Women in Brass: Re-examining gendered involvement in music A preliminary report into musical preference stereotypes

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There is a well-proven stereotypical preference for musical instruments, based on masculine/feminine binaries. Recent interest in the education of boys has brought about a renewed focus on engaging boys in playing the so-called feminine musical instruments such as flute, violin and singing and a rigorous examination of the resultant effect on ensemble participation.

The dearth of females playing so-called masculine instruments has not gone unnoticed, but frameworks for investigating females' participation have been driven almost entirely by a feminist agenda. A construct for studying gendered participation in music, employing a post feminist perspective is presented. As one of the major areas in which female participation does not match their male counterparts is in that of brass playing, this paper also reports on the preliminary stages of a project aimed at engaging more females in playing brass instruments. In addition to outlining a philosophical standpoint, therefore, it investigates female brass players in a variety of musical genres and emphasises the impact of role models in challenging the status quo. It examines how schools and society (through the media) perpetuate systems that support hegemony, which in turn limits musical opportunity for both males and females

Introduction

Harrison (2003) conducted a review of the literature into stereotypical behaviours associated with instrument choice and gendered participation in music. In eleven studies undertaken between 1978 and 2003, a profile of individual instruments prone to stereotyping could be established.

- Flute was on the feminine end of the scale in ten out of the eleven studies;
- Clarinet and violin were either second or third most feminine in eight out of eleven studies;
- Tuba was the most masculine in every study in which it was an option, while drums/percussion were the most masculine in five of the studies;
- Trumpet, trombone, drums and other lower brass were consistently deemed masculine;
- Saxophone was consistently neutral;
- Singing was towards the feminine end in all the studies in which it was an option.

In the Australian setting, Bartle (1968) commented that many orchestras in girls' schools lacked brass players. He also remarked on the lack of boys in choral programs. More recently the engagement of boys in playing the so-called feminine musical instruments has been thoroughly investigated (Harrison 2001, 2003, 2004, 2005, Hall 2004, 2005 and Collins 2005). Abeles and Porter (1978, p. 65) accurately summarise the affect of stereotyping on participation:

The association of gender with musical instruments can, as can stereotyping of any kind, serve to constrict the behaviour and thus the opportunities of individuals. Stereotyping is particularly irrelevant when applied to a group of objects such as the association of maleness with playing the drums and femaleness with playing the violin. The sex-stereotyping of musical instruments therefore tends to limit the range of musical experiences available to male and female musicians in several ways, including participation in instrumental ensembles and selection of vocations in instrumental music.

Stereotyping is therefore perceived as basis for gendered participation in music. Some of the comments Green (1997), Hanley (1998) and Conway (2000, pp. 8-9) interviewed students and teachers regarding the gendering of instruments. Conway's subjects commented on brass instruments:

I thought that low brass is sort of masculine, but it's not really true at our school, we do have some girls.

In Conway's study, boys avoided flute, clarinet and singing, while girls avoided choosing French horn, tuba and double bass. Zervoudakes and Tanur (1994) examined the issue of change in musical preference over a longitudinally. The results indicated that there was a limited increase in the number of girls playing "masculine" instruments. While they conceded that further research is required to conclude that girls are playing a wider

range of instruments, there was evidence males are not able to cross gender lines as easily as females. (Fagot 1978; Langlois and Downs 1980; Golombok and Fivush 1994; Abeles and Porter 1978 and Delzell and Leppla 1992.)

O'Neill and Boulton's (1995) study concluded that girls showed a stronger preference for flute, piano and violin, while boys expressed a stronger preference for drums, guitar and trumpet. Girls consistently avoided trumpet. Both sexes had few respondents electing trombone, French horn, tuba, 'cello and double bass. When asked about the reason for the existence of stereotypes, some students commented that, while they were unwarranted, sound and physical characteristics of instruments were cited. Perhaps of most importance in relation this research was that all students who played a cross-gendered instrument talked about having to deal with some questioning about their choice. Green (1993, p.248) commenting on how both boys and girls are disadvantaged by the gender order) stated:

both boys and girls tended to restrict themselves or find themselves restricted to certain musical activities for fear of intruding into the other sex's territory, where they may have be accused of some sort of musical transvestism.

