Appendix i

Dear Student,

I am one of the singing staff at Wilkes Academy, and am studying for an MA in vocal pedagogy (teaching) with University of Wales, Trinity St. David (UWTSD) and the voice study centre. For my final module, I must undertake a large-scale research project for which I have already gained approval from UWTSD's ethics committee.

I am therefore, seeking to recruit 20 participants for a pilot research study, which aims to measure student response to words of instruction used in singing lessons. The study is an exploration of various words and terms which may be familiar or unfamiliar to students, and their effect on students' understanding and implementation of vocal technique, when used in a voice lesson. The reason for the research is to find the most effective means of communicating vocal technique to individuals who may have had limited experience in singing prior to college.

The research will involve a short pre-questionnaire to determine the training and vocal experience of possible participants before college. This should take no longer than 10 minutes. From the returned questionnaires, 20 participants will then be invited to the live testing session, where they will take part in a series of short vocal exercises. The session will conclude with a short interview to gauge the participants overall opinion of the strategy. The live testing will take place at Wilkes Academy on Monday mornings during March and 30 minutes will be allocated to complete each session. The test and interviews will be filmed but the all footage will be kept in a secure environment and participants' identities will be anonymised in the report, and all data will be destroyed at the conclusion of the course or should the participant withdraw from the study.

Kind regards,

Yvette Cummings. yvette@wilkesacademy.co.uk

My tutor's contact information : Mel@voicestudycentre.com

Appendix ii

Consent Form

Title: Pilot study into linguistic effects in the voice studio

- I (name of participant)……voluntarily agree to participate in this research study.
- I understand that even if I agree to participate now, I can withdraw at any time.
- I understand that I can refuse to answer any question asked during the research process without consequences of any kind.
- I have had the purpose and nature of the research explained to me in writing and have had the opportunity to ask questions about the study.
- I understand that participation involves answering a questionnaire about my training. Additionally, I will be trialling and assessing vocal exercises, and discussing the test session.
- I understand that I will not benefit directly from participating in this research.
- I agree to my test session being filmed.
- I understand that all information I provide for this study will be treated confidentially.
- I understand that in any report on the results my identity will be anonymised.
- This will be done by allocating me with a participant number.
- I understand that disguised extracts of my interview may be quoted in the dissertation, video presentation, conference, published papers.

Participant signature……..

Researcher signature…….. Date……

Yvette Cummings. yvette@wilkesacademy.co.uk
My tutor's contact information : Mel@voicestudycentre.com

Appendix iii

Pre-test questionnaire

This pilot research project aims to investigate the use of language in singing lessons, and to identify how understandable existing terms are, to music theatre students.
This questionnaire seeks to identify your background and training prior to college, and your current knowledge. The information you provide will not be shared and your name will only be used as an identifier by the researcher, and you will be anonymised in the final report.
Please tick the boxes next to the words, or terms, you know the meaning of and would be confident in explaining or demonstrating. You will not be asked to demonstrate or explain in the subsequent practical test.

Name…….… Age……

<u>Vocal experience prior to college</u>

Did you have voice lessons prior to college? Yes/No (Circle applicable answer)

If so, how frequently were the lessons?

…….

During what period of time did you have voice lessons / how many lessons?

……

How long did each lesson last? (only answer if applicable) ……..

Did you study a musical instrument? Yes/No (Circle applicable answer)

If so, what was it? ……

Did you take GCSE music at school? ……..

Were your voice lessons: In a group? Private? (Circle applicable answer)

Dance experience prior to college

What was your dance training prior to college (please give a brief history including types of dance studied, duration of study, frequency of training, examinations passed/awards.

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Please look through the terms listed below and tick the box most relevant to your existing knowledge of the term. Consider whether you would be able to describe the meaning of the term or to demonstrate it. You will not be asked to define or demonstrate the terms but I am interested in how familiar you are with the terms before testing.

Terms	**Confident**	**Partial knowledge**	**Don't know**
Adage			
Anchoring			
Arabesque			
Arpeggio			
Bras bas			
Chest Resonance			
Colla voce			
Constriction			

Crescendo			
Demi point			
Diminuendo			
Dynamics			
Falsetto			
Forte			
Frappe			
Grand plié a la second			
Harmonics			
Head voice			
Legato			
Mezzo piano			
Modal Voice			
Plié			
Port de bras			
Relevé			
Ronde jambe a terre			
Soft pallet			
Staccato			
Support			
Tendu			
Thin folds			
Tilt			
Trill			
Vibrato			

Appendix iv

EXPERIMENT SCRIPT

Hello, thank you for agreeing to participate in this pilot study. I will be videoing the test today, but I am not recording right now. I would like to remind you that you may withdraw from the research at any time, at which pint any data generated by your participation with be deleted. If you are happy to continue, your name will not be used in the project report and the video footage will be kept securely and protected with a password.

In order to create identical conditions for each participant, I will be speaking from a script today, so I apologise if this makes the situation seem a little unnatural. I would like you to feel as relaxed and comfortable as possible.

Today's test will consist of ten vocal exercises which will be explained and demonstrated on a recording and which I would then like you to attempt. I will stop the recording to give you time.

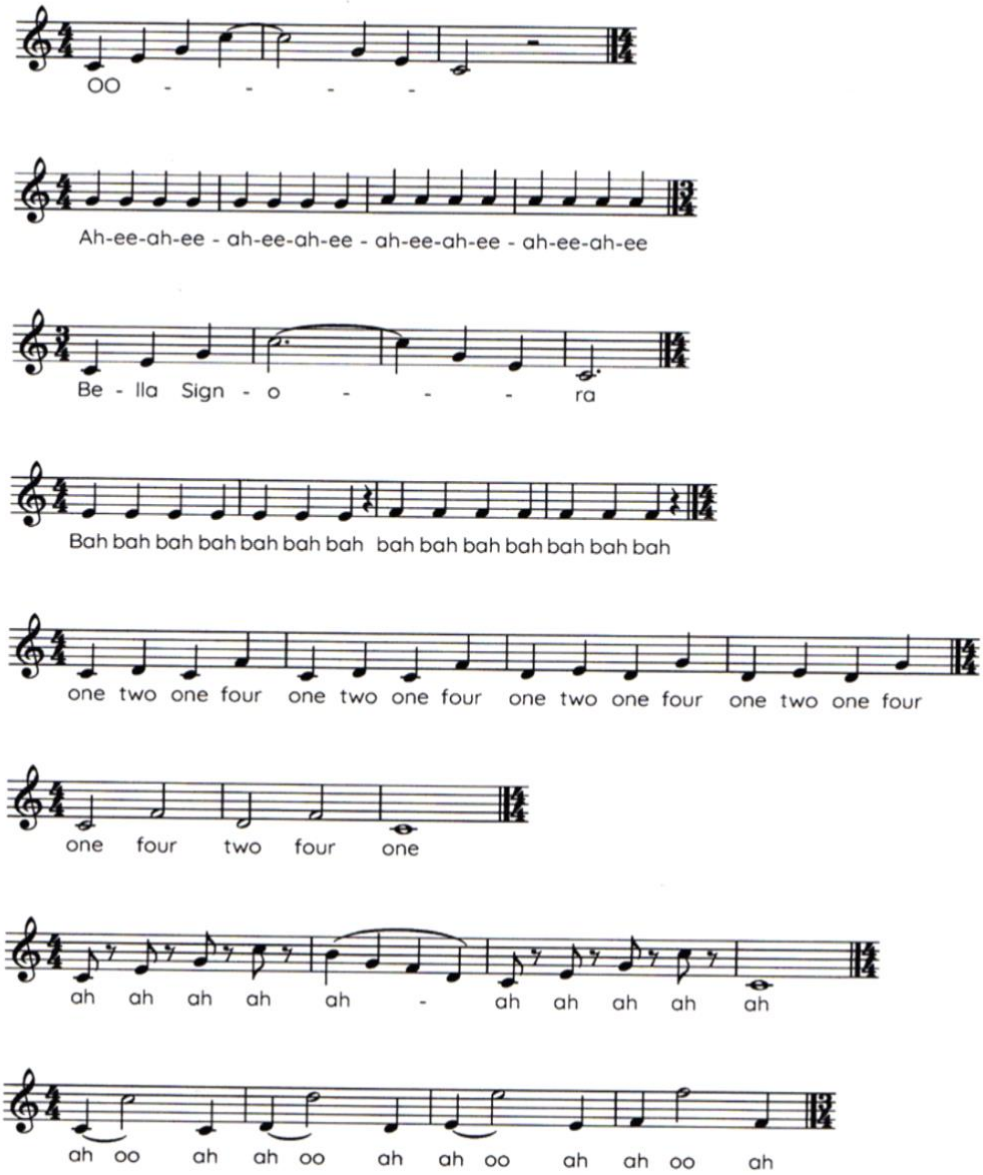
After each exercise I would like you to provide a rating of it from 1-7 according to how easy or difficult you found it. A score of 1 will mean that you found the exercise very easy and a score of 7 that it was very difficult. I will remind you of the scale again later.

This study is to develop effective ways of communicating with students, so your reaction to the ease or difficulty of each vocal exercise is what is being measured, not your ability to sing or perform the exercises. When all the participants have tested the exercises an average of their ratings will provide a general view of what students think.

Is that all understood? Great, then I will start recording and we will begin.

Appendix v

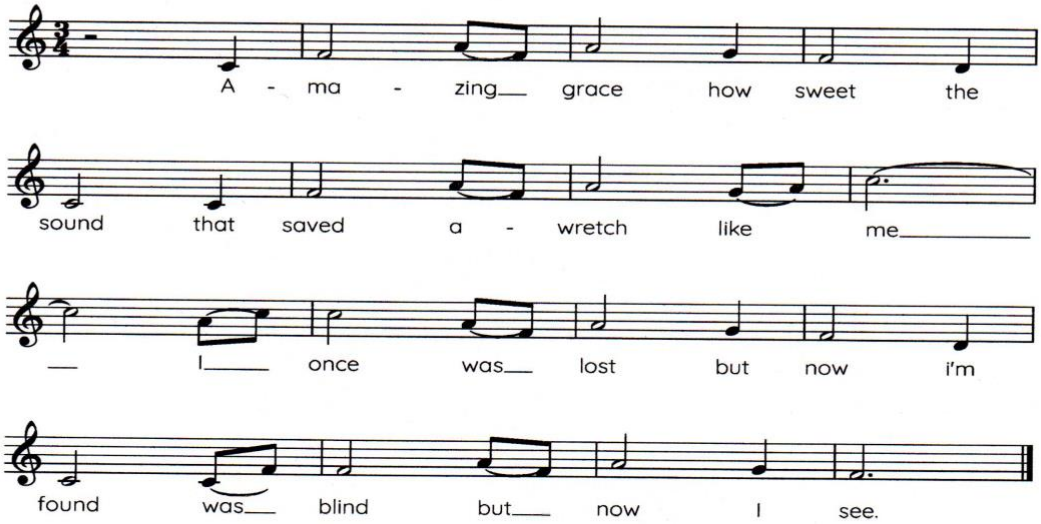
VOCAL EXERCISES



AMAZING GRACE (EXERCISES 9 and 10)

J. Newton (Lyricist) 1772
William Walker (composer) 1835

2



Exercise 1 : Arpeggio using a ‘flute’ voice quality (female version of falsetto). The aim of this exercise is to achieve a loud, clear tone as in classical/legit singing.
Make an exaggerated vertical oval with the mouth, dropping the jaw maximally; the lips should protrude. The target vowel is an ‘U’ (making an OO sound). The arpeggio/melody pattern (formed of notes one, three, five and eight of the major diatonic ‘western’ scale) should be ‘hooted’ or ‘whooped’ and the transition from one note to next should be continuous and smooth. The exercise should be repeated with the initial note being raised by a semi-tone each time. During vocalisation, the abdominal muscles in the area between the hip bones should be retracted inwards and upwards. Simultaneously, the shoulder-blades should be pulled downwards towards the waist. The effort level for this exercise is upwards of 75%.

Dance descriptor: Imagine you are performing an arabesque and try to replicate the usual feeling you have when doing this.

Exercise 2 : Diphthong exercise. The aim of this exercise is to achieve a diphthong without moving the jaw. Matching the demonstrated pitch, sound a long ‘Ah’ in your normal speaking voice then make long ‘EE’ on the same note and notice where the tongue is positioned in both cases. Resting a finger lightly on your jaw, alternate between the two vowel sounds several times without moving your jaw or you lips; your tongue should be flexing and flattening.
(Note : The voice quality is modal initially, but with each repetition of the exercise the pitch is raised by a semi-tone. Allow the tonal colour to become lighter and the lip position widen raising the larynx.)

Dance descriptor : Imaging you are performing <u>a tendu each</u> time you move between vowels. Your jaw is the floor and your tongue is your foot.

Exercise 3 : Arpeggio with text ‘Bella Signora’. The aim of the exercise is to engage the pelvic floor muscles in addition to the abdominals and back muscles.
Repeating the melody of the first exercise, an arpeggio, sing the text ‘Bella Signora’.
As before, pull your abdominal muscles inwards and upwards and your shoulder-blades downwards towards your waist. Just before and during the top note also feel as if the area underneath you is also pulling up.

Dance descriptor : As you sing, imagine that you are performing a grand plié a la seconde so that you get to the lowest point in the plié by the top note.

Exercise 4 : Staccato short repeated notes on a single pitch, rising to the next of a scale with each repetition. The aim of the exercise is to articulate each note using the muscles of the torso not the throat. Sing the sound ‘bah’ seven times on the note that you are given. You are aiming to make short strong separated notes. Try to start each note by sharply pulling in your midriff area, but remember to release these muscles after sounding each note.

Dance descriptor : Imagine you are performing a frappé on each note.

Exercise 5 : Singing a pattern with words. The aim of the exercise is to master an unusual melody and maintain accurate pitch whilst using words. I will play you a musical pattern which I would like you to repeat back to me using the lyrics ‘one, two, one four’. Sing the word ‘one’ on the first note of the melody, the word ‘two’ on the next, the word ‘four’ on the next note and so on.

Dance descriptor : Whilst you sing, think about the positions of your feet in tendu. First position, second position, first position, fourth (devant), then back to first and repeat.

Exercise 6 : Legato exercise. The aim of the exercise is to sing a melody as smoothly as possible whilst using words, so that the sound is continuous. As in the previous exercise, I will play you the melody and I would like you to sing it back to me using the lyric ‘one, four, two, four one’ so that each note has a word. Try to make your sound continuous.

Dance descriptor : The notes and words correspond to positions of your feet. I would like you to imagine that you are performing ronde jambe a terre. Starting in first then devant, second, derrière and close in first. Concentrate on making the perfect ronde jambe as you sing.

Exercise 7 : Staccato / legato exercise. The aim of the exercise is to achieve a difference in articulation short and sharp and then smooth. Sing back the melody played to you on an ‘ah’. Make each note of the ascending phrases of the tune short and separated and the descending part as smooth as possible.

Dancer descriptor : On the ascending phrases imagine you are doing four <u>frappés</u> and on the descending phrase a rond de jambe a terre.

Exercise 8 : Yodelled octave jump. The aim of the exercise is for the singer to experience the flip from chest to head voice. Sing a strong ‘ah’ on the given note in your speaking voice then jump an octave to and sing the top note on an ‘oo’ like a hoot. Make sure that you make a vertical oval and protrude your lips for the top note. Then drop back to the original note changing mouth shape to a horizonal and a heavier spoken quality. Notice how the high and low notes feel.

