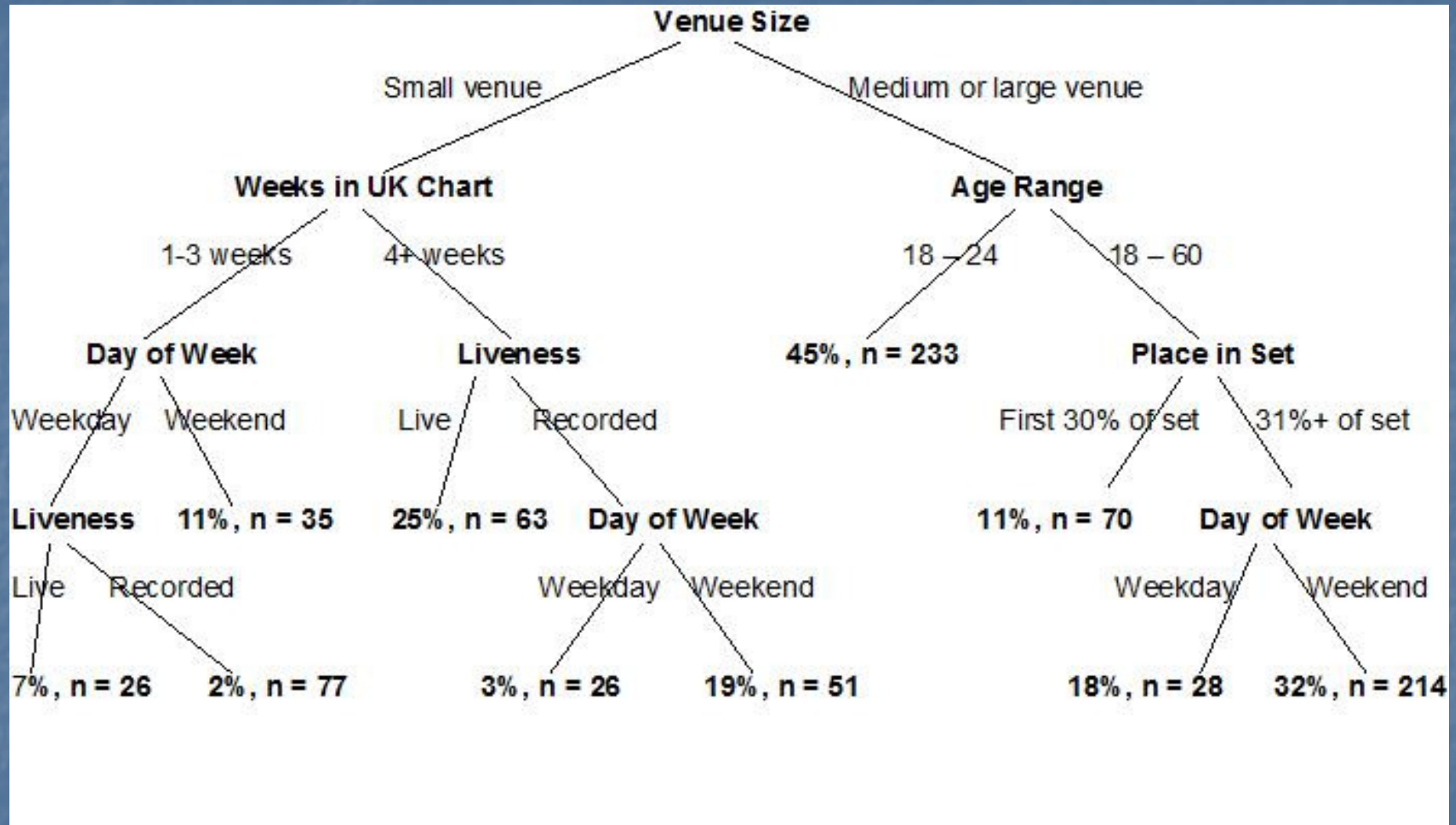
Quantitative Results: Intro to Data

- Dependent variable: percentage of people singing along
- Two sets of explanatory (predictor) variables: contextual & musical
- 1050 'song events'
- 636 songs
- 332 song events used in musical analysis (121 songs)
- Contextual variables:
 - Place of song in set
 - Day of week
 - Venue size & function
 - Live vs recorded
 - Age range of audience
 - Date of release, UK chart position, weeks in UK chart
- Musical variables (34 total):
 - Vocal span & phrase lengths
 - Vocal hook
 - Vocal performance
 - Lyrics
 - Gender
 - ...

Distribution of Percentages of People Singing Along Across 1050 Song Events