Studies into girls' non-engagement with instruments deemed masculine have not been undertaken to any significant extent in Australia. While there have been several significant international studies, these studies have frequently been driven by an agenda that does not recognise the need for a balanced view that supports both males and females in the pursuit of musical involvement.

Philosophical Framework

Given that frameworks for investigating females' and males' participation have been driven almost entirely by a feminist agenda, a broader, post-feminist construct is required for examining issues of gender in music and general education. The post-feminist viewpoint was adopted after a thorough investigation of first, second and third wave feminism, men's rights, pro-feminism, masculinity therapy and conservatism (Harrison 2003, 2005, Adler and Harrison 2004) The author's post-feminist view acknowledges the disadvantages that each of these bring to both men and women. Within this viewpoint (which implies moving beyond feminism), the term critical genderist thinking and action (Adler and Harrison 2004) describes the process of examining issues of gender across the entire gender spectrum. By removing references to feminine and masculine, this term allows for the discussion of gender in the broader context. It therefore provides a means of examining the experiences of individuals or groups regardless of gender or gender bias, illuminating the interconnectedness of differing experiences. This movement has a growing body of literature associated with it (Harrison 2004, 2005, Adler 2005, Adler and Harrison 2004, Hall 2005). By using this framework it is possible to illuminate structures and practices that contribute to a gendered social hierarchy, which in turn negatively affects the participation of both males and females in music.

Research method

As part of a larger study into gendered participation in music, a number of studies were undertaken with primary, secondary and tertiary students. The research design incorporates a mixed method approach in which more than one type of data is collected and analysed (Tashakkori and Teddlie (2003). The purpose in using this research design was to ascertain whether a nexus between instrument preferences, actual instruments played and perceptions of instruments in relation to gender could be established. The first phase of this study as reported here will reflect on data gathered as part of this larger study. In this first phase, three separate studies were conducted over three years to elicit

- A. Primary school students instrument preferences
- B. The actual instruments students in secondary school played
- C. The perceptions of tertiary students regarding the gender associations of instruments

Study A. This was a study of primary school age students' preference for musical instruments. This study asked for primary school students' first and second choices. To provide some longitudinal perspectives, this replicated the Delzell and Leppla (1992) study.

Study B. This study comprised an 11-item survey asking secondary students' current instruments, the instruments students would least like to play and the instruments students would most like to play. In open and

closed response items, students were also asked to provide reasons for their choices. This was based on the 1993 work of Fortney, Boyle and Carbo.

Study C. This study asked music and non-music tertiary students to indicate whether musical instruments were perceived to have masculine or feminine attributes. This was an extension of one of Abeles and Porter's (1978) studies that asked college students to place instruments on a masculine/feminine continuum. Delzell and Leppla (1992) also studied college students' attitudes. While all previous studies of college (tertiary) students included a comparison of music students and non-music students, the Griswold and Chroback (1991) study provided the closest possible conditions for replication in this instance.

The second and third phases of the study will report on data gathered through two questionnaires of music teachers: the first at the time of concert presentation by female brass players and a second, follow-up questionnaire of music teachers at the time of instrument selection.

Context

The research was undertaken across three years (2000 - 2003) with a view to establishing trends in gender perception of musical involvement and actual involvement in primary, secondary and tertiary settings. Primary school students were drawn from 52 schools across southeast Queensland. Secondary school students were students enrolled in pre-tertiary programs at an Australian university and tertiary students were music and non-music majors in a metropolitan university. Non-music students were from a range of disciplines in arts and sciences.

Findings and Discussion

Stage One, Study A

As part of a larger study, 345 primary school students (aged 12 to 13 in 2000 and 2001) were asked to indicate their instrument preferences. Students were given a list and asked to indicate their first, second and third choices for instruments they would most like to play. They were also asked to indicate gender. There were an almost equal number of male and female participants (50.7% female: 49.3% male). The data for both years was combined, then analysed according to instrument type and gender (Table 1)

It should be noted that there were a relatively small number of responses for French horn, trombone, tuba and viola. The data presented in Table 1 indicates a strong inclination towards flute, clarinet, viola, 'cello and singing for the female participants. Saxophone, trumpet, double bass, drums/percussion and guitar were chosen by a large number of males. The lack of overall response to French horn, trombone, tuba and viola makes it difficult to make any conclusive comment in relation to gendered choices. These findings would suggest a stereotypical bias against larger, lower and "louder" instruments for females.