Dancer descriptor : Imagine that you are heels down for the low note and that you rise to <u>pointe</u> on the high note, then return to heels down.

Exercise 9 : Amazing Grace - breath management. The aim is the exercise is to experience reflex breathing. Sing Amazing Grace starting on whatever note you wish. Aim to keep the sound consistent and clear. At the end of each phrase release your abdominal muscles and engage them again as you begin each new phrase.

Dancer descriptor : Image you are in relevé as you sing each phrase. At the end of every phrase imagine that you plié and return to relevé for the next phrase.

Exercise 10 : Amazing Grace – legato. The aim of the exercise is to sing through every vowel so that the sound is consistent and continuous. Sing Amazing Grace again starting on any note you wish but aim to sing as smoothly as possible so that there is no break in the sound.

Dancer descriptor : Image you are performing <u>port de bras</u> as you sing. Start in <u>bras bas</u> and move to first position by ‘mazing’, move to second position on to arrive on ‘grace’ and back to bras bas by ‘sound’. Then slowly go through first position to arrive in fifth by ‘me’ at which point slowly take the arms through second and back to bras bas, supporting the arms on their way down. Repeat the pattern for the next two phrases (bras bas to first, second and back to bras bas, then up through first into fifth and back through second to bras bas).

Appendix vi

Likert Scale

Please rate each exercise after you have attempted it in terms of ease or difficulty, by ticking the box you find most appropriate to your experience. Please consider how difficult or easy it was to understand the instructions and how easy or difficult it was to complete the exercise and give a combined rating in terms of your experience.

Exercises	Very easy	Easy	Moderate	Moderately challenging	Challenging	Extremely Challenging	Impossible
1 Arpeggio using "flute" voice	☐	☐	☐	☐	☐	☐	☐
2 Diphthong exercise	☐	☐	☐	☐	☐	☐	☐
3 "Bella Signora"	☐	☐	☐	☐	☐	☐	☐
4 Staccato	☐	☐	☐	☐	☐	☐	☐
5 Melodic pattern with text	☐	☐	☐	☐	☐	☐	☐
6 Legato exercise	☐	☐	☐	☐	☐	☐	☐
7 Staccato / legato exercise	☐	☐	☐	☐	☐	☐	☐
8 Yodelled octave	☐	☐	☐	☐	☐	☐	☐
9 Amazing Grace breath management	☐	☐	☐	☐	☐	☐	☐
10 Amazing Grace legato	☐	☐	☐	☐	☐	☐	☐

Appendix vii

SEMI STRUCTURED INTERVIEW QUESTIONS

How did you find the exercises?

Was there a difference compared with a normal singing lesson?

Did you notice the use of ballet terminology?

If you did notice the inclusion of ballet terms, how did this make you feel?

Was there a difference between the exercises where you had ballet terms as an additional description, in terms of your understanding of the exercise?

Did you think that the terms affected your singing?

Did hearing dance terminology affect your mood?

Appendix viii

This table shows how the dance descriptors were randomised

Participants	Exercise 1	Exercise 2	Exercise 3	Exercise 4	Exercise 5	Exercise 6	Exercise 7	Exercise 8	Exercise 9	Exercise 10
1	🕺	🎜	🎜	🕺	🕺	🎜	🎜	🕺	🕺	🎜
2	🎜	🕺	🕺	🎜	🎜	🕺	🕺	🎜	🕺	🎜
3	🎜	🎜	🕺	🕺	🎜	🎜	🕺	🕺	🎜	🕺
4	🎜	🕺	🎜	🎜	🕺	🕺	🎜	🎜	🕺	🕺
5	🕺	🎜	🕺	🎜	🎜	🕺	🕺	🎜	🎜	🕺
6	🕺	🕺	🎜	🕺	🎜	🎜	🕺	🕺	🎜	🎜
7	🎜	🕺	🕺	🎜	🕺	🎜	🎜	🕺	🕺	🎜
8	🎜	🎜	🕺	🕺	🎜	🕺	🎜	🎜	🕺	🕺
9	🕺	🎜	🎜	🕺	🕺	🎜	🕺	🎜	🎜	🕺
10	🕺	🎜	🎜	🕺	🕺	🕺	🎜	🎜	🕺	🎜
11	🎜	🕺	🎜	🕺	🕺	🕺	🎜	🎜	🎜	🕺
12	🕺	🎜	🕺	🎜	🕺	🕺	🕺	🎜	🎜	🎜
13	🎜	🕺	🎜	🕺	🎜	🕺	🕺	🕺	🎜	🎜
14	🎜	🎜	🕺	🎜	🕺	🎜	🕺	🕺	🕺	🎜
15	🎜	🎜	🎜	🕺	🎜	🕺	🎜	🕺	🕺	🕺
16	🕺	🎜	🎜	🎜	🕺	🎜	🕺	🎜	🕺	🕺
17	🕺	🕺	🎜	🎜	🎜	🕺	🎜	🕺	🎜	🕺
18	🕺	🕺	🕺	🎜	🎜	🎜	🕺	🎜	🕺	🎜

🎜 = Exercise has instruction and demonstration only	🕺 = Exercise has an additional dance descriptor (recording will be stopped and this will be spoken by the researcher)

Appendix ix

Scores from randomised exercises

Exercises	Participant 1	Participant 2	Participant 3	Participant 4	Participant 5	Participant 6	Participant 7	Participant 8	Participant 9	Participant 10	Participant 11	Participant 12	Participant 13	Participant 14	Participant 15	Participant 16	Participant 17	Participant 18
Exercise 1	2	3	4	2	3	2	2	4	5	2	4	3	1	3	2	2	2	3
Exercise 2	3	1	1	1	4	1	2	3	2	3	2	4	4	4	3	3	3	2
Exercise 3	5	4	2	2	3	1	1	4	4	4	3	2	2	4	2	2	4	5
Exercise 4	4	4	3	1	2	2	3	2	1	2	2	4	4	5	1	4	2	6
Exercise 5	2	2	2	1	3	1	1	2	2	2	3	2	1	3	3	3	2	3
Exercise 6	5	2	2	2	3	3	2	3	3	3	4	3	4	4	4	2	3	6
Exercise 7	6	3	3	3	4	5	4	2	4	5	4	4	2	6	4	5	5	6
Exercise 8	3	3	5	3	4	3	1	4	5	4	3	4	2	5	2	3	3	5
Exercise 9	3	4	5	4	3	2	3	3	4	5	5	5	1	5	3	3	4	2
Exercise 10	4	3	4	3	2	2	3	1	4	5	4	2	6	6	4	3	3	6

Dance descriptor applied	The table shows the scores for the randomised exercises as rated by the participants. The numbers are the Likert scale scores according to how participants graded each exercise. The numbers on the seven-point scale referred to the following descriptions; 1= very easy, 2 = easy, 3 = moderate, 4 = moderately challenging, 5 = challenging, 6 extremely challenging and 7 = impossible.

Appendix x

Experiment results

Participant	Dance	No Dance	Result	Participant	Dance	No Dance	Result	Participant	Dance	No Dance	Result
1	14	23	Positive	2	14	15	Positive	3	17	14	Negative
4	11	11	Neutral	5	15	16	Positive	6	13	9	Negative
7	8	14	Positive	8	13	15	Positive	9	16	18	Positive
10	14	21	Positive	11	18	16	Negative	12	19	14	Negative
13	8	19	Positive	14	25	20	Negative	15	16	12	Negative
16	13	17	Positive	17	18	13	Negative	18	24	20	Negative

(Dance < No Dance = Positive; Dance > No Dance = Negative; Dance = No Dance = Neutral)

This table shows how the intervention of dance terms was scored overall by participants, as either easier, more difficult or the same. The higher numbers show that more difficulty was experienced. Where the combined scores for exercise with dance descriptors was lower than the combined score for exercise without, the intervention was perceived as useful and gave a positive result to the intervention.

Appendix xi

CODED TRANSCRIPT OF POST EXPERIMENT, SEMI-STRUCTURED INTERVIEWS

Q = Researcher questions and comments, A= Participant response
Comments in square brackets and green font are latent codes.

Participant 1

Participant did not have a chair at the start of the test.

Q How did you find the exercises?

A I thought they were alright but I struggled [identifies difficulty] not having any music like to go along with them [lack of guide melody a factor] so like cos obviously on your recording you had like music with the singing [melody was played on the keyboard first then vocal demonstration was acapella, apart from the final iteration or Amazing Grace] then I was trying to find a pitch and, and thinking about the exercise you know what I mean [The conditions on the recording were the same as for the participant; piano followed by unaccompanied voice. Her perception was that the conditions were harder for the participants. Was the combination of no guide melody and legit vocal quality difficult?]

Q yes

A that what I was struggling like a bit and sometimes if you like can hear music it can remind you of what way you're going and stuff [coping mechanism, feeling of security?]

Q yeah

A Also, like obviously I know Amazing Grace, but then in my head [audiation]I was, 'oh my god I've forgotten' cos 't know I was doing it 't have any music. [participant became flustered. Lack of guide melody affected confidence] Erm.. but I really liked the visualisation stuff like with the dance

Q Yeah?

A I think that really, really helped, especially on the, the erm.. the number 5 one, the melodic pattern with text one. [participant identified a specific occasion where the intervention was viewed positively]

Q Yeah

A Yeah I think it really helped on that one and er the diphthong one that one was really helpful [participant mentioned a second instance where the intervention was viewed positively]

Q Oh the, the tendu one?

A Yea and oh the arabesque that, like really helpful coz we did so much of that in ballet [identified conditioning and motor planning linked to intervention] the proper placement I knew exactly where to go straight away [participant felt increased confidence]

Q That's brilliant. Did you notice the difference when you, coz you sang Amazing Grace twice.. [participant asked for a direct comparison]

A Yeah

Q Erm and one of the,.. the first time you sang it you had erm.. you had some additional information given to you did …?

A Yeah that was so much easier [third occasion an intervention was viewed positively] that one, coz the second one I was just thinking about like elongating [participant trying to decipher and implement the instruction] that but and where to place it and stuff and then obviously coz the first time you gave like plié and relevé I knew where to like breathe and then relax between and then go up again for singing [participant used the dance descriptor to utilise motor planning of a ballet exercise]

Q Perfect

A So was there a difference compared with a normal sing lesson, I mean don't just think me, [lessons with the researcher] just think generally.

A Yeah I think it were more like, I knew where,.. what I was meant to be doing [this could be the instructions overall not necessarily the intervention] you know what I mean? I feel like sometimes I just sing and I know how it should sound [audiation] I just don't know how to do it [frustration? Desire for greater technical knowledge?] d 'you know what I mean and like I feel like when the imagery that was with it, it was easier to think about like certain, how to control yourself like even just the posture I think that helped. [identified imagery as useful]

Q yeah erm so you did notice the ballet terminology then

A yea

Q that was my next question

A yeah

Q if you did notice the…, I think you've answered this one already, if you did notice the inclusion of ballet terms, how did, well how did it make you feel, like generally, to hear

A I felt more comfortable like I felt like coz it's more what I'm used to doing it was something I could refer back to even though I've done quite a lot of singing it's still more nervous for me than dancing is so I felt more comfortable like I felt I was doing it right [identified the familiarity of ballet terms as a factor that increased 'comfort' despite previous vocal experience]

Q yea brilliant erm was there a difference between the exercises where you had ballet terms as an additional description in terms of your understanding of the exercises

A yea coz like as soon as I heard the ballet terminology I was like oh that's it, I know what to do now [identified the dance terms directly as improving understanding] but when I didn't have any I was like really having to listen to the instruction and like having to remember [increased cognitive load without dance terms] d'you know what I mean it felt easier to remember the terminology [familiarity, conditioning] than it was to remember the exercise, it was just more helpful.[participant identified the intervention as 'helpful']

Q how did it affect your processing of it? Did you find it was the same ?

A Well especially on like the plié, the Amazing Grace, then that's when I knew when to like breathe and I knew like the plié was like the down and the relevé was like the up of the song d'you know what I mean, does that make sense?[participant identified the purpose of the exercise and said it was useful for their understanding]

Q I do yeah I do know what you mean. Erm so did you think the terms affected your singing then?

A Yeah I felt more comfortable when I was doing them because even though I weren't doing them, I was imagining it so it was something else to focus on rather than just thinking, 'Oh my god, does that sound bad? Does that sound alright?' It was like I'll just focus on doing the tendu or focus on way you're stood rather than thinking oh my god does that sounded awful or that sounded. [participant identified that the intervention shifted focus which quieted perfectionistic overprocessing]

Q so this is my last question, in general did hearing dance terminology affect your mood then?

A yea it was nice to hear in a singing lesson coz I feel like sometimes singing teachers can be like right we're just singing I know you do your dancing but we're singing so like to hear it like together it was quite nice coz it felt like it was like recognition that you can dance as well you know what I mean [participant identified the intervention as validating]

Q yea yeah good. Well, that's it thank you so much.

Participant 2

Q how did you find the exercises

A Erm some of them I found not easy but most of my answers are moderate. Erm the staccato legato I found that kind of straight forward but then erm, like the yodel octave erm, Bella Signora and also the arpeggio, I found them a bit more difficult erm, yeah some of it I did find a bit difficult [participant identified three exercises specifically as being difficult]

Q and some of them are perhaps unusual exercises that you don't have in other classes?

A yeah I'd never heard the 'flute' term yeah, like I'd never heard that before. Diphthong I mean I've heard of it but I didn't know that it was that, erm Bella signora what was the Bella

signora one again [participant identified unusual language and this coincided with exercises that were highlighted as 'difficult']

Q demonstrates it again. Some MDs are fond of that one, it crops up quite a lot

A I've done it before but I was focusing on like different things like you said before which was interesting [identified that despite previous familiarity the intervention shifted focus and mad it 'interesting']

Q was there a difference compared with a normal singing lesson I mean apart from it being recorded

A erm… I mean yeah I guess so like a private singing lesson?

Q yeah

A erm, probably yeah because most recently I've been going into my singing lessons singing a rep song going through it you know like not really a lot of …[routine singing lesson, perhaps not much technique discussed?]

Q do you have a vocal warm up, or exercises.

A yeah, yeah, not all of these sort of ones but usually yeah some breathing and vocal [identified usual vocal warm up]

Q so did you notice the use of ballet terminology

A yeah, I wasn't sure if it was.. I think I was focusing quite hard on what I was doing with my voice so that when I was thinking about the ballet terminology it was kind of putting me off what I was doing [identified shift of focus away from voice towards ballet terminology]

Q ah that's interesting

A but then the one with the plié that one made the most sense to me to come out of the grand plié, the last one I think I'm not sure which one that was but yeah [Having recovered from the initial confusion seemed to begin to see benefits]

Q if you did notice the use of ballet terms how did this make you feel like generally not just performance but you know

A Erm I don't it was interesting [repetition of the word 'interesting' underlining shift in focus/interest] but then I found myself trying to do it in my head and it was sort of throwing me off like it did make sense the frappé with the staccato notes yeah it made sense but I feel like that I was focusing so hard on these exercises that I didn't fully understand, that it was maybe a bit off putting I'm not sure [the intervention was shifting focus and there was mental conflict]

Q that's good for me that's good data erm so was there a difference between the exercises where you had ballet terms as an additional description in terms of your understanding of the exercises, did they help

A it did help my understanding I think it helped my understanding [participant identified that the intervention aided understanding] but it didn't help me when I was practising it [perception was that the intervention was not assisting 'in practice']

Q yes

A but yeah it did help my understanding like the legato that was helpful [yet it aided understanding – participant conflict?]

Q did you think the terms affected your singing in any way!