Tree Model: Contextual Variables



Conditional Inference Regression Tree model: explains ~40% of variance in the data

Random Forest

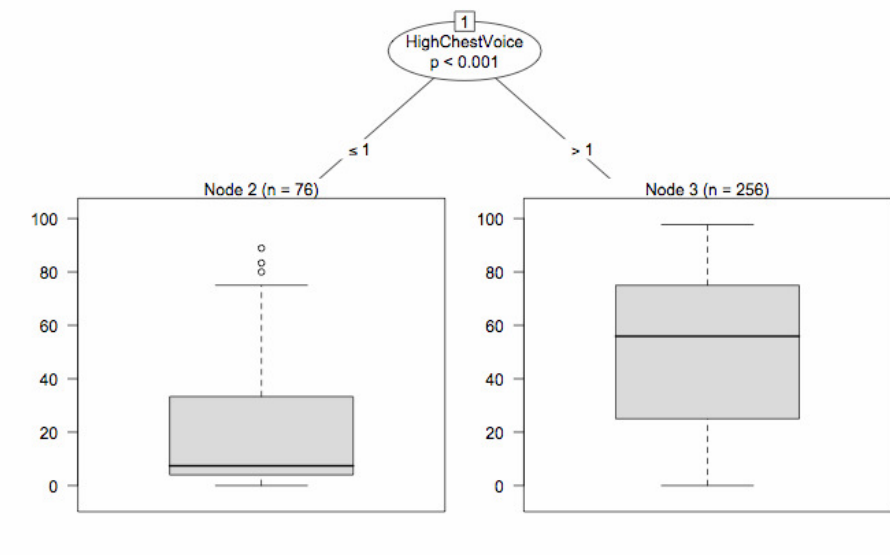
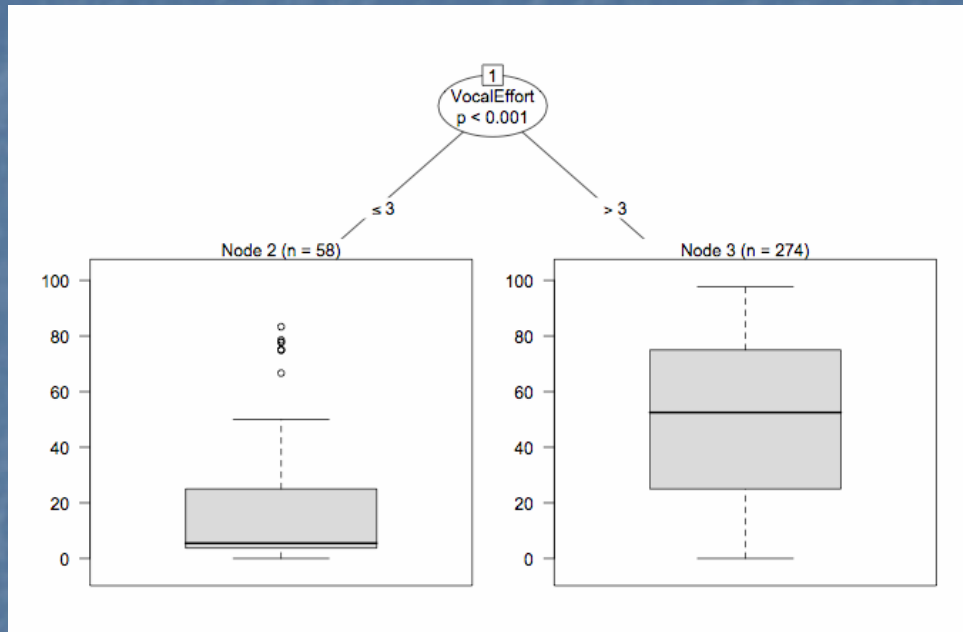
- Idea (Breiman, 2001):
 - Build ('grow') many tree models for same dataset each with a subset of the explanatory variables
 - Use majority vote of trees in forest to decide on predicted value for each case
 - Pro: Much better prediction accuracy than from single tree
 - Con: No simple rules or individual graphical model but information about the importance of each predictor for predicting the dependent variable.