Stage 1, Study B

Data was gathered from a pre-tertiary program of 600 secondary (aged 13 - 17) students in 2000, 2001 and 2002. There were a slightly higher proportion of females in this study (54% female: 46% male). This data represents the actual instruments students' play, displayed according to gender (Table 2)

The polarization of instruments to the stereotypical choice is quite clear when viewed across the three years. Flute, viola, harp, voice and composition are very strongly represented by females. Percussion, brass, double bass were played by a higher proportion of males. As with study A, there is a strong bias against lower instruments and particularly brass instruments for females.

Stage 1 Study C

The final aspect of Stage 1 was to question music and non-music tertiary students about gendered perception of instruments. Undergraduate music students and non-music students from a university in Southeast Queensland volunteered for the study. Music students were those students enrolled predominantly in music subjects, while the non-music students were from disciplines other than music.

Of the 98 respondents, 71 were music students (32 males and 39 females) and 27 were non-music Students (9 males and 18 females), giving total 41 male subjects and 57 female subjects. Students were given a list of instruments and asked to rank them according to whether they considered them to be masculine or feminine on a Likert-type scale (1= feminine, 10 = masculine). The data was categorised according to gender and course of study. Some students indicated that instruments did not have significant gender associations by circling numbers in the centre of the scale (numbers 5 or 6.) To determine whether an instrument was perceived to have masculine attributes, the total of the numbers upper end (7 - 10) of the scale were added (Table 3).

Drums, trumpet and trombone were clearly gendered masculine by a large proportion of subjects. Only guitar rated below 50% for the non-music subjects. Non-music students generally perceived guitar to be gender neutral. There is a high degree of correlation between males and females in relation to trombone and drums and this is noteworthy, as is the correlation between music and non-music students for these students.

To determine whether an instrument was perceived to have feminine attributes, the total of the numbers lower end (1 to 4) of the scale were added (Table 4).

From these results, it is possible to conclude that only flute is considered feminine by a significant number of tertiary students. Overall, the music majors were more stereotypical in their choices than non-music majors. The only exception to this was in relation to trumpet and trombone where non-music students were in the vicinity of ten percentage points higher in their perceptions of these instruments as masculine. The extent to which this can be applied to the general population is questionable, but these results could be indicative of a general trend.

Conclusion

It is acknowledged that these results are the result of a mixed method and therefore not a completely accurate representation of the data, as the sources are quite varied: some are the opinions of tertiary students; others are lists of instruments students are currently playing or would like to play. The aim of providing the tables below is to assist in ascertaining the clear correlations between each study and the gendered nature of participation and to make appropriate connections with existing literature in the field. Table 5 represents the findings in one format from feminine at the top to masculine at the bottom of the list. In analysing this information, it is vital that the reader understands these tables combine actual instrument choices, preferences and opinions and in that sense they are not ideal for the purposes of comparison. Across all three studies in stage one, it is still possible to conclude that, in keeping with the literature,

- flute was on the feminine end of the spectrum. Singing and upper woodwind was also consistently feminine or undertaken by females.
- tuba, trumpet, trombone, drums were consistently deemed masculine. Double bass was frequently referred to as masculine or taken by males.

One of the general trends emerging from the data is that larger, lower instruments and to a lesser extent, those with the capacity for higher dynamic levels were male dominated. Conversely, softer, smaller and higher instruments were female dominated.