A Erm, erm, not sure I mean I was thinking about the rond de jamb when I was doing the legato [identified motor planning] so I guess maybe my legato was a bit more clear because I was thinking about it but I'm not sure [uncertain, but indicated in the positive]

Q Did hearing dance terminology in general affect your mood, in a vocal context

A Erm no it actually helped me to like focus more because it is something that I know [perception that the researcher had indicated negative impact but participant indicated positive impact in terms of focus] so I could put that into something that I don't know [identified the familiarity of dance language 'improved focus'] if that makes sense

Q yeah

A Like I'm familiar with all the dance terms so it made me stay a bit more switched on [again, the participant indicated that that the familiar language aided focus] than like hearing loads of foreign sort of things being said [direct positive comparison between the intervention and other pedagogical language which is seen as 'foreign']

Q how does erm how do you experience normal erm vocal language

A Erm I'm not like really confident with all the terminology [participant identified 'ack of confidence' in pedagogical language] but I mean I'm ok like the check list that you sent us I think quite a few of them I was familiar with just a few that I didn't know [pedagogical language seems less familiar than dance terms as these immediately shift mental focus]

Q yea well I'm going to stop the recording now and hopefully that was alright for you thank you very much for participating.

Participant 3

Q How did you find the exercises?

A I think challenging but not in the way of like impossible. I'd not rate some of them as impossible because like I could do them also because it was the first time I've ever seen the exercises I think that made it a bit more challenging if I done them quite a few times practised them it'd be easier [participant found the exercises 'challenging' but said that familiarity with them would improve her rating of ease]

Q yeah of course. Was there a difference compared with a normal singing lesson like a one to one

A Erm I think in one to ones you make me repeat [compliance] it quite a few times to like really get the hang of it [repetition and practitioner recommendation in lessons is seen as beneficial] whereas now we just do it once but I think we do use the exercises like this so it's not too unfamiliar [on further reflection participant views the exercises as familiar – is participant affected by circumstance?]

Q Did you notice the use of ballet terminology

A Yeah I think that's helpful [initial response to intervention is 'helpful'] but when you use them in the one to ones as well I've also noticed it then [identifies some previous experience of dance term in lessons] so that was good that you used that, coz that makes more sense in my brain coz I'm pretty much a dancer anyway so.. [participant identifies herself as a dancer and says that the terms were useful because this is so]

Q if you did notice the inclusion of ballet terms how did this make you feel?

A more comfortable I'd say because they're things that I'm familiar with [identifies that familiarity with dance terms affects comfort] rather than singing if you were to give me lots of fancy singing terms I don't think I'd understand [negative response 'fancy, singing terms' to pedagogical language] whereas ballet terms.. that's what I have done my whole life so it makes it a lot easier to understand [Direct comparison of dance intervention to normal language of the voice studio – identifies conditioning to ballet terms]

Q When did you start ballet?

A When I was 3 [long study period]

Q Yea, so was there a difference between the exercises where you had ballet terms as an additional description in terms of your understanding of the exercise?

A Yea, I think it gave me a starting point whereas the others I was like kind of doing my own thing but that gave me something to actually focus on [another direct comparison and identifies improved focus when dance terms are included]

Q Did you think the terms affected your singing?

A Erm I'd like to think they did [compliance] but I don't know that they actually did [uncertainty] but it affects the way I feel about the singing [intervention affects confidence?] like I think I do it more correctly whereas if you don't give me anything to go off I feel like I'm doing it incorrectly [highly binary language 'correctly' 'incorrectly' but identifies the intervention as assisting in feeling of correctness by giving additional information 'something to go off']

Q Are you saying that there is a level of uncertainty if you don't have any additional guidance from a…

A Yeah

Q A dance description.

A Yeah [identifies technical 'uncertainty' when no dance descriptors are included]

Q Erm and I think maybe in a normal lesson, you'd have, you'd have more kind of verification

A Yes

Q You know like do that more, do that less?

A yeah

Q sort of general encouragement that I haven't been able to provide

A yeah definitely [identifies practitioner input as verification-compliance?]

Q So, did hearing dance terminology affect your mood, generally, or *does* it affect your mood?

A I think I feel more settled, I feel more natural because that's what I hear most of the time rather than singing terminology [familiarity of dance language seen as calming], so it makes me feel a bit more comfortable. [comfort increased by dance terminology]

Q so if you are in one to ones with, with, erm a.. different teachers erm what sort of language are they using?

A Erm I'd say they just use a lot of singing terminology so I just have to get them to explain it and ask like oh can you explain that more in terms that I would understand or they just ask me to repeat it and correct little things rather than using dance terminology. [identifies difficulty with understanding unfamiliar language]

Q does that make you feel a particular way?

A Erm it makes me feel a bit like.. not intelligent because I don't know what they are talking about [the use of unfamiliar language affects self-perception] but after I've got them like to explain it, [is given help by practitioners]I feel a bit more comfortable [additional help affects comfort] but if they use a word I don't understand I feel a bit slow like I don't understand what they're saying.[reiteration of unfamiliar language affecting self-concept]

Q yeah I get you. Alright well that concludes the test.

Participant 4

Q You don't know amazing grace do you? (Giggling)

A (Smiles and shakes her head)

Q Don't worry

A I've never heard that song before in my life [lack of exposure to different genres of music?]

Q That in itself is interesting. So, if you'd like to take a seat and I just have a few questions hopefully the worst part is over, I hope it wasn't too challenging. Yeah that must have been a bit ..

A Sorry

Q No, no, don't apologise, there was a reasoning behind choosing that (Amazing Grace) and it's that the number of rec.. it's one, one, of the most recorded songs of all time

A Oh (grin wince)

Q But you know, if you've heard it you've heard it, and if you haven't heard it, you haven't heard it.

A yeah

Q So it's a very sort of binary situation there

A (Laughing)

Q So, maybe I should have sent everybody a recording of it first, but the only thing is that if I did that and you had the opportunity to rehearse it. [Explaining rationale to help the participant feel more comfortable]

A yeah

Q Which I didn't want, so I considered both of those things

A Yeah

Q erm I'm sorry if it made you…

A No, no! (laughing)

Q I kind of tried to hum it in the background to make you feel a bit better. ..

So, my first question is how did you find the exercises?

A Yeah like I felt like some were like, like, more challenging than others erm.. [identifies a range of difficulties] in the fact that like, when you explained.. what it would look like in my head it was like, ok, [participant is explaining that some exercises were easier because of the dance descriptor as this aided visualisation] it's like calm on this bit and then you've gotta go up and then like, [describing the shape of the phrase] the muscles that you have to engage for like certain phrases was[evidence of motor planning].. easier in that sense [positive comparison 'easier']

Q So were you visualising them when …?

A Yeah, like when you was explaining it must go like down and it must be like, like, the whole 'adage' [uses a ballet term that was not used in the intervention] thing like bringing your arms down it's like soft, but then going up it's like,.. you know what I mean like..[participant is making comparisons between ballet and the exercises]

Q I do

A So it made me visualise it better [identifies the intervention as initiating visualisation and this was seen as beneficial]

Q Right good. So was there a difference form a normal singing lesson apart from the obvious thing of you know having very little feedback from me and also having the whole thing recorded?

A Erm yeah. I feel like everything was explained, what I was doing and why I was doing it [identified the intervention and noted the rationale] erm..and like I didn't know what I was expecting either [The intervention was surprising]

Q Yeah, did you notice the use of ballet terminology?

A Yeah

Q Ok and if you did notice the use of ballet terms, how did this make you feel?

A Erm.. like it was kinda weird like,[identified intervention as unusual] thinking of a like a tendu, [mentions a specific term] like while I'm like singing, but kinda got me to realise like, OK like that's the motion of it, [the intervention words conveyed motion to the participant] like that's what that exercise… [intervention words added somatic information that aided motor planning] if it's like, you know, staccato like, like, breath work, it like, OK that like the exercise that you've chose helps with that .. do you know what I mean? [participant realised the purpose of the exercise]

Q yes

A sorry I'm rambling, it's so bad …

Q No you're not, this this is really good I want your pure thoughts ..

A Yeah

Q On all of it, you know? ….So, was there a difference between exercises where you had ballet terms as an additional description in terms of your understanding of the exercise?

A Yeah I did feel like it just made me realise like the intention of the exercise [participant understood on a deep level the intention of the exercise by connecting it to ballet exercises for which she has identified the purpose] so like you know like obviously a tendu is like different from adage so it's like, [participant offers a direct comparison to a ballet lesson] OK this is… I don't know it made it like clearer in my head like I could see a picture in my head [visualisation] of like myself doing the exercise [motor planning] and thinking ok what muscles am I engaging what, what, like you know what's …yeah..?

Q Yeah

A Yeah

Q Good. So, did you think that the terms affected your singing, or maybe you weren't aware of the singing at all I mean maybe there's a lot going on there?

A Yeah I was thinking of the exercise yeah, but like if I was erm, confident and comfortable with the exercise yeah, then I did. [if she didn't have to concentrate on the exercise because it was easy or familiar, then she noticed a difference in her singing] I was in the back of my

head thinking, OK like yeah, she's like.. that's the equivalent to what you've just explained [participant understood the aim of the intervention]

Q Did hearing dance terminology affect your general mood?

A Erm….[was not sure what was meant by the question]

Q If you think of having a one-to-one voice lesson where there is no inclusion of ballet terms and this situation where ballet terms were included…

A Erm yeah it makes like, this might sound really silly, but it makes me understand that like *you* understand more…[participant identifies researcher's attempts at connection]

You don't just like expect me to be like, this, this and this. If I don't get it then it's like Ah, it's frustrating but it's like, if you were to like tell me OK, think of doing this then it's like, OK I get it now in my head I can like see myself doing it and like, well then it almost feels like the same but not the same, you know like it links a bit more [participant has completely understood the intervention on a physical and mental level]

Q Would you say you felt more understood?

A Yeah like I have that feedback of OK you want me to achieve it [compliance] and you are helping me to achieve it [understands the rationale for the exercise and feels connected] but like sometimes, in singing in general, it's if that doesn't work for you there isn't any other option and if you don't get it you don't get it [feels powerless? Feels it is her fault or made to feel that way?] and like then, that is kinda, like you made me feel like OK you *do* want me to get it and made me feel more understood and seen [Participant seems to be saying that she does not feel practitioners care and that she lacks connection and self-worth in this context but the intervention is helping her feel more connected and validated]

Q 'understood and seen' I love that! Ok that concludes, I'm going to stop the recording now.

Participant 5

Q how did you find the exercises?

A All of them?

Q Yeah just a general…

A Yeah I thought they were quite helpful erm.. exercises I get erm.. trying to think back on them it helped listening to them first [liked the demonstration] and then coz sometimes just hear like erm, the description of them isn't enough for me [needs the demonstration], like I feel like I need to hear someone do it and a demonstration before I have a go otherwise I get a bit confused. [needs something to help with motor planning – has insufficient motor-plans for singing] It didn't help doing it a Capella without the piano sometimes I feel like I go off on like a bit of a tangent compared to when I've got a piano to stick with [does not like to rely on her muscle memory or cannot].

Q I think that's quite a general thing with people

A Yeah

Q You shouldn't feel bad about that at all.

A Yeah

Q Just out of interest erm.. a demonstration if it's on a recording, like that is an unusual situation, do you, do you prefer a recorded demonstration or do you prefer a live demonstration?

A I don't think for me it makes much of a difference but.. probably in person, [this would provide visual information to form a motor plan] for me, coz I feel like I hear it better, but then with a recording you can obviously if you take, you can take recordings home and practise at home so it's more useful in that respect [identifies the need for multiple demonstrations] but in person I feel like portrays it quite clearly [participant has not identified that it is the visual aspect of singing that helps her planning]

Q So if it was a video recording would that be better than an audio recording or the same?

A If it's got movement obviously video is better [participant finally identifies movement as a needed factor]

Q But if it's singing?

A If it's just singing? Audio

Q Just audio

A Actually, no coz the mouth shape [now she is identifying why viewing a demonstration is useful] with some of them obviously when you say like have them open, and then like different mouth shapes affect the sound I think that's obviously more clear with a demonstration like on a video then you can understand better like more what you mean like when you say an oval obviously I understand what that means go this way (demonstrates a vertical oval) like my brain understands it more when I visually saw that [pictures mean more than words as they facilitate motor-planning]

Q So was there a difference compared with mmm.. apart from the fact that this is a test was there a difference compared with a normal singing lesson? ……So, think of all the different one-to-ones you have had with different practitioners and for a, like a general picture of what a one-to-one is like.

A Erm yeah in my normal one-to-ones I feel like this.. I got more done in a shorter amount of time like it meant I could progress more with the exercises [it is unclear whether the participant means that she was able to assimilate more information quicker because the exercises were clearer/more useful, or whether she just felt like she was progressing because there was no repetition] where in the one-to-ones I feel like we focus more on certain bits more slowly and perhaps in more detail but in this we got through a lot in less time because it was like do the, the, exercise and like we went through it quite quick with the coz with the audios you don't have to discuss it you just do it so I felt like I got to different

things more but in a one-to-one I guess you can ask more questions and go into more detail with particular exercises and like go over them more than once [participant initially seems to enjoy not having to repeat exercises or discuss them but then having evaluated again see that the slower pace of a lesson can be beneficial]

Q Yeah, so did you notice the use of ballet terminology?

A Yes…port de bras

Q If you did notice the inclusion of ballet terms how did this make you feel?

A I feel when things are explained to me in ballet terms I feel a bit more in my comfort zone and I feel like it makes more sense [participant identifies the intervention specifically for the first time and expresses 'comfort' and increased understanding, at the inclusion of ballet terms] like when you talk about the port de bras I,..if that's going smoothly that communicates better in my head [motor planning] and so I know, so it's smoother even if I can't do it yet vocally I still know what it's meant to sound like [binary language] just from picturing [visualisation] it with the arms for example. Like even if I can't do it, I know that I'm doing it wrong whereas if I wasn't thinking about the arms I probably wouldn't know if I'm doing it or not. [needs somatic information provided by previous motor-plans to compare. No evidence that the participant relies on any other sense to provide information] So having ballet terms definitely helped like it put me at ease to then like not stress about singing because I'm also thinking about ballet so I'm more comfortable. [participant identified ballet terms as easing singing related stress].

Q was there a difference between the exercises where you had a ballet term as an additional description in terms of your understanding of the exercise?

A Yea, so like the one with staccato into the legato, when you doing the frappés and then the rond de jamb it makes more sense in my head whereas if you just said staccato and legato I probably wouldn't know the difference at all [participant relies on previous motor planning for ballet and even though the exercises were communicated with full English descriptions, picks up on the Italian words that she says she does bot know]

Q What if I said something like erm I want you to do short, choppy singing and then I want you to do smooth would that have been better?

A Yea I'd understand what you mean but again like visually I can communicate it better with those movements but I'd still understand what you'd mean if you said short and choppy and like smooth obviously I understand what those words mean so I'd try and do them with vocals [understands the meaning of the words but not necessarily how to achieve the vocal effect with no specific demonstration to provide a motor-plan]

Q Erm do you think the terms affected your singing? Or if not now do you think that they might?

A The ballet terms?

Q Yeah

A Yeah I think coz I've never done that before and feel like when sometimes in class we do like an arabesque and to help like pull up or like a plié on a breath for example, I feel like it really helps me to think about that, coz if I know I've got to do a movement I'll actually take a breath whereas if I'm just told to take breath I will probably forget or just not be thinking about it, because I'll be thinking about vocals. **And when I get, when I just think about singing, I get quite overwhelmed and a bit stressed** but when I'm thinking about dance I'm a bit more comfortable, so then I feel like the singing comes naturally if that makes sense? [positively identified the intervention as beneficial to her understanding and as something that lowers her stress level]

Q So overall, if you were hearing dance terms does.., is that affecting your mood?