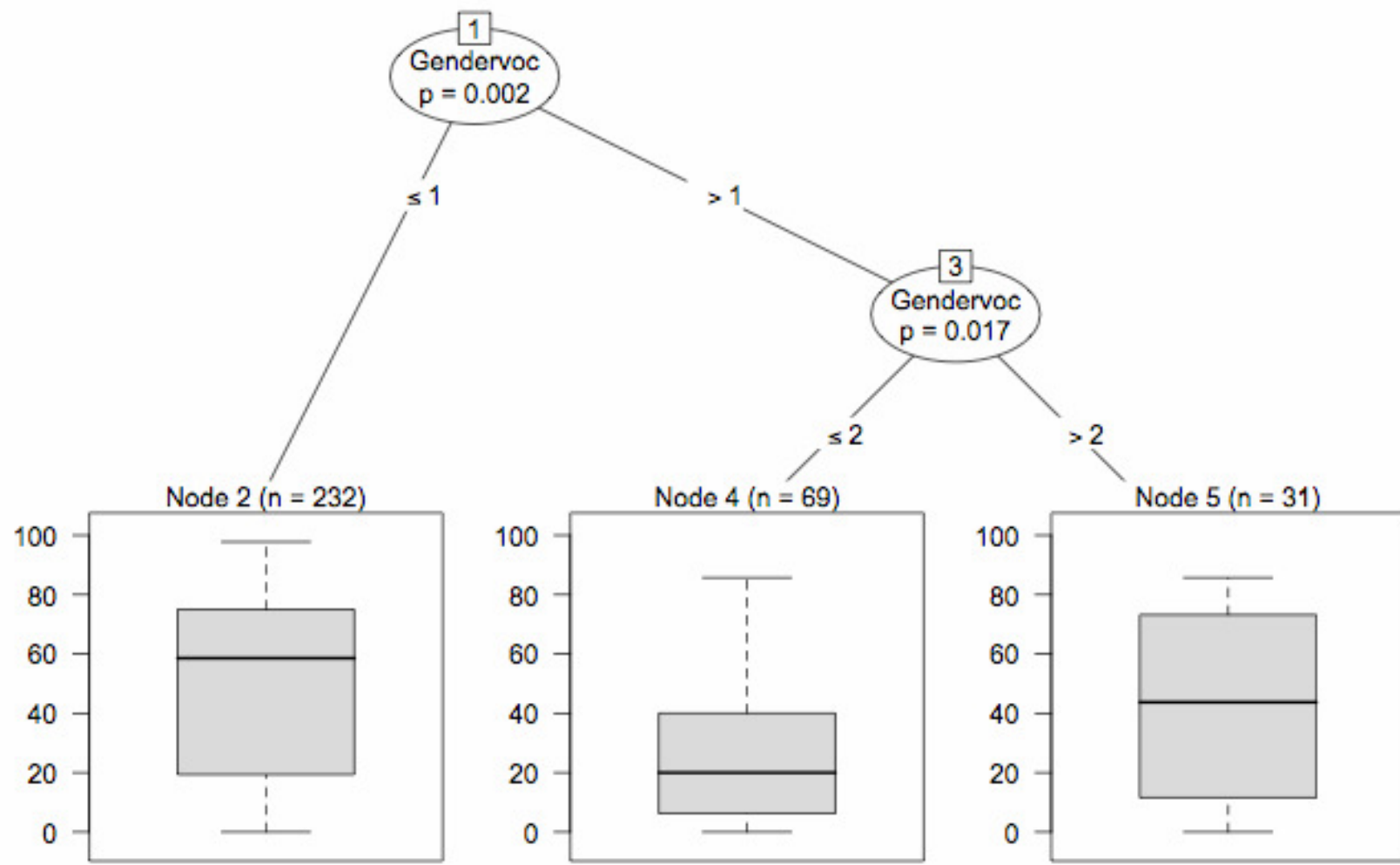
Random Forest Results

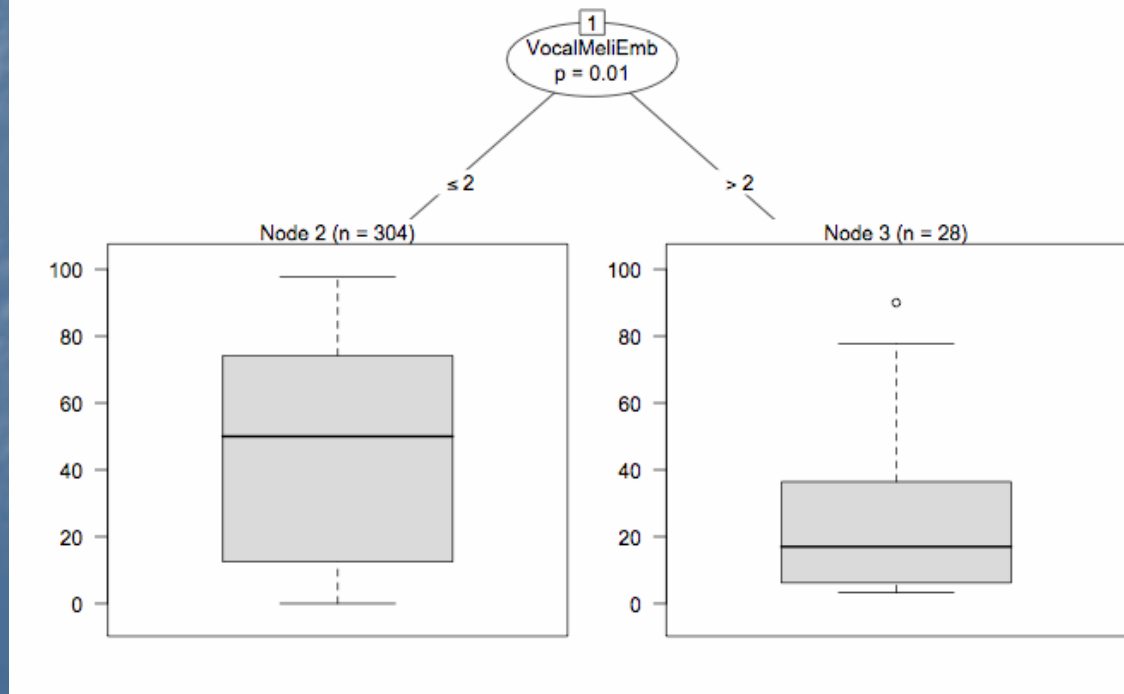
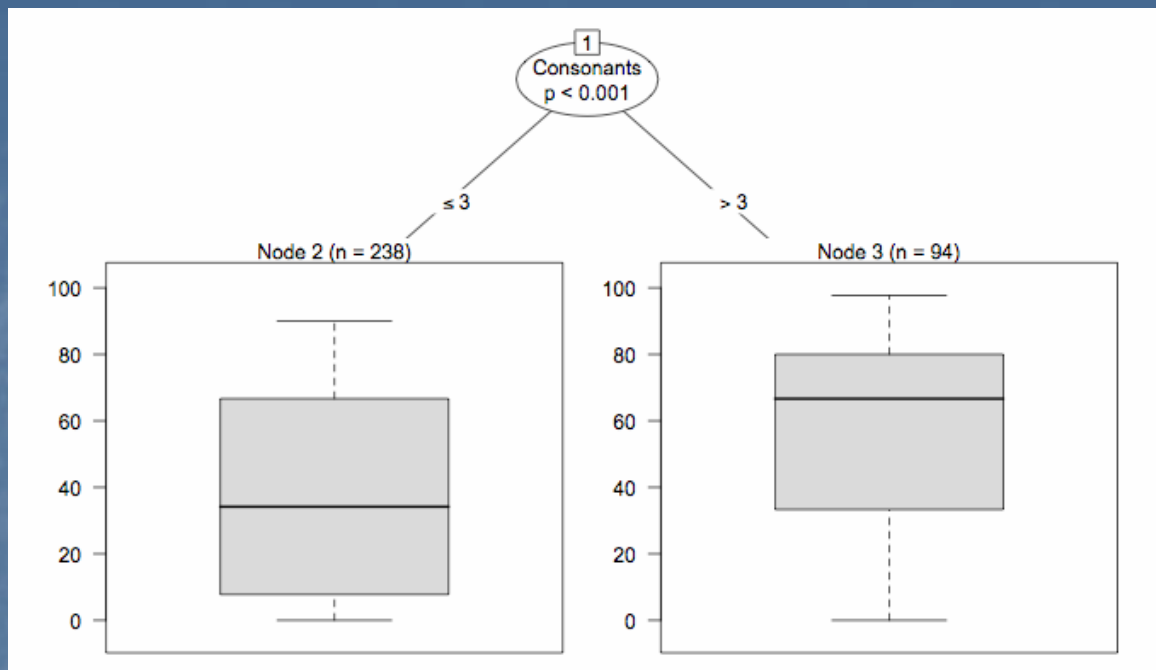
- Prediction accuracy: 65% of variance in data explained
- Most important variables (importance index):
 1. Combined model from contextual variables (81.4)
 2. Vocal effort (5.9)
 3. High chest voice (5.6)
 4. Gender of vocalist (4.5)
 5. Consonants (3.6)
 6. Vocal melisma and embellishment (2.0)
- ...

Trees of Most Important Musical Variables

Relating most important predictors relating to sing-along percentage (by single trees)







Results: Summary

- Contextual factors largely determine how many people sing along (explain ~40% of variance); musical factors not as influential (explain ~25% of variance).
- Singing along is positively effected by these contextual factors:
 - Larger venues
 - Younger people
 - Weekends
 - Songs played later in the set
 - Songs that spent 4 or more weeks in the charts
- Singing along is positively influenced by these musical factors:
 - High chest voice
 - More vocal effort
 - Clearer consonants
 - Less melisma and embellishment
 - Male singer

Discussion

- Contextual variables that encourage singing along can be connected with general revelry, which links to qualitative data.
- Familiarity & popularity potentially linked to singing along.
- No single 'sing-along' formula for music.
- Musical factors that do influence singing along are similar to qualities of anthems in popular music (Dockwray, 2005).
- 'Call to party' – 'tribal' bonding.
- Expresses excitement of revellers.
- Word clarity: ease of understanding & reproduction.
- Qualities that inspire confidence.
- Male vocals.

Conclusions

- Leisure contexts provide unique context for singing along to occur in public.
- Singing along is by influenced by context and connected to general revelry, where songs with anthemic qualities can invite a large proportion of the audience to join in.