Further research has been undertaken into the feminine association with singing and woodwind instruments, the reasons for these associations and strategies for improvement. However little has been done in the area of quantifying the extent to which the perceptions of brass and percussion among females can be more thoroughly investigated. It is envisaged that the subsequent stages of this project will pursue aspects of this association from the critical genderist viewpoint, providing solutions for action and development through role models of female brass players. This premise is based in the literature that indicates that prior to notation, music was passed on solely through the use of role models (Sang 1992, Harrison 2003, Collins 2005). Lamb (1993) concurred stating that music has a long tradition of role models and mentors as the primary means of transmitting culture and knowledge: the mentor/apprentice model occurs most commonly in the applied lesson, but also in composition, conducting and teacher education. Through the use of the critical genderist approach, it will be possible to examine this data without the bias and blaming of feminist and masculinist studies, thereby creating opportunities for students to participate in music regardless of gender stereotypes and perceptions.

Early anecdotal accounts from stage 2 of the study indicate that primary school students are prepared to change their gendered viewpoint when confronted with high quality female brass playing role models. It is anticipated that, as the study takes on a more longitudinal perspective, the effect of role model will become clearer.

About the author

Scott Harrison's career as an educator spans over 20 years. He currently lectures in music and music education at Griffith University. He also maintains an active performance profile in the fields of opera and music theatre. He is a National Councillor for ANATS (Australian National Association of Teachers of Singing) and examines singing for the Australian Music Examinations Board. Recent publications have focussed on teacher identity, gender, choral and vocal education.

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Table 1 *Primary school students' instrument preferences 2000 & 2001*

Instrument	Average %	Average	
	of males	% of	
		females	
	2000/1	2000/1	
Flute	12.5	87.5	
Clarinet	11.8	88.2	
Saxophone	77.3	22.7	
Trumpet	86.1	13.9	
Trombone	50	50	
French Horn	100	0	
Tuba	100	0	
Violin	22.9	77.1	
Viola	0	100	
'Cello	0	100	
Double Bass	83.3	16.7	
Drums/Percussion	65.7	34.3	
Guitar	72.8	27.2	
Piano	27.9	72.1	
Singing	15.9	84.1	

Table 2Comparison of instrument selection by secondary students (data for 2000, 2001 and 2002)

Instrument	Average	Average
mou dinent	% of	% of
	males	females
	2000 – 2	2000- 2
Flute	9	91
Oboe	34	66
Clarinet	27	73
Bassoon	38	62
Saxophone	42	58
Trumpet	67	33
Trombone	97	3
French Horn	66	34
Euph/Tuba	77	23
Violin	22	78
Viola	11	89
'Cello	40	60
Double Bass	65	35
Harp	0	100
Guitar	74	26
Voice	10	90
Piano	46	54
Percussion	67	33
Composition	11	89

Table 3 *Percentage of subjects who considered some instruments masculine*

Instrument	Total	Music	Non Music	M	F
Drums	82.7	84.5	74.0	85.4	80.7
Trombone	81.6	78.8	88.9	80.4	80.7
Trumpet	71.4	69.0	77.8	75.6	59.6
Guitar	62.3	69.0	40.7	65.9	59.6
Saxophone	59.2	61.9	51.9	63.4	54.4

 Table 4

 Percentage of subjects who considered some instruments feminine

Instrument	Total	Music	Non Music	M	F
Flute	73.5	77.5	63.0	58.5	61.4
Clarinet	41.8	42.3	40.7	46.3	38.6
'Cello	39.8	35.2	55.6	36.6	43.8
Singing	38.8	40.8	33.3	53.7	29.8
Violin	37.8	38.0	37.0	41.5	35.0

Table 5 $\label{eq:Feminine} \textit{Feminine - Masculine instrument continuum}. \textit{``Feminine'' instruments are at the top.}$

Study A	Study B	Study C
Primary students' preferences	School students' instruments	Tertiary students' opinions
'cello	Harp	Flute
Clarinet	Viola	Clarinet
Flute	Singing	Cello
Singing	Flute	Singing
Violin	Bassoon	Violin
Piano	Violin	Saxophone
Trombone	Clarinet	Gutiar
Percussion	'cello	Trumpet
Guitar	Composition	Trombone
Saxophone	Piano	Drums
Double bass	Oboe	
Trumpet	Saxophone	
French Horn	Percussion	
Euphonium/tuba	French Horn	
•	Double Bass	
	Trumpet	
	Guitar	
	Euphonium/Tuba	
	Trombone	