A Yeah it helps me I feel more at ease, so then I can like relax into singing rather than be like all uptight about it and stressing [positively identifies that hearing ballet terms helps reduce singing related stress]

Q yea ok erm that was in fact my last question so you've answered that already so we have concluded.

Participant 6

Q how did you find the exercises

A Erm mostly fine, mostly they were alright. Erm the pitching definitely got harder during the one four ones I found the first one was ok but then the second one I was a bit more unsure [participant has singled out the most novel exercises devised specifically for the test- the other participants did not single them out as they had less vocal experience so all the exercises were equally unusual] and the minute I was uncertain I felt like if I went in confidently [identifies confidence as affecting pitch accuracy] I would have been more likely to get it.

Q So was there a difference compared with a normal singing lesson? Erm obviously there was limited feedback from me.. erm, but in terms of, let's say the language that was used in the exercises?

A Well there was physical and vocal direction whereas a lot of the time you spend time talking about the sound you're trying to produce [noticed the physical information] or the placement but actually we were focusing on what we were trying to do by body as well and the approach to the sound [this is an important point, does vocal instruction typically lack specific physical description?] erm and visual, very visual which helped because you could

picture what you were doing and it was affecting the sound. [The participant was aware of how motor-activity affected the sound but linked the words used, to her own visualisation- there was no actual visual element to the test]

Q In what way was it visual?

A Erm so because you had the dance pictures in your head in the exercises it made me change and adapt my body rather than just thinking about my throat and my voice.[Connected the dance descriptors specifically with useful visualisations and external focus]

Q Erm so you did notice the use of dance terminology, ballet terminology specifically?

A Yeah I did

Q And if you did notice the inclusion of ballet terms, how did that make you feel specifically?

A Focussed, really focussed it meant you knew exactly where you were placing everything and somehow that made more sense than just thinking about your throat all the time and thinking about your face. You kind of were, replicating movements into sound which I thought really helped [Identified that the intervention improved mental focus and enhanced external focus, whilst noticing how movement affected sound]

Q was there a difference between the exercises where you had ballet terms as an additional description in terms of your understanding of the exercise?

A Yes definitely

Q And do you think that the terms affected your singing at all?

A Yeah I think it altered the sound quality, I think thinking of the directions allowed me to get a placement without even choosing to actively think about a placement [Noticed the benefit of external focus]

Q Did hearing dance terminology affect your mood?

A I felt comfortable. [identifies the intervention as beneficially effecting mood] You knew kind of, coz sometimes if somebody describes to me a singing term I think they have such subjective meanings, whereas dance tends to be quite cohesive [participant identifies the rationale for the intervention!] in of the fact that if it's a ballet term it is what it is there is no other version there is a right way to do it and a wrong way [identifies binary language as being part of dance training] whereas with singing there's sometimes more aspects, so for me that helped me to know exactly what I was being asked for [compliance] [intervention provided clear somatic information to the participant]

Q do you feel that erm different vocal practitioners perhaps use the same terminology but have slightly different meaning to it?

A Definitely

Q Yeah.., erm ok well that concludes the interview.

Participant 7

Q how did you find the exercises?

A Good, like not easy but I managed to like, figure them [acknowledgement of need for cognitive input] out coz I listened properly [sense of duty? Right and wrong?] I could figure them out. Some of them were a bit more challenging than others, some were quite straight forward and easy to pick up, yeah.

Q Was there a difference compared with a normal singing lesson apart from it being recorded?

A Erm, the dance terms that you gave me [participant identifies the intervention] like using the first, second, and fourth position for the melodic pattern with text. As soon as you said that it made more sense in my head [initiated motor planning nor provided somatic information] I don't know if you saw but I was like under the table like this (demonstrates) like trying to figure it out and it helped. [Identified the ballet terms as useful in planning and understanding the exercises] And like obviously in a normal singing lesson, we're usually just sat there or sat at the back [sounds like a passive activity] with like the correct posture you have to be in a certain position [strong sense of right and wrong and compliance] so it was a lot different.

Q Yeah did you notice the use of ballet terminology

A Yeah (laughs) straight away

Q If you did notice the inclusion of ballet terms how did this make you feel?

A More comfortable [identified enhanced 'comfort' when the intervention was used] more like I knew exactly what to do. [linked the intervention with planning] some of the ones where you didn't give me a dance example didn't like ..I tried to figure it out for myself, personally I'm not a very wordy person I'm more of a visual person so when you said the dance terminology I was picturing me in a ballet class in first position and second and fourth and it just it made more sense to me. [connected the intervention with visualisation and motor-planning and compared this positively to having no dance descriptors]

Q So it helped you visualise what was going on?

A Yeah

Q And you maybe describe yourself more as a visual learner?

A Yeah

Q So was there a difference between the exercises where you had ballet terms as an additional description in terms of your understanding of the exercise?

A Yeah, so with the ones with the dance terms used, it was again, it was easier for me to like visualise, and the ones that didn't, the ones that were a bit wordy, some of the words used didn't like, not help [double negative] but didn't,.. I didn't recognise and aren't familiar for my language as a like main dancer. I sing and dance but as a dancer mainly, it didn't make that

much sense in my head. [Though the participant identifies as a triple threat and does not have singing related anxiety, having to decode pedagogical language made the exercises less clear than giving dance terms which had been conditioned].

Q So in a normal singing lesson, would it be.., would you have as many words as that?

A Not as many words as that, but there would still be some words going through the lesson that I'd have to really think about [pedagogical language slows processing of the lesson] or it's like, look at the teacher if they do an example of an exercise [identifies that visual information is prioritised as it helps produce motor plans], like she.. I have tech singing, if she's…, he or she is using quite complex wording, that isn't obviously, wouldn't be anything to do with dance, it doesn't… **it takes a longer time for me to process** [pedagogical language has not been conditioned in the same way that ballet terms have] **and I have to either watch them do it** [again demonstrations provide motor information for motor-planning- notice the participant says watch them do it not hear them do it and this idea is repeated] **or ask them to repeat it again** and it takes like, it's a bit more time consuming when it happens like that

Q So you like the visual element ..

A Yeah

Q in a lesson. Ok, did you think that the terms affected your singing?

A The ballet terms?

Q Yes … did they…?

A I think the ones where you gave me the ballet, like, examples, I felt my voice was sounding a bit more clear and a bit more confident in how I sounded, rather than a bit unsure with the other ones, and it wasn't done with such conviction. [participant identified the intervention as improving her confidence and vocal clarity and the exercise where there was no intervention she noticed a lack of 'conviction' in the sound]

Q Erm and did hearing dance terminology affect your mood?

A Again, it just made me feel a bit more comfortable and a bit like I knew what I was doing but I'm a perfectionist I don't like not knowing what I'm doing so erm yea it made me feel much more comfortable [participant identified as a perfectionist and felt improved confidence when she 'knew what she was doing' which is what she felt when dance terms were included]

Q Do you think that is a general thing with dancers are they perfectionists?

A 100 per cent everyone's their own worst enemy if you're a dancer you're constantly wanting to be perfect and there is no perfect like there's always someone better there always something more you could be doing I think it is very common for dancers to constantly wanna get things right and when they don't get things right it makes them uncomfortable and puts them in a position where they feel vulnerable. [participant identified

perfectionism as common amongst the dance community and any uncertainty leads to a feels of vulnerability]

Q Have you.. well, are you able to comment on the general feeling of dancers if they are in a one-to-one voice lesson.. what's their general mood?

A I think there's a lot of negativity around coming to a one-to-one [avoidant behaviour] coz they think they can't sing [identifying as non-singers] dancers they think they'll get judged [perfectionism-imposter syndrome?] or like there's no point them even trying it [despondent-hopeless] like there's no way it's ever going to make sense for them [hopeless due to inability to understand] but when I had a lesson the other day [with the researcher] and a lot of terminology was used that I was familiar with and it makes it so much more… easy[familiar language affected 'ease']. I mean I'm a lot more confident than a lot of other dancers [identifies that she has had more experience and is perhaps less anxious] when it comes to singing like but I know some people that I'm friends with, they'll just won't come to the one-to-ones [avoidant behaviour] coz they're scared to sing[anxiety linked to singing resulting in avoidance]. They don't wanna sing,[rejection of singing] it doesn't make sense to them [lack of understanding] which is fine, coz some people aren't as confident with it [acceptance that this is the way it is and will be]. That whole negativity around singing for dancers it .. a lot of people wanna do it [identifies that there is a desire to sing] , they just find themselves that they can't [lack of technique stop them]. It puts them under pressure it makes them vulnerable [pressure to be perfect but skill deficit feels like lack of control] . Dancers don't like to be vulnerable in a situation [because they aspire to perfection]. We're constantly in an environment what we love [contrasts intrinsically motivated activity – dance] and what we are comfortable in [comfortable because they are highly competent] and as soon as you get put in a environment where you're feeling vulnerable [where they don't feel competent], it just switches your mood completely [The participant has outlined exactly why, and for whom, the intervention was designed – a combination of lack of experience and competence coupled with perfectionism stifles dancers attempts to find their voice]

Q Do you think the high standard that you have in dance compared with a study that is relatively new, do you think the comparison between the two things is a factor?

A Yeah I think when, well say me for example, I'm very strong in commercial [identifies skill set] and if I was to get praised in a commercial class, it makes me feel really good about it [sense of achievement, enjoys affirmation, competitive?] but I know going into a singing lesson with a main singer [identifies different tribes] in an ensemble singing lesson, if I know someone's really good at singing, I'll hold back myself, [Is this 'holding back' impacting learning?] coz it's like that person's thing so just let them, let them get their praise [sense of fairness and generosity, acknowledgement of specialties?] and let them do their thing but obviously it's now I wanna get more into singing [ambition] since I had two lessons. Two

lessons last week and they really helped and put things into a bit more of a perspective of how to be more comfortable in a situation [dance language was used in the lesson] when I'm singing so..[lessons were with the researcher] [participant identified a mood shift brought about by 'two lessons' and this has affected her comfort 'more comfortable' and her ambition to improve 'I wanna get more into singing']

Q Great, right that concludes the interview so thank you.

Participant 8

Q How did you find the exercises overall?

A I found what you were doing actually really helpful. To begin with I er, at beginning I saw that I rated things slightly lower [I think the participant means that they rated their ability lower as rating an exercise as lower, would indicate that it was easier on the Likert scale] than what I possibly could've, in the sense that the more we went on with exercises, then I realised is less about my skill [is the participant concerned about not executing the exercises well and self-soothing by reminding himself that his opinion is what matters?] and more about how the words that you are using help me achieve[acknowledgement that the intervention is intended to help not judge or test] what you want me to achieve [compliance] and I'm not saying that I wasn't doing that, and that I wasn't taking that into consideration at the start, I'm just saying it came more into consideration at the end and yeah, some of the exercises I struggle with anyway and I found it, what you did, helped me today.[participant has possibly noticed the intervention but this is unclear at this point]

Q OK that's good. So, was there a difference compared with a normal singing lesson I mean apart from there's no piano very little feedback but in terms of the language per se?

A With you or in general? [meaning one to one lessons with the researcher or with other teachers]

Q Just in general. I'd like a general comment.

A It was very different, no one links as practically, as physically sorry, to dance as what you did today.[highlights a difference in the usual language 'no one links it ..as physically to dance as what you did today'] And none of my singing teachers have done that before you know [identifies the intervention as novel] I've been told to do things like anchor [identifies a physical instruction that uses a word from 'Estill training'] and been told to do things like imagine that you are moving gracefully to something [identifies the inclusion of imagery] but less so balletic terms have been used in my previous experience. [participant has noticed the intervention and ballet terms, which he identifies as unusual]

Q And some of the language wasn't er… some of the language was just very descriptive. Like 'I'd like you do this' or 'I'd like you to move this muscle about and do this shape with

your mouth' was that useful as well? [the researcher isolates physical instruction form the specific use of ballet terms to see which has had the greater impact]

A Yes definitely [participant has verified that specific physical instructions are also useful to dancers]

Q A very specific step by step guide to what you do with your body? [attempt to clarify]

A Yeah it was, it was.

Q OK that's good. So, did you notice ballet terminology?

A Yes, yes I did!

Q Erm and if you did notice the inclusion of ballet terms, how did this make you feel?

A mmm erm for example.. the last exercise that we did as much as I was struggling with the song because I was less familiar than I thought I was with the tune, erm.. I found that at times, when I wasn't thinking about that, and I was thinking of moving through the movement, it kind of naturally took my voice with it as well. [participant has identified external focus as being beneficial and motor-planning] It kind of aided me in having a more legato sound, yeah erm.. graceful, continuous. Actually, I would say that about the frappé exercise as well that was really helpful. We say that [does he mean the word staccato is used in ballet class?] but that was very (ha ha!) but that was very staccato and that really helped with it, really, really helped [used the musical language confidently but seems to be saying that there was greater physical understanding of how to articulate when linked to the term frappé]

Q The idea is … it's designed so that people are less inclined to articulate from the throat with hard glottal, to give them an option, you know, to make that articulation that they are striving for. That's the general idea but I meant also, not just in terms of the exercises, but in general? Did they… was your mood affected at all by hearing familiar language?

A No I really really liked it. [second participant to take 'mood' to be a negative] I really enjoyed listening to language that I am familiar with [increased enjoyment due to the use of familiar language] because it's like speaking my dancer language in a way. [Identified familiar language as improving mood] And I'm not very, very familiar with ballet terms but I definitely know the basics of things [although the participant was not primarily a ballet dance the intervention was still viewed as improvement on pedagogical language] , at least what was used today was really helpful for me anyway. If it was something more advanced I possibly wouldn't know it probably would have made me feel ..worse. [the intervention is deliberately set at a low to intermediate level but this is an inciteful comment as if the language was identified as dance language the student might feel that they should know this if they identify as a dancer and would negatively affect self-esteem]

Q how many times do you get ballet in a week here?

A We get ballet like three or four times a week [operant conditioning-repetition]

Q And you are in your third year so that's..

A We have done plenty of ballet lessons, yeah it's just not my strength ballet and it's not something that interests me in the industry to go into, but I obviously recognise its benefits of course [participant has not particular interest in ballet but has respect for it].

Q Would you say it's foundational in any way?

A Oh yeah! Of course. Yeah!

Q Some people might argue that it isn't but I have found that, well lots of people have said that it is foundational and that is perhaps..

A Ballet is the foundation of all modern technique. It is a fact! (Smiling) it's a fact. [certainty]

Q So was there a difference between the exercises where you had a ballet term as an additional description in terms of your understanding of the exercise?

A In lessons?

Q Right now in this test.

A Yeah, yeah of course it did yeah. It really helped me [confirmation that the intervention was useful for this participant]

Q Coz a non-dancer might not understand that

A Oh yeah, no of course it helped me.

Q The majority of people reading this research will be non-dancers I would say, so things that you might take for granted might be a revelation to somebody, and would be an unusual fact, that's why I am asking you things that you might consider to be common knowledge.

A Yeah no. I hear what you are saying and it definitely, definitely helped.

Q Good. Do you think that the terms affected your singing per se? Or maybe not today or maybe, today I don't know?

