

# A small scale investigation into the perceived effect of music on the quality of life for a person with aphasia

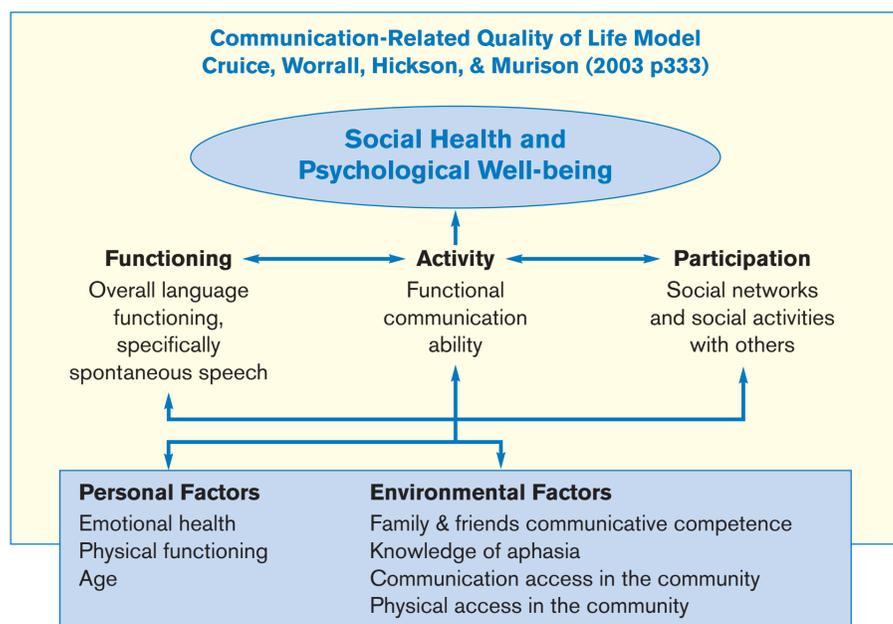
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## Background

Music, which can be described simply as organised sounds and silences, is universal and uniquely powerful in its ability to evoke both physical and emotional responses. Music has been used “extensively throughout history as a healing force to alleviate illness and distress” (Bunt 1994, p3). The influential Norwegian music therapist and author Even Ruud (1997, p96) further suggested that “involvement in music is a potential resource for obtaining a better quality of life”. The proposition that aphasia rehabilitation should encompass more than the repair of language and communication has been supported by living with aphasia therapy advocates such as Pound, Parr, Lindsay & Woolf (2000) and Lyon (2004). In 2000 Pound et al suggested that music had the potential to influence quality of life by improving self-esteem, by lessening feelings of social isolation, and by offering a means of expression and communication for people with aphasia. This small scale study was undertaken as part of the final year undergraduate degree programme at De Montfort University. It was designed to investigate whether people with aphasia thought that music function, music activity and music participation had a positive effect on their quality of life.

## Methodology

Fifteen people with stroke and aphasia completed the Belhaven (2009) music questionnaire. The four part Belhaven (2009) music questionnaire was divided into three dimensions based on the function, activity and participation categories described by the World Health Organisation International Classification of Functioning, Disability and Health (2002). The fourth dimension was included to investigate the relationship between music and quality of life. Each dimension was investigated using five specifically devised music related questions. These questions were designed to find out about music behaviours and attitudes. The wording of the twenty questions music related questions was influenced and adapted from vocabulary and concepts presented by Cruice, Worrall, Hickson and Murison (2003) in their communication related quality of life model.



Questions were presented and formatted in a way that was influenced by the Stroke and Aphasia Quality of life Scale-39 designed by Hilari, Byng, Lamping and Smith (2003). All twenty questions in the Belhaven (2009) music questionnaire were presented to the participants both visually and orally.

### Belhaven (2009) Music Questionnaire Question 5

DURING THE PAST FORTNIGHT

5. Did listening to music change your feelings?

Yes  Not sure  No

## Results

Responses from the fifteen participants were analysed qualitatively and quantitatively. Non-parametric Friedman and Wilcoxon tests were used in this within-subjects design because the small sample of numerical ordinal data was not distributed normally. A Bonferroni test result with a chance probability of  $P \leq 0.05$  was considered significant for this study. The Friedman Test was used to identify if there were significant relationships between the questions within a

dimension or between the dimensions themselves. The Wilcoxon Test was then used to identify what specific questions within a dimension showed significant relationships or which specific dimensions showed significant relationships.

### Belhaven (2009) Music Questionnaire Qualitative Results 15 participants

Before each question say during the past fortnight:			
FUNCTION	F1	Did you listen to music at home? (on the radio or TV?)	93%
	F2	Did you have any trouble listening to music at home? (hard to hear, turning on radio or CD player?)	20%
	F3	Did listening to music make you clap your hands or tap your foot?	87%
	F4	Did listening to music make your body feel different? (adrenalin; relaxed?)	87%
	F5	Did listening to music change your feelings? (happier; sadder?)	80%
ACTIVITY	A6	Did you sing or hum a song?	80%
	A7	Did you play an instrument?	7%
	A8	Did you listen to music on records or CDs?	87%
	A9	Did you listen to others talk about music? (radio/TV programme?)	47%
	A10	Did you recognise a piece of music? (that you hadn't heard for a long time)	93%
PARTICIPATION	P11	Did you go to live music performance with friends or family? (orchestra, musical show, choir)	13%
	P12	Did you take part in something musical with friends or family? (social event; sing at church)	47%
	P13	Did your friends or family sing to you?	27%
	P14	Did your friends or family play an instrument for you?	40%
	P15	Did your friends or family talk about music with you?	67%
QOL	Q16	Did you enjoy music? (listening, singing, performing)	93%
	Q17	Was music important to you? (in everyday life, at certain times)	84%
	Q18	Did music affect your quality of life in a positive way? (feel better?)	79%
	Q19	Did music make you feel closer to your family or friends? (share music?)	88%
	Q20	Would more music have improved your quality of life?	64%

Statistical analysis revealed that the dimension of music function was significantly related to the dimension of quality of life. The music activity and music participation dimensions did not show a significant relationship to the quality of life dimension.

## Discussion

The results of this study suggest that enjoyment of music is not dependent on social inclusion. Music can be enjoyed by an individual irrespective of sensory, language or physical disability. All but one of the fifteen participants in the study reported that they listened to music, recognised music and enjoyed music following the onset of their aphasia. The results of this small scale study suggest that music can be easily included in everyday life. The study also suggests that music should be viewed as accessible and beneficial for people with aphasia. The enjoyment of music could be a cost effective addition to the therapy tool kit of those who work alongside people with aphasia to help improve perceived quality of life following stroke and aphasia.

## References

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