A For some exercises yeah I did find like, I don't know why I keep thinking back to the frappé one (laughing) but the frappé one was for me (laughing a lot) so that one did yes! [participant thought that their singing was positively affected by the intervention] Yeah but erm other than that not massive amounts but it still did affect me in a positive way if any

Q so maybe if, do you think if, you were actually doing the action that maybe you were less familiar with ballet, but maybe if you were doing the action as you were singing that might be different? [inquiring as to whether the lack of ballet as a specialism meant that there was a weaker conditioned response and less motor planning- so by doing the exercise the link might be clearer]

A yeah I think it's, I think for me it would work, [considering if this would be useful] at the same time recognise that some people have more inhibitions about themselves [comparison to other students-considering generalisation] so you know like all dancers are different some are really confident in ballet and some are not, so doing it to [thinks of the student as passive

and the teacher as active?] me as someone who is not, you'd think it would make me a bit embarrassed [considering]

Q but if you were given the choice..

A I wouldn't mind doing that [decides that he would try]

Q it's like do this or think this up to you [describing the intervention as an option – either imagine the ballet manoeuvre or actually perform it]

A I think it worked for me to just think about it, but if my singing teacher told me I should try doing the action as well to achieve what they want me to achieve [compliant language] then I wouldn't mind doing that at all. [happy to be obedient - is this because he realises that the practitioner is trying to help?]

Q yeah ok erm and was your mood affected at all by the whole thing?

A no I actually really liked it because [took mood to be negative] ..it affected in a positive way I don't know why I said no I am not numb! (Laughing) yeah but I really liked it. It was really different and I really enjoyed it [enjoyed the use of familiar language]

Q Well that everything unless there is anything you'd like to add I'll switch off the recording

A No I think it was great. I think I just need to ..be less harsh on myself on scoring myselfs myselfs? On score my skills. [clarification that this is what he meant earlier - he had scored the exercises as difficult because he was not happy with how he had executed them]

Q are dancers harsh on themselves?

A yes very! [perfectionism]

Q are dancers subject to perfectionism

A very very (laughing) very! [confirmation of perfectionism]

Q or imposter syndrome?

A yes all of the above [conformation of imposter syndrome]

Q all of the above. Ok all right, I'll switch off the recording now.

Participant 9

Q so how did you find the exercises?

A Erm I found like some of them a bit hard to understand [despite the exercises being highly descriptive and having lots of physical directions] I think it's just because it was my first time hearing them[does she mean in terms of motor-planning? They unusual so she does not have an existing motor plan?] and like understanding them straight away [perfectionism] and then also, I think something I found different [uses the word different but not difficult here] was like doing it and not having a piano [lacks reassurance of a guide melody] because we always have a piano [acapella singing is unusual to her] I think just trusting

myself to do it and just see what happens, so that was different [having to be self-reliant was different but she does not say challenging but does say that trusting herself is unusual]
Q so was there a difference you've kind of half answered this anyway was there a difference compare with a normal singing lesson?
A Yeah I think so erm.. obviously with the no piano [reiteration] and being just told the exercises like once [does not say if this is challenging or just different] and then doing it also I'm ..sometimes in your singing lessons [refers directly to lessons with the researcher] you'll compare something to ballet [remembers the intervention] but the rest of our lessons they won't really [compares lessons with other teachers to lessons with the researcher] and I did find that helpful [referring to the intervention] when we, I found some of them some of them [qualifies 'some of them'] I found easier and some of them I was still struggling with, that you did explain the ballet things with does that make sense? [She meant that sometimes the terms were helpful but sometimes either not helpful – would refinement of the terms, clearer explanation or familiarity with it help?]
Q so you did notice the use of ballet terminology
A Yes
Q OK, and if you did notice the inclusion of ballet terms how did this make you feel?
A Erm it made me have something to compare it to [comparison with something familiar] especially the feeling like, the frappé one really like clicked in my head [motor planning?] because I feel like I 100% [binary language] understand the feeling of frappé [links to motor planning and conditioning] and the arabesque did as well, like coming up I hadn't thought about it that way, so it kind of made me able to relate it to something that I knew [connecting muscular activity in singing to conditioned ballet terms]
Q And would that be different to the language that is maybe used er.. in general?
A Yea I'd say so. I think it's different because you wouldn't use actual ballet terminology. [highlights how the intervention is different from the language of voice lessons] As soon as you said about the arabesque I was like, oh that is kind of what everyone is saying when they are saying pull your shoulder blades down the use of your abs [makes a direct connection to what has been said by other practitioners and usually by the researcher when not employing the intervention] that is the same as what you'd do in ballet just using the other words makes me relate the two things in my head [The word initiated motor planning for ballet]
Q Yeah
A Yeah
Q Yeah erm.. was there a difference between the exercises where you had ballet terms as an additional description in terms of your understanding of the exercises?

A I think most of the time that I did have a better understanding when the ballet terminology was used [confirmation that in some instances the intervention assisted understanding of the exercises] although there were still some that I struggled with but I think that I had a better understanding with the ballet terminology.[confirms that despite finding some of the exercises a challenge her understanding of the exercise was improved by the ballet terms]
Q okey dokey… erm did you think that the terms affected your singing in any way?
A I think so and yeah. [confirms that there might have been a change to her singing as a result of the intervention] I think so because I, when,.. that I was actually creating the feelings that make me do a better sound [motor planning] or like when I was thinking about the positions [visualisation] or because I wasn't thinking about my singing so much [positive distraction - external focus] I was kind of relaxing into it a little bit more [mood positively affected]
Q yeah ok so did the hearing dance terminology affect your mood
A Erm yeah I think it made me.. coz sometimes even though I have been doing a lot of more singing like, and I am used to singing, I am still the most used to dance [identifies more as a dancer than a singer and has grater experience as a dancer] so it makes me feel a bit more comfortable and it's something that I am familiar with. So yeah [identifies the familiarity of ballet terminology as positively affecting mood]
Q Did you feel in terms of erm a connection..
A Yeah like comfortable, comfort-ability for like I wasn't doing something like I don't know anything about [she has already said that she has had some vocal experience so this is an exaggeration but nevertheless it is how she sees it] I know what that is I don't know what word I'd use to describe that [familiarity enhanced comfort?]
Q That's fine is there anything else you'd like to add?
A Erm I don't think so, no
Q OK fantastic thank you so much.

Participant 10

Q how did you find the exercises?
A Er, what all of them?
Q In, in general. All of it.
A In general, I thought it was very, well like,.. described [appreciation of the descriptive instructions] and it wasn't just like 'hear that and then repeat', it was useful to have all the information [participant found the instructions 'useful'] erm and yeah I definitely preferred the ones which had like, the relation to dance I'd say [participant 'definitely preferred', the

exercises with 'relation to dance'] and like coz sometimes, like I do know more like, singing terminology now, [identified learning progression since starting college resulting in greater familiarity with vocal terminology] but I don't sort of know everything [identified gaps in knowledge]. I feel like it's useful to have a mixture of both.. [participant found have dance terminology included with more usual pedagogical language 'useful'] erm.. so, I definitely found the ones easier [and found the inclusion of ballet terms made it easier- to understand?]. I feel like I would've, the ninth one, the breath management one, I would've found that one easier if like I knew the tune, [participant said that if she had known the melody of Amazing Grace the exercise would have been 'easier'] but like the 'up to relevé and plié' for like knowing when to release your abs is like very useful [identified motor planning for ballet assisted in understanding how to execute the exercise was 'useful'].

Q So when you are in plié are you releasing your abdominal muscles?

A No (ha ha) not really

Q Not really?

A No

Q Do they stay in the whole time then?

A Pretty much, yeah. [participant identified muscular effort and patterns associated with ballet]

Q Is there any time that your abdominal muscles do get released?

A erm..

Q Or are they just permanently in?

A I feel like they are permanently in, I don't know [uncertain] well at least when I am actually dancing [suggests that the abdominals are permanently engaged]

Q But is there difference in effort level doing a plié to a relevé?

A Yes. Well, it's sort of like a feeling like your plié is your preparation which is getting you up and like erm yea I don't know it's just like a different feeling to it. Your plié kind of sets you up for the next thing. [describing the different sensations involved in the two manoeuvres]

Q Erm.. so, on the whole was there a difference compared with a normal singing lesson in terms of language? And think generally from all the singing lessons that you've had from various practitioners.

A Yeah there was definitely like, I don't think I've heard any other like singing lessons where they do relate it to like dance. Like they kind of just throw all the terms out at you [overwhelming, confusing?] and they like explain them but like, [qualifies previous statement] I don't know [uncertain] I definitely I find it a lot easier to understand what's going on, if you say like that's like so it's like an arabesque ['definitely' finds dance terminology made singing 'easier to understand'] or it also makes it like less .. coz relatable ['relatable' due to familiar language] it's like less scary [positively affected anxiety level] so it's like I can do that, that's

a similar feeling [understood the somatic similarities] and like I don't know… yea definitely easier to understand ['easier to understand'] and you don't really get it as much [ballet terminology?]

Q So you did notice the use of ballet terminology?

A Yeah uh ha

Q If you did notice the inclusion of ballet terms how did this make you feel on the whole?

A Erm.. like cuz I'm familiar with those kind of like you know, [familiarity] kind of made me feel like, OK I know what I'm doing [language linked to existing knowledge] I know what it is, it's like easier to understand and yeah [easier to understand]

Q How does the usual, erm.. the usual language used in voice lessons does that make you feel a particular way or…?

A Erm I feel like when especially when I first started I a bit like ready to get overwhelmed coz there was so many like new words erm and like I kinda go all scary [when she had less vocal experience, she was 'overwhelmed' by volume of unfamiliar language which felt 'scary']

Q Even if the words are explained to you?

A It's easier when it's explained but still like yeah…[explanations helped but minimally]

Q So, was there a difference between the exercises where you had ballet terms as an additional description in terms of your understanding of the exercises?

A Yeah there definitely was ['definitely' identified a difference between exercises with the intervention and those without] like I feel even if there is like kinda calms you down a bit more and you're like OK, I do know what that is and I can like, like, transfer it into here. [transferring somatic information stored as motor planning for ballet and re-using it for singing] And also, like I feel a lot of what you say about pulling up the core muscles is like very relatable to dance [identified that the same muscle groups are used for both activities] so I was like that was a lot easier [participant found the exercises ' a lot easier' when ballet terms were used as descriptors] and I quite like the arabesque one, like knowing the feeling of like support that I do I wouldn't have thought about that so I don't know [participants 'liked the feeling' of linking ballet to singing and found the idea unusual]

Q do you think that these ballet terms affected your singing in any way?

A erm yeah I feel like overall I understood it better [participant identified that understanding of the exercises was improved by the intervention] so then I could sing it better or like better to me, at least [participant felt that her singing was improved but was not sure this was actually the case 'to me at least'] and I think also going forward it would be more beneficial coz like she you're just on the spot still like perfect it would be much beneficial if I continued to think of that [participant thought that continued use of ballet terms would be 'beneficial']

Q So if it became the usual thing in a voice lesson…

A Yea or even when I'm just at home I can be knowing that this teacher said to do that for this exercise erm so I feel like long term it's good [participant implied that she would continue to practice the exercises using the terms]

Q Somebody else commented on the visual aspect of it erm did you did you think there was, that ballet terms add anything visually erm to your understanding?

A Yeah I'm like definitely, I'm quite a visual learner [participant identified as leaning towards visual learning] I'd say erm, so when you know, you were saying about arabesque [identified a ballet term that was used] and everything and I pictured in my mind [the participant visualised the ballet manoeuvre] but also the muscle memory of it [motor-planning] erm and I think when you are like doing it the pliés and the relevés as well ..[participant considering executing the dance movements whilst singing]

Q And overall, did hearing dance terminology in the context of a vocal lesson, did that affect your mood in any way?

A Erm I feel like speaking from as,.. well, when I first started singing, I feel like it definitely.. coz I was quite nervous [identified singing related 'nerves'] and like scared to sing [more severe feelings than nervousness perhaps] so I feel like having someone relate it to dance made it like feel a lot more comfortable [participant identified greater sense of comfort brought about by the use of ballet terminology] like ok this is a safe space [improved sense of safety] and I can think about all the things I *do* know in dancer [the words reassured the participant that they knew something] erm and also coz it actually helped. [participant noted an actual effect-motor planning] I felt like I could do.. I could make the sounds better and easier. [participant noticed improved vocalisation] I felt like it does boost your confidence which means you are less scared and more like just confident and like yea…[intervention improved 'confidence']

Q Yeah do you think your idea, casting your mind back, do you think if you were singing as a novice but a strong dancer, do you think that your feeling is generalisable? Do you think that many others dancers have similar feelings or do you think yours was a unique feeling?

A I feel like a lot of people when they sing, like even my friends from other colleges, like people who have come from such a strong dance background where you never use your voice it's like so daunting at first a lot of people in my class erm really struggle [participant said that anxiety about singing is common with dancers] to like get over the first like singing in front of everyone, or just the singing lessons [singing lessons judged as almost as stressful as singing to a group] and like the tech, like it definitely took like a while for people to settle in [identified the technical langue of vocal pedagogy potentially slows the 'settling' process] so I do feel like it's quite a generalised thing, erm yes it would be useful for everyone who is coming from such a strong dance background to still have that like influence in a class erm [a clear endorsement of the strategy]

Q do you do you feel erm if you hear this language do you feel that … no I can't really say that.. ok that will be everything. Thanks

Participant 11

A I find it hard to drop my mouth sorry please could you play that one more time [participant very nervous]

Q yes of course I can and don't forget it's your opinion that I'm interested in ultimately ok? [reassuring]

A yea

Q That's what it is I don't know where I am on the recording but here we go

Recording starts again (exercise 1) arpeggio dance description given once.

A I think I found like when I think about the arabesque the idea of the arabesque it does help me find like which muscles to use which helps [participant immediately noticed the ballet term and said that it helped, but was perhaps too flustered to remember to score the exercise and discuss it at the end] I just struggle to drop my jaw quite a lot [participant's jaw appeared to be tight on the video- induced by nerves or because it was an unfamiliar posture?]

Q If you could rate it and then when we get to the end of all the exercises we're gonna have a little semi structured interview where you can sort of flesh out your feelings about everything. [reminding]Good? Ready for the second one? Here we go then ..

Q so how did you find the exercises over all?

A I found of them challenging [not a confident singer] I think it's mainly coz like I find it quite hard to pitch [this was very evident on the video] so when I haven't got anything to go off I kind of like didn't really know where to stop or ….[participant has very few motor-plans for singing and pitching is an issue as she cannot what her muscles should do]

Q So when you're pitching are you thinking about, are you thinking about the sound or.. is there anything that helps you stay in pitch? [thinking about muscular engagement]

A When I find that I can hear it when I find it ..I'm not sure I struggle I feel like I struggle to find it but when I find where I am I can like keep it there [when she finds the correct muscular sensation she has the skill to sustain that feeling]

Q How are you able to keep it there?

A Coz I can kind of feel that it's right [muscle memory] I can hear that it's right when it is right but sometimes er…[connects the sound to the sensation]

Q Are you aware of using physical sensation to stabilise the pitch?

A Yeah I do think when I sometimes don't have help I can't find the, the note or something most of the time it's when I'm not engaging anything when my abs [identifies that muscular engagement stabilises] are like have the right posture and engage here (indicates abdominals) then it does help me to kind of find it I think [lots of binary language but connefcts abdominal engagement with vocal stability]

Q So if you are singing full out ..? [dancers' term for at a performance level]

A Yeah definitely when I'm singing full out I find it easier to find where I am coz then I probably… coz everything is like..[identifies again that muscular engagement assists pitch and vocal stability]

Q You are using different mechanisms really to stabilise everything?

A Yeah

Q OK, was there a difference compared with normal singing lessons er.. specifically in terms of the language but also .. anything you want to say

A Erm the idea of like moving through the ballet steps (indicates ronde jambe) and like the frappé on like the short sharper notes I found that quite useful [indicates planning for the ballet manoeuvres] erm I think I put like moderate or moderately challenging for those because when I was thinking about it, it was like, helping to kind of think where I need to be [ballet terms helped with planning] I wasn't used to like thinking about what I'm doing if that makes sense? [motor-planning not usually used for singing by dancers?]

So, the idea of thinking about it especially on the (indicates abs) 'bah, bah' (staccato exercise) that one. The idea of the frappé kind of goes with that sensation quite well I think [identifies 'frappé' as being a useful term to connect to staccato] and like same with like the longer notes (indicates rond de jambe) the rond de jambe I felt like that was quite helpful [participant remembers and identifies all the ballet terms she was given in the exercises]

Q did you notice the use of ballet terminology then?

A Yea (big smile)

Q If you did notice the inclusion of the ballet terms how did this make you feel?

A Erm I think it helped because obviously I'm more confident as a dancer, not a singer. [participant appeared very nervous during the experiment and pitching seemed challenging] I think it does help if you are not used to singing terminology it kind of helps you be able to erm kind of like imagine [visualisation initiated by dance terms] what it is you are supposed to be doing like the sensation of doing a frappé [talks about seeing and feeling the movements] (indicates motion with hand) because you're erm.. coz I'm familiar with that, I feel like to intertwine it with singing it does help a bit [combining ballet and singing together seems to help]

Q Was there a difference between the exercises where you had ballet terms as an additional description in terms of your understanding of the exercises?

A I'd actually say yes on some of them erm coz it just gave me something to think about as well, so actually doing without any like backing on that one that I was just talking about erm the ballet terminology was quite helpful to visualise [participant stopped relying on her ears as she would have done with t a guide melody and had to rely on visualising and feeling]

Q Did you think the terms affected your singing

A Er not sure I think maybe helped me to visualise it better [visualisation improved comfort level] so maybe I felt a bit more comfortable on those ones as opposed to most of the ones that were explained solely in singing terminology [interesting as mostly physical instructions were given as how to perform each exercise but there were vocal and musical terms yet these were explained]

Q How do you find singing terminology on the whole?

A It's ok but in general there is a lot of it that I don't really understand [terminology is explained in group lessons but maybe the terms are not remembered? – contextualisation missing? No demonstration?] and we have gone through quite a bit in singing tech lessons but with our singing tech assessments I found we spoke about it but we hadn't actually like if find it easier to like speak about something and then put it into practice straight away coz otherwise I can't like .. if I'm just hearing it I can recognise what it is but I can't actually put it into practice so then when it comes to doing it I'm like I can say all of these things that I know but I don't actually know how to apply them [participant can explain the terms but cannot produce them]

Q Yeah, yeah

A So I think as well because I don't really have a singing background I find that it would be easier to work that way. So someone say singing terminology and then kind of like demonstrate it and then do it and then I would understand better [technical classes do not have enough practical application]

Q mmm did hearing dance terminology affect your mood

A Erm I think it made me a little bit calmer [affected mood positively] Coz I was like yea OK I know what she means. It was like familiarity (smiling) [familiarity of the terms calmed the participant]

Q that's the last question that I had so is there anything you'd like to add …

A no I think yea mm hmm

Q lovely I am going to stop the recording.

Participant 12

Q how did you find the,.. the exercises?

A I think there was a variation of what I found hard to, like well, not hard I'd say more challenging [dancer tendency to cope with circumstances-possibly 'challenging' seems less negative than 'hard'] to what I found easier so like I didn't find them all super… and didn't find them all super hard, there's probably like three I've got down here for easy and the rest are like moderate to moderately challenging [answering the question but focusing on score rather than her experience- expecting judgment? Competitive?] like it may not have been like.. but then the.. massively in tune [Judging her own performance] but I understood it. But then the amazing Grace breath management, I don't feel like I did that one very well. [her comments are all performance related not about her experience or opinion] I found it like hard to break between it (chopping action with hand) thing if that makes sense? [the exercise was to sing with a continuous flow so I am not sure what she means]

Q Yea that makes sense thank you very much and of course this differs from a normal voice lesson

A Yeah

Q Where you would get feedback so I am deliberately trying to not look at you

A Yeah

Q Not give you any physical clues as to what might be going on. That is also a bit unsettling and different to a voice lesson. I am just acknowledging that erm but also it maybe helps if someone isn't staring at you. [trying to calm the participant]

A Yeah that's true

Q So that's what I am doing and I also suggested you could stand or sit for your comfort. So normally in a voice lesson you would stand, but I can understand why you would want to sit [potentially using the table as a physical barrier in a vulnerable situation]

A Yeah that might have been why I found some of it more difficult as I was sat and couldn't hold myself properly maybe? [is analysing her own performance still but at least is finding a potential cause for not performing as well as she would have liked]

Q Yea, yea [encouraging]. So why was it that you made the decision to sit? Just out of interest this isn't one of the questions

A I think maybe I viewed it as kind of a warm up [perception that a vocal warm up is a low energy/effort activity maybe because it is not performative. Is this the general feeling amongst dancers? Does this perception differ from their view of a dance warm up?] so that probably isn't right [binary language] coz if I was in a singing lesson, I would stand up [typically in the college vocal studios there is no chair for the student so there is no option] so I think maybe I viewed it as a bit of a warm up and normally in class if we don't get told to stand [absence of orders-do music practitioners issue fewer orders than dance teachers?]

we wouldn't stand so maybe I am just used to taking instructions ['used to taking instructions'-not autonomous behaviour] so I was like oh there's a chair I'll go and sit on it.. er yeah. So maybe I viewed it as a kind of a warm up [low energy activity – non-performative - contrast with participant 11 who initially sat but stood as soon as arabesque was mentioned – standing for dance (high energy) sitting for singing (low energy)?]

Q It's just an interesting kind of side-issue I was just thinking, Oh why is it some people stood and some people sat down and it's just an interesting thing.

A Like we are so used to being told to sit or stand so maybe subconsciously I haven't been told to stand so I'm going to sit [used to obeying orders all the time]

Q Yea that makes sense erm. I also thought for some people to have a physical barrier between the researcher might also help but I don't know.

A Yeah [Is she agreeing or brushing this off? – review video]

Q Maybe it feels more informal if you sit

A Yeah that is very true [agreeing or impatient]

Q Anyway so was there a difference compared with a normal singing lesson

A In the exercises or the experience?

Q Well you can talk (think) aloud. All of it of any of it, and make a distinction if you like.

A I think what you said before about the feedback obviously. I wasn't completely confident [lacked confidence 'in some of them' or the situation] in some of them, which you could probably hear [expecting negative judgement] I think normally I'd be given a bit more 'do this, do that' [orders] or 'this will help you get to this if you practice …[either thinks that or has been told that the onus is on the student rather than a collaboration towards a goal]

Q A smile or a nod? [continuing own thoughts about what feedback might consist of]

A But obviously we couldn't have that as this was an experiment, so I didn't know I was doing it correctly ['binary oppositions' (structuralism-Levi Strauss)] a lot of these exercises we do,.. do quite regularly [similar but not the same-participant normalising the situation?] and so it wasn't like I was completely unfamiliar with them which made me sort of relax [familiarity with some of the exercises helped to relax the participant] a little bit, I wasn't completely in the dark I kind of knew what I was …

Q There were certainly a couple of ones I had to invent for this so

A Yeah

Q Ha, ha! so.. did you notice the use of ballet terminology

A Yeah I did and I think that it really helped [immediate response and clear affirmation]

Q If you did notice the inclusion of ballet terms how did this make you feel?

A Well I think it helped because I am a dancer first [identifies as a 'dancer first'] coz like singing isn't the thing that comes most naturally to me, [identifies singing is less natural] so when you were referring to things like a frappé, I knew that like a frappé is like sharp so I

needed to like, come in quick. [refers to the movement linked to the term] or like rond de jamb it made sense in my head [motor-planning] if I could visualise where my foot would go [visualisation] so like, so that's like where my voice would go (gestured throughout the conversation) if that makes sense. So I think that really helped, being a dancer first it made sense for me to like visualise it that way. To think about it that way could, I could understand it more [ballet terminology helped the participant to 'understand']

Q I was also thinking about the feeling of pressure [suggestion]

A Yeah

Q On the floor [rationale for why rond de jamb a terre specifically was chosen]

A Yea like you said about the tendu, coming back to those images [visualisation] I had to slide onto (big gesture) like with my tongue I had to make sure like that the floor wasn't moving [visualisation] so my jaw couldn't move [connects the movement] and I had to move my tongue like my foot would[comparison] and that was kind of hard [new motor-plan needed for tongue] but I think that if you hadn't have said that, I don't think I'd known how to do that. [The ballet descriptor informed the participant how to achieve the movement] it would have been like, how do I move my tongue without moving my jaw? How do I make a sound? But when you said it like that, [comparison to ballet] it was like oh yeah! That makes sense so I think that helped [identified the intervention as being helpful in terms of understand and motor-planning]

Q That's good anything else to add there?

A mmm no, but I think it's something that I probably like to think about again while singing like if somebody tells me to do something I will try to visualise it in that way because I do think it massively helped I mean that, having something to visualise definitely helped [participant suggested that they would use the intervention voluntarily going forward as it 'massively helped' to visualise the vocal exercise]

Q So a visual element is useful?

A Yeah

Q So normally in a singing lesson, would you have a visual element or not?

A No I mean we have the teacher in front of us, but normally they wouldn't be doing anything [does she mean they are not 'doing anything' useful to inform motor-planning?] they'd just be playing (the piano) so it's something for me to visualise [meaning the intervention could be visualised in the context of a 'normal' lesson] not something to look at, just something for me to like visualise, which I think that helped coz I wouldn't normally think of it that way. That's a new way of me thinking about it that I thought was really handy [participant is reflecting on the intervention]

Q But typically, as a dancer, you are working with seeing something [emphasising the visual element is a norm in dancer training]

A Oh yeah as a dancer, but when I'm singing I don't normally [does not normally have a visual element] but when I'm dancing normally you get given like erm like someone will just demonstrate and when someone demonstrates it like it's ok I understand it [indicates the use frequent of human mirror neurone system in dancer training]

Q Are you not given demonstrations in voice lessons?

A Oh I meant like visual in the sense of like you saying about the ballet stuff like that I've never been told it that way before but we are given demonstrations in singing [has not connected with the visual element of a vocal demonstration]

obviously with our voice and spoken to in that sort of sense but referring to something in dance… [suggests dance terminology adds a visual element which is linked to existing motor plans]

Q So when you have a demonstration in a lesson, do you just listen to it or do you also watch it?

A I do watch, so yeah I suppose that is a demonstration [maybe does not watch it in the same way as viewing new choreography? Active watching not passive watching]

Q But looking back on it, you don't view it that way? [suggesting that she is passively watching]

A Yeah I don't view it as a demonstration [participant confirms that she passively watches]

Q That's interesting

A I do view it as a demonstration, but I don't look at them well I do look at them but I don't take in what they are doing if that makes sense [confirmation of passive watching as there has been no instruction to watch the demonstration actively]

Q Yes not in the same way as ...

A As I would in dancing yeah [active watching in dance passive watching in singing]

Q Did you think that the terms affected your singing?

A What the different exercises?

Q You had some that had dance descriptors and others that didn't, so the ones where you did have a ballet descriptor, did you find that that changed your singing in any way? Or was it the same, or was it.. it.. just to do with understanding it? [enquiring if the intervention helped only in terms of understanding or if the participant noticed any difference to their singing]

A I think it was more like the understanding. Like when you would, in the terms, it would say something like 'sliding between the notes making it smooth' I feel like when I had a ballet demonstration [participant views the mention of a ballet word as an actual demonstration due to her own visualisation] I could do that easily-er, because you said this, this will.. think of it like this, and it made it so much easier. And when we went like 'one, four, two, one,' and I thought about (lots of gestures) going all the way round it made so much more sense to me

because I could visualise it like I said before, I could visualise it! And then the other ones I would sort of like, I'd listen to the terms [instructions- not dance terms] and then I would just maybe be kind of copy because I didn't have a deeper understanding of …[intervention provided a 'deeper understanding' than the exercises without dance descriptors] whereas with the terms I was like, oh I get this I understand what I am doing, and why I am doing it if that makes sense.[ballet terms provided a rationale for the exercise perhaps because an effect was noticed?]

Q Yea that's it, and then the last question. Did hearing the dance terminology affect your mood in any way?

A Kind of relaxed me a bit more because again I know that that's my comfort place [identified dance as her 'comfort place']that's kind of like where I feel most comfortable, whereas I may not feel as comfortable in singing, I feel more vulnerable so when it's linked into something that I do feel more comfortable, it's my like natural state like. I.. that where I am most comfortable when that was linked it was like, oh OK, it's not too different. Think of .. like this and it will .. I think it relaxed me more coz like it's not actually too different just think of it like this [realised that dance and singing as both motor-processes and therefore similar]

Q And how long have you been dancing?

A Since I was two and a half and I've done ballet since I was .. then, so those terms to me are like just second nature I don't really have to think about them twice I get it, it helped [confirmed operant conditioning of ballet terms]

Q thank you well that concludes the test I will now switch off the recording.

Participant 13

Taite Newman sitting

Q how did you find the exercises?

A Erm I found erm.. having the explanation before really helped I feel like if I hadn't had a detailed explanation before some of them, I really would have struggled with.. the criteria was very clear about what you wanted me to achieve [identified the instructions as 'very clear' and stated that without the detailed physical information she would have 'struggled']

Q Was there a difference compared with a normal singing lesson?

A The detail yeah, I feel like, quite often we'll be told what to do [instruction/order] but not necessarily how to do it [identified that there is often lack specific guidance] and as someone who hadn't had as much singing background [identifies lack of experience] I struggle to actually like I know what you want me to do [wanting to obey] but I don't know how to do it [lacking specific knowledge of how to do so] and especially having the dance terms, I could

like then.. ‘ok if I think about this, will I achieve it better’ [questioning] and I actually found that I did [confirming]

Q So did you notice the use of ballet terminology?

A Really helpful! (big smile) I’ve never done it before erm.. like just where placing the feet I’ve.. that then affected when I was placing my mouth [motor-planning] and the sound. [suggests a change in ‘sound’ due to the intervention] I thought that the notes were easier to achieve [noticed a benefit in terms of technical ease] when I was thinking about the positions

Q Do.. when you think about ballet terms, how do you experience them?

A What like in a class? [meaning a ballet class]

Q Well if someone says a ballet word, whether it’s in conversation or in a class, or anything else like that, how do you experience that word?

A I think I just physically imagine it in my head [asserts motor planning is initiated when she hears a ballet term] and the placement (hand gestures) because it’s almost like for us dancers, it’s like our spoken word, you know what I mean, because we’ve done it so much so I just instantly think about the position [identifies operant conditioning]

Q Do go you feel it then

A Yeah

Q If you noticed the inclusion of ballet terms, how did this make you feel overall?

A I felt like it was like (smiling) you understand that I’m a dancer [feels connect to the researcher] but I’m trying to sing and like therefore it’s combining the world that I understand to help me understand this world better [understands the rationale for the intervention]

Q Yea do,.. did you feel..?

A I felt like it made more sense and it felt like it was the best way to explain it [stated intervention improved understanding]

Q Did you feel that you were seen?

A Yeah yeah [agreed she felt seen]

Q Was there a difference between the exercises where you had an additional ballet descriptor in terms of your understanding of the exercises?

A Yeah I felt like I understood because you gave me positions I understood where my placement was meant to be so I don’t know why but the exercise made more sense in my brain given those positions than maybe ones that weren’t [ballet descriptor helped with motor planning]

Q Yea yea, and did you think the terms affected your singing in any way?

A Yes (nod) [emphatic] I was going to say when I did the feet I was like, wait that sounded more clearer because I was I second for that and then I was in first and I noticed a change in where my mouth was placed [identified unintended effect of intervention]

Q Erm I was thinking in particular the breath management one. You sang that very well the first time. You sang Amazing Grace you sang it very strongly [leading]

A mm hm [does not comment directly]

Q And, good. Did you, did you.. did hearing dance terminology overall affect your mood?

A Made me happier I think (smiling a lot) I was like I understand what I was trying to do [identified improved understanding 'what I was trying to do' not 'what you were trying to make me do' more autonomous phrase]

Q How do you think dancers feel in general, who are less experienced singers, if they are in a vocal lesson whether it's a one to one or a group situation?

A I think they really struggle and feel out of their depth and feel like not understood, don't understand what you are trying to get me to do and because I think there's that extra anxiety because it's already outside of your comfort zone I feel like it's a little more daunting

Q so do you hear these kind of feelings just going about [asserts dancers do not feel autonomous, connected or competent in voice lessons hence lack intrinsic motivation]

A Yeah vocalised yeah

Q Well unless there's anything you'd like to add I'll stop recording now

Participant 14

Q How did you find the exercises?

A Erm I would say like I was coz I'm not really a singer [does not identify as a singer] I was a really nervous [anxious] to do them but I found some of them challenging and some I kind of settled into. Like some of them were like, 'oh right this is ok' but some of them I was like ooo Like I was really trying to listen to like the melodies and stuff coz like I was ooo shit oh am I not allowed to say …[expresses anxiety]

Q Doesn't matter

A But yeah I'd say like giving it kind of a score, I'd find it challenging for me the whole thing was challenging for me [felt anxious about the experiment]

Q Yeah

A I would say

Q So was there a difference compared with a normal singing lesson in terms of language? Really I mean, I know this is an experiment so that's a bit weird.

A No I would say so [agreeing?] because some of the language in this, they don't talk about a lot on singing lessons. [identifies different language was used] like a lot of singing lessons these days [she is a second year] like you go in and we have a song prepared and we sing it and we don't talk a lot about the techniques and stuff that kinda come with singing. [suggests that she had not had much technical help recently] I would say so hearing all of

this, you kind of.. I'm like oh yeah I remember that now [remembering previous lesson where she had technical advice] but some of it I'm like ooo I don't think I've heard of that

Q So some of that language, did it come up in technical lessons?

A It has, like some of it's done like legato I would say staccato and legato come up in singing lessons more [identifies words connected with musical phrasing] but I would have never, if someone would've asked me a question on what those are I'd have been like (shrug) I couldn't tell you. [asserts that she has heard language often than she does not know the meaning of] Because we don't, we don't go over it enough in singing lessons I would say. [Identifies a training deficit in the current programme] So hearing that again today I was like oh (pulls a face) [triggers bad memories]

Q So what about vocal techniques, how were they described to you?

A Erm…

Q In a typical lesson

A Er [struggling to remember any technical advice]

Q How do they get you to make a particular voice quality for example? [using similar phrases to the other participants]

A I would say like when we start the lesson we do a warm up there are some kind of like,.. for example, the first exercise sometimes we do stuff like that. The diphthong exercise as well erm, but I don't think I ever.. I do it in a lesson but I would never understand what I'm doing why I'm doing it do you know what I mean? [says that she has never been given a rationale or any contextualisation for an exercise – she has never had a lesson with the researcher]

Q Did you notice the use of ballet terminology

A Yeah I did and I liked that (smiles) because I was like imagining it in my head and then singing it I think it made it a lot easier for me, yeah like for example the full rond de jamb I was thinking of a ronde jamb and was like ok focus so I think yea I liked that I was a big fan of that [recognises the use of ballet terminology and says that it made her focus and that she found it easier and that she is a 'big fan of that']

Q If you did notice the inclusion of ballet terms how did this make you feel?

A Calmer, much calmer [says that her anxiety was reduced by the intervention] because you see my first thing is dance [identifies as a dancer] so as soon as dance terminology comes into it, I'm like, 'oh I can start to understand it more' [suggests the intervention improved understanding] in a way, like I know there's obviously singing technical terms for it but I think that was a big part of me understanding the exercise and where I need to go with my voice that all interlinked together I think [suggests that linking the ballet terminology improved understanding of the musical and vocal terms]

Q So how do you feel about the instructor or practitioner using that language to you in a voice lesson?

A Erm I would respond better to that if it was like,.. if it was a singing kind of technique I'd be like ahhh singing but like if then someone used a ballet technique I'd be like oh ok this is what I need to do [uses autonomous language]. It really helped me understand it more [identifies that the intervention improved understanding and reduced anxiety]

Q Yea and did you think there was a difference between the exercises where you had ballet terms as an additional description in terms of your understanding of the exercises?

A Yeah I definitely think it did [certainty] especially the exercise where I couldn't kind of gauge the melody of it I really struggled with that, and then fast forward to the exercises including the ballet terminology I was like oh right ok yeah [identifies a difference in how the intervention affected her anxiety and understanding]

Q Do you think the terms affected your singing in any way?

A Yes I do. [definite] I think when I think it was the full port de bras one. I was imagining myself going up to first and going out then I was kind of bringing my voice up and extending it out and then kind of going through the port de bras in my head up to fifth which, when I realised I needed to like lift my,.. the tone of my voice and then bring it back down and then go again with like the second verse like that really helped me kind of understand where my voice was going [understood the physical connection between port de bras and singing]

Q So were you visualising or physically sensing

A Visualising I would say [identified visualisation was triggered by the ballet terminology]

Q So would you say there any kind of physical planning that went on?

A Physical planning……? [Thinking not confirming]

Q Like when somebody says a dance term, how do you experience that?

A I kind of look to the lyrics on a sheet of paper and I'll think right ok and start here [has not understood the question- is describing her process for learning a song – maybe thinks that as I am a singing teacher, I must be taking about singing and not dance]

Q Maybe in a different situation .. so, if somebody says, whether they are just talking in a corridor or in whatever context, if somebody says a ballet term what do you start thinking? Or does it not affect you?

A Erm I don't think … I'm trying to think I'll kind of turn my head and think oh ok you need to do this now [hearing a ballet erm the participant frames it as an order 'you need to do this now'- operant conditioning]

Q So if somebody was talking about something and they just randomly dropped into the conversation 'grand jeté'?

A That would probably alert me [is alerted when a ballet term is mentioned] and I be like oh what are they talking about? [is interested]

Q Ok you don't sort to feel how that would be?

A I visualise it in my head [identifies visualisation occurs when she hears a ballet term].like if someone randomly said 'grand jeté' I'd be like eh (makes a hand gesture and smiles) ooh I love a grand jeté'. [indicates enjoyment is sparked by the term and the gesture could indicate motor planning]

Q Don't we all! Not that I can do it ha, ha! So, did hearing dance terminology affect your mood?

A Yes, because it's my kind of comfort so I heard ballet and I was like hey! (Big smile) it sort of brought a bit of light to it [asserts that ballet terminology improved mood]

Q How do you normally feel in a voice lesson?

A Erm scared like I'm not a very confident singer I think over the past couple of years at Wilkes, I've become more confident but that because of people having to push me out of my comfort zone [she is passive the practitioners are active- this is seen as being done to her rather that she is actively and willingly involved] I can like never get up in the lesson and sing I'm terrified of doing it but very.. most recently when we did our musical I've been pushed out of my comfort zone and had to sing a whole solo so I think now that's really, really helped me a lot [realises that experience aids confidence] like even when we were just in singing today like I got up and I never normally get up, I was like you know what, who cares what anyone thinks! I think I'm scared of people judging me but now I'm like oh they've heard me sing so I doesn't matter [identifies fear of judgment 'scares' her, but having been exposed to it in a performance with no resulting repercussions she now has improved confidence]

Q Do you think there is a possibility that everyone in the room is feeling the same as you?

A Oh yeah definitely! Yeah, yeah, I do feel that sometimes. [identifies that sometimes she is aware of similar feelings of anxiety in her cohort]

Q Ok that's everything I'm going to switch off the recording.

Participant 15

Q So how did you find the exercises?

A Er I thought that I liked how different each kind of was but when you were making the connection to dance I didn't find that as effective purely because I'm not really from a dance background. I could imagine it, but if you were someone in this position who was like a dancer, they would have found it more effective. I understood the connection but it didn't really impact what I did if that makes sense. [noticed the ballet terminology but stated that due to her singing background it was not especially helpful]

Q Do you regularly attend ballet classes here? [establishing familiarity with ballet terms]

A Yes I do, yes

Q So you are aware of the manoeuvres?

A Yes definitely it made sense but I feel like …

Q Did you start ballet when you started college? [establishing length of time studying ballet]

A Yea (nodding)

Q Good to know, was there a difference compared with a normal singing lesson?

A Erm I don't think so no. Like obviously there's some different ones that I haven't done before but I think they were kind similar to ones that we do in singing classes yes. [identified similar situation in normal vocal classes to the experiment]

Q Did you notice the use of ballet terminology?

A Yes (smile)

Q Did the inclusion of ballet terms make you feel a particular way or how did it make you feel?

A I think it was effective I can't remember which one I think it was earlier on in the exercises I definitely was imagining it [even though she is a singer with limited ballet experience, the terms provoked visualisation] as you were saying it and I could imagine how it would be like [motor-planning?] Oh I think it was the arabesque it was the,.. ooh something with the diphthong exercise I found that effective for the ones later on I kind of, I understood the connection but I didn't understand kind of the first and the fifth kind of translated into voice if that makes sense.[noticed the connection with support and the arabesque and diphthong and tendu - the exercise with numbers was complicated and was more to with understanding the melody and preparing for the rond de jamb in the next exercise]

Q Yeah some of those exercises I really had to think about to try to try and connect with.. so some of the exercises are very unusual and that's why I said 'an unusual melody' so actually the numbers correspond with the degrees of the diatonic western scale [engaging in singer speak] so when you were doing one two that's a major second when you were saying the word four that corresponds to an interval of a fourth and I used an interval of a fourth because the first interval of Amazing Grace is also a fourth

A Right ok (nodding smiling) that makes sense [understanding the application]

Q Right, so was there a difference between the exercises where you had ballet terms as an additional description in terms of your understanding of the exercise?

A Erm I wouldn't say so, no <u>I think they are a good addition for people who had more dance experience definitely they would be beneficial for people like that</u> yeah [understood the exercises well enough so that the dance descriptor did not aid understanding]

Q Did you think the terms affected your singing?

A Erm I don't think it was just me subconsciously, but felt like in the Amazing Grace 'legato', I think that's where you mentioned ballet terminology, I felt kind of clenched and grippy more (indicates midriff area) but I don't know whether that's just a ballet that's how you've got to hold yourself? I don't know if that's something you would need to know I don't know if there

was a connection. [felt that because she is encouraged to pull in her midriff in ballet, using ballet terms in the context of a singing lesson made her automatically assume a ballet posture]

Q So you felt that the terms in that instance were detrimental to your singing

A yeah

Q They made it harder?

A You could say that yeah

Q Did hearing dance terminology affect your mood in any way?

A No I do like the connection I do think there should be more of a connection [takes it as a negative - but identifies a lacking element of connection between dance and singing and thinks that the intervention could be useful]

Q Why do you think there should be more of a connection?

A I think because singing and dancing people make it very separate but I think that they are the same thing just using different parts of the body if you know what I mean [understands the need for an integrated pedagogy of song and dance and that they are both motor skills]

Q I do! Is there anything else you'd like to add or…

A I did find erm the numbers, the melodic pattern with text slightly difficult with the numbers but I don't know if that was just forgetting the numbers or ..

Q No it is difficult, I would find it difficult I mean I told you a little bit about the planning but I thought at the time (suck teeth) that's a bit tricky but I needed it to correspond with the …something else. Ok so anyway I'll press stop.

A ok

Participant 16

Q How did you find the exercises?

A Erm on the whole I rated them mainly easy to moderate as in understood what I was meant to do but as it was my first time doing it I was a little bit… ah! [participant has a good level understand but the situation and the exercises were novel] But I think if I did it again or did it a few times I think I'd be able to change, as in get it vocally right, as well as in my head. [participant identifies motor-planning 'in my head' but suggests that she needs more repetitions for the intervention to be affective] So in my head, I know what I was meant to do but I was just changing it through to them. [the motor-planning wasn't yet strong enough to affect the muscles or the singing substantially?] And using all like the dance notation was helpful. [participant found the intervention 'helpful'] One of the exercises where you changed the order it was one four two four the imagery was going through my head of a rond de jamb, that really helped me one to focus on the numbers [the ballet manoeuvre helped her to focus on the text of the exercise which consisted of numbers] and also what I was meant to

be doing, [and also on the sensation of legato 'what I was meant to be doing' which was the aim of the exercise] so it helped me picture the jump obviously because it was a jump (describing the musical interval) it was a jump so it helped me with that as well. [could possibly be talking about the octave jump exercise – so a different exercise must check!!!]

Q OK, so was there a difference compared with a normal singing lesson in terms of the language?

A Yeah I'd say I understood a lot more [participant said that the intervention improved understanding] so when you added in the extra bits about dance, it sort of clicked how I was meant to do it [participant explains how she suddenly understood aspects of vocal technique, when the intervention was applied] and like I said it made me remember things whilst I was doing it which was helpful because it sort took the stress away [participant states that the intervention alleviated stress] because it was something that you knew [the familiarity of the words and the pre-existing of motor-plans reduced stress] you were..like ..was sort of relatable to you verses something that's a little bit different and out of my comfort zone [familiarity of the ballet terms helped alleviate stress]

Q Yes so how is the language in a normal singing lesson?

A Erm a lot of the time they just sort to stick to the exact vocal terms [emphasis on pedagogical language in voice lessons] whereas I think how you did it, with the extra bit of information it allowed me to bridge the gap between the vocal term and the dance term which then made me feel physically how I was meant to do it [the combination of detailed instructions and ballet terms gave the participant the information they need to achieve the exercise]

Q Yep, yeah so my next question you have already answered. Did you notice the use of ballet terminology?

A Yeah (laughed) I did yeah particularly, I've said this already ['particularly' noticed the dance terms]. Particularly the one, four, two, four, one, even now I can still remember [she remembers the order of the numbers because of the rond de jamb exercise] because I am still going through the rond de jamb in my head [motor-planning] And when you were doing like the legato one and using your port de bras, it helped me think, and I also think it helped you feel, like you went up on the top note.[intervention increased thought and feeling] So obviously, when you go up to fifth everything has to be pulled up and braced a bit more [participant understood the muscular connection between the exercise and the ballet manoeuvre] so I think that helped as well and like as you were obviously, the recording was, going through it, I was going through the arms and when you sung it, it was something relatable again.[participant could 'relate' or understand the connection between ballet and singing]

Q Yea, yeah …er so if you did notice the inclusion of ballet terms how did this make you feel?

A It felt me .. it felt me? ha ha! (laughs and shakes head) it made me feel a little less stressed because I knew.. it was something relatable with something not so relatable [reduced stress due to connecting familiar ideas with the less familiar; vocal technique] so then the use of them as I said, bridged them together so I felt like you almost had a safety net [‘safety net’-makes singing sound life threatening] behind you so if you went wrong you kind of were brought back to the ballet terminology you were using. That sort of, if you forgot the vocal terms or how you were meant to do it you pictured [visualisation] the ballet move if you like …[ballet terms were conditioned and so unforgettable so linking them to singing terms helped the participant remember what to do]

Q m mm So when you hear a ballet term in whatever context, how do you experience that

A Erm I mean out of a ballet context it’s relaxing because it’s something you know [familiar language out of context is seen as ‘relaxing’] In a ballet class it’s a little bit more stressful because obviously the pressure is then on the ballet term itself [‘pressure’ to perform it optimally in a ballet class] whereas I guess using it as a distraction [a ballet term is seen as a ‘distraction’ from the ‘stress’ of a singing lesson make the student more comfortable] in a way to help you get [understand]the vocal term it’s something comforting as opposed to a stress

Q Yeah, yeah. I just wondered in terms of maybe planning. So, when you hear a term…

A I think again because, because it’s all relatable, so you sort of know where the ballet flow is going so if you were doing a port de bras most of the time it is smooth unless they say otherwise so straight away the specific term like the frappé you know when someone says frappé you know it’s going to be sharp sudden sort of movements so I guess you switch between the two. [the ballet term provides information on energy, attack, articulation and feeling]

Q So was there a difference between the exercises where you had ballet terms as and additional description, in terms of your understanding of the exercises?

I think you might have already answered that actually

A I think, I think so yeah. It sort of… it’s all relatable, so you sort of know where the ballet flow is going so if you were doing a port de bras most of the time it is smooth unless they say otherwise so straight away the specific term like the frappé you know when someone says frappé you know it’s going to be sharp sudden sort of movements so I guess you switch between the two. [intervention aided understandings other was no need for further explanation or repetition] It was quite straight forward of how to do it, so I think the ballet terms were a reinforcement [the description was straightforward but the ballet terms were a ‘reinforcement’] and obviously I think what helps that I’ve got quite a musical background so

the musical terms I understood but having the physical ballet reference as well made it even clearer what I was meant to achieve out of the exercises.[the musical term describes the sound the ballet descriptor provides the somatic information -how to achieve it]

Q Yep thank you did you think that the terms affected your singing in any way?

A I think it ..like I've previously said, if I did the exercises again I think because I am now aware of how they are meant to feel the ballet terms sort of gave me that oomph [stronger physical sensation] (laughing) I couldn't think of another word, so like in the Amazing Grace obviously I didn't go up to fifth, using the imagery of going up to fifth I felt like I supported myself more.[talks about the process of support] And obviously you didn't directly say you're going to have to support yourself properly on the higher note, but that yeah using the ballet terms sort of related to it. And I think it made it clearer [clarified] what we were meant to do coz obviously the ballet we hear almost every day and the singing terms aren't used as commonly as that [ballet references heard in all of the dance classes but singing references are only used in singing class]

Q Yeah so when did you start dancing?

A I started dancing about 3 or 4 years old and obviously they don't put in any dance terminology at that age until you are about 6 or 7 when you are old enough to comprehend how to… [outlines the long ballet training]

Q Still pretty young

A Yeah you're still young but at that age obviously you don't necessarily use the whole terminology but like a tendu so it's like smooth (hand gesture) like floor pressure [exactly] and everything and yeah I think I've grown up in a dance background and then obviously the music knowledge helps but singing-wise nothing. (Laughs)

Q Did you sometimes find vocal terminology… well how do you experience vocal terminology, you know, when people are talking about thin folds and tilt?

A So I think thin folds and thick folds are more of a stronger point like a regular term and tilt I understand what I should be doing but it's just how to get there if that makes sense? [understands should is happening physically but not how to initiate it] And I can see what you want me to do but I just can't bridge the gap between how to do it and what you are telling me to do, well not you particularly but just in general [understands the theory but has not had sufficient practical application]

Q You plural?

A Ha ha! In vocal class and obviously some of the terms they'll explain them as you go, but see everyone learns at different paces and sometimes it just doesn't click exactly what.. how to do it. [This participant echoes comments from participant 17. There is something missing in the explanation so they do not fully understand]

Q Yea do you think contextualisation would help .. doing it?

A Yeah

Q Doing it, having it explained, repeating it.

A Yeah even if the teacher gives you a little bit of feedback after the couple of times see I find if I did the exercises again I think because I am now aware of how they are meant to feel the ballet terms sort of gave me that oomph [stronger physical sensation] (laughing) I couldn't think of another word, so like in the Amazing Grace obviously I didn't go up to fifth, using the imagery of going up to fifth I felt like I supported myself more.[talks about the process of support] And obviously you didn't directly say you're going to have to support yourself properly on the higher note, but that yeah using the ballet terms sort of related to it. And I think it made it clearer [clarified] what we were meant to do coz obviously the ballet we hear almost every day and the singing terms aren't used as commonly as that [motor learning theory]

Q Yea, yea. So, did hearing the dance terminology affect your mood generally?

A It kind of made me less stressed. [it had a calming effect] it's like relatable terminology it sort of calms you down as I said before it's a reinforcement and a safety net like you know the dance terms well enough like it helps me remember an exercise. I know it was only one four two four but as soon as you said that my brain was going one four two [having to concentrate to try to remember the order of the numbers] whereas when you said the ronde jamb straight away my brain was like ah its fine one is here (hand movements) and it aligned with the positions [participant understood the exercise] I didn't end up thinking about the numbers I was thinking about the notes and going round (hand gestures) so it was almost a distraction but one that was a helpful distraction if that makes any sense. [she could forget about the order of the numbers which became automatic as soon as they were connected to rond de jamb]

Q yeah the exercise was designed so that the musical intervals, you might appreciate this as a musician, corresponded with the words. So two was a second, four was a fourth, but then in addition they corresponded to positions of the feet

A I think it was lots of small things that ended up making a big difference if that makes sense, which I really liked personally [enjoyed the intervention as it mad 'a big difference']

Q That's great well If you have any more thoughts share now but if not I will click stop.

Participant 17

Q How did you find the exercises?

A I found I found they were all moderately fine it's just that I find it difficult without like having the accompaniment [is unused to acapella singing] so as I usually go to a singing lesson and

they'll do these sort of exercises, it would be easier with having an accompaniment [singing without an accompaniment was more difficult because it was unusual]

Q Yea that that is definitely usual [meaning in a singing lesson it is usual to have and accompaniment and that students find it harder to sing without a guide melody if they are unused to this]

A So I usually hear it once and then it's like oh, oh now I have to do it and it's difficult to retain everything as we went and I was trying to focus on what else you were doing [identified that that the unfamiliarity of the exercises and the intervention was a lot to mentally process]

Q And maybe it feels a bit exposing as well?

A Yeah [identified that lack of guide melody was 'exposing'- researcher's word]

Q I do understand that. So, was there a difference compared with a normal singing lesson? In,… really of the language I think we've addressed the fact there's no accompaniment.

A Erm I found it so much easier with, you know, seeing like the dance terms and singing terms together. [intervention helped with visualisation] That made it so much easier for me to imagine what I was doing with my body [helped with motor-planning] coz I'm mostly dance trained and, I have been for ages but erm, but maybe doing it with the actual moves would help because I'm imaging it, but then I'm thinking right if I actually tried to do it I know how it would affect how the singing would sound.[motor-planning and anticipating the effect on singing] but maybe I'll try and do it with the move and then do it without the move and see if it will have that same like idea of like placement [seems keen to compare visualisation with executing the actual manoeuvre] but it's just to like make the two things work together and then you can take away one of the things and it would be probably easier to figure out. [is planning how to use the intervention going forward- shows interest]

Q I should have said.. but because I didn't want to talk about the dance terms before you experienced the dance terms, erm.. I would have said, like in a normal singing lesson while using this kind of language, then I would say if you wanna move then move.

A Because like when you were talking about the relevé thing I was like thinking of doing it [motor planning] with my feet I was like already under the table like thinking of right what I would do, but things like that, it made it more helpful [found the intervention 'helpful'] coz in my brain like s.. coz we watch people a lot I could like see someone doing it what seeing what I could implement in my own body if that makes sense? [visualisation and motor planning]

Q Yes, so you did notice the dance.. the ballet terminology?

A Yeah

Q When did you start learning ballet by the way?

A When I was three so it's a complete muscle memory ingrained everything in my brain (laughing) [confirmed the research hypothesis that operant conditioning takes place during ballet training and that this can be used to aid dancers learning to sing]

Q At what age did they start using the terms then?

A I would say probably as soon as they could, so they're like 'OK point your foot to the front' like you'd.. now I know it's a tendu, but they'd start saying 'here point your foot to the front' (indicates with hand) 'and that's a tendu' and I'd be like OK can you point your foot to the front and then be like oh can you do a tendu [describing initial ballet training where French terms are interchanged with English descriptions and learnt by repetition] so you like gradually building up. I used to teach the little ones as well, [understands the teaching process] so it's having that thing of like.. things like smiley feet (indicates turn out with hands) and like happy, sad feet [= not turned out] so you'd like do first smiley feet and you be like what.. 'what happens when you win a medal you are first and you are happy' [explains a teaching strategy used for young children to help them learn ballet positions] things like that so it like gradually building it up so they learn the terminology (smiling and nodding)

Q So when you hear a ballet term, whether it's in.. whatever context how do you experience that?

A I don't know I just it's like it's more like second nature thing [conditioned so that she no longer has to think – it has become a reflex]

Q But do you start to think about it?

A Yeah

Q Do you feel it? [asking about motor planning]

A Yeah coz when you were saying about arabesque, I'd be like ok what did Lisa shout at me in ballet for like (laughing) [emphasises the rigour and toughness of ballet training – remembers an instruction from her ballet teacher when she hears the word arabesque] it's things like that. Like keeping your ribs square like making sure your abdominals are all up in the right place I don't know [outlines muscular engagement and posture for ballet that is additionally useful for support in singing]

Q So you did notice the inclusion of ballet terms

A Yeah

Q How did this make you feel?

A They made me feel more relaxed because I get quite anxious [ballet language made the participant 'fell more relaxed' rather than 'anxious' which she identified is her usual feeling when in the voice studio] I get a lot of performance anxiety, in [views a lesson as a performance?] that sense. I feel very vulnerable when I'm talking about myself let alone singing by myself [heightened vulnerability when singing solo] and I definitely have quite a

lot of anxiety about that.. erm, so doing things like that [using and visualising ballet terms] are more comfortable to me, makes me feel more relaxed. So, when someone's in.. when we're in a singing class and someone's telling you to do something [phrased like it is an order not a suggestion or a request] like I understand, but it's hard to feel that with my body, but when you translate it into a dance term, I already know what that feels like, so it all correlates together in my brain? [suggests that dance terminology initiates motor-planning improving understanding].

Q So how do you feel when somebody's erm.. when it isn't a dance lesson but somebody speaks to you in terms that you understand, how does that make you feel about them maybe? [trying to see if there is a feeling connection with the practitioner if they use familiar language]

A I feel like sometimes if you haven't had a lot of singing experience and they are talking to you, like trying to make you understand, you are maybe a tiny bit babied (pulls a face, hand gesture) [implies that she has been patronised by practitioners] I'd say like they're trying to like make you understand ['make' rather than 'help' seems to emphasis the power disparity in a lesson] but when you relate it, it doesn't make you feel as stupid [identifies the intervention as beneficial in empowering the student] if that makes sense, like you are trying to learn something new so obviously you are gonna go slower than everyone else [seems to imply that everyone is quicker - feels less equipped?] and your gonna like be told it like (Chopping hand gesture.) very small, but like in sections but you do feel a little bit silly if that makes sense? [implies that practitioners have made her feel patronised]

Q Yes it does make sense to me, yeah. So, was there a difference between the exercises where you had ballet terms as an additional description in terms of your understanding of the exercises?

A Yeah (nod)

Q Did you think that the terms affected your singing in any way? Maybe you weren't aware?

A I don't think I was aware [participant was unaware of any changes to their singing] coz I was more making sure I was sounding right [focusing on the sound they were making- rather than on the process] anyway but erm.. Oh, I don't know

Q that's ok, it's ok not to know

A I don't know whether it did coz like I was saying, if you are doing the movement that's gonna affect your singing [participant thought that ballet movements would affect their singing] coz you are singing and doing something else at the same time, but maybe when you take it away you will be able to like see the difference? I don't know…[participant suggested that effects of the intervention might last]

Q It's good not to know. It's good to know and it's good not to know.

A (laughing)

Q It's all good! Did hearing dance terminology affect your mood?

A Yea I definitely felt relaxed a bit more relaxed [the dance terminology relaxed the participant] I felt yeah, I did know something [hearing the ballet language reminded the participant of their existing knowledge] I didn't feel just like silly coz sometimes when they're like explaining something I'm like I don't really get it. I don't wanna like, ask and go into more detail because I feel like I should know [Participant is self-judgmental and blames themselves for lack of knowledge]

Q Why should you know though?

A Because like if they've already explained it and I'll be like ok yeah I've got it.. [is too embarrassed to ask for further explanation when she has not understood and blames herself]

Q How long have you been learning to dance?

A Since I was three [she has studied ballet for at least 16 years]

Q How long have you been learning to sing?

A Not even one, well one like first year so that's it [realising the difference in the duration of study between the two disciplines]

Q So maybe you should cut yourself some slack?

A (laughing) OK yeah

Q If there's anything you like to add that's great if not I'll stop the recording.

Participant 18

Q so how did you find the exercises?

A Erm I found some of them really hard. Erm some of them I found, ..I found it easier to be fair when you said the dance terms erm I think [participant noticed the dance terms and said this made the exercises 'easier'] coz then I could visualise something [identified that visualisation aids understanding] instead of just focusing on the singing [external focus rather than internal 'focusing on the singing'] but I did find a few of them really hard. [found the exercises very challenging]

Q So was there a difference compared with a normal singing lesson in terms of the language that was used?

A Erm yeah because I think I could visualise what you meant [intervention helped participant to 'visualise'] so in the last one I did put that as 'extremely challenging' [Likert score] because I did find that really hard, [found the exercise very difficult] but I could understand what I was meant to do because of how you described it so, [port de bras] I knew what the aim was even though [intervention aided understanding but not execution] I couldn't really do it.. do what I was meant to be doing, yeah [understood the aim of the exercise due to

dance description but was not able to achieve it in the test the was uncertainty with the melody and participant chose a lower key]

Q So did you notice the use of ballet terminology?

A Yes

Q If you did notice the inclusion of ballet terms how did this make you feel?

A Erm I think more comfortable because singing is out of.. I'm quite new to it still so then there was a sense of familiarity when doing the exercise because then I could compare it to ballet. [comparisons to ballet initiated by the terminology made the participant 'more comfortable' due to the familiarity of the language]

Q How long have you been dancing?

A Erm eighteen years [strong possibility that conditioning has occurred based on the length of time studied]

Q So you started when you were quite young

A (laughing) Yes

Q Would you say that ballet is foundational In terms of dance or not?

A Yes definitely [confirmation that ballet is considered foundational]

Q you think so ok. Was there a difference between the exercises where you had a ballet term as an additional description in terms of your understanding of the exercises?

A Erm I think it made it clearer what I was meant to do so yeah I think so [intervention made it 'clearer' so aided understanding]

Q did you think the terms affected your singing?

A Er yeah I think so because the jaw one, for example, I could feel that I was going to move it and then I was like no coz that's the floor [motor-planning] so then I thought that can't move so it helped me [terminology 'helped' the participant to 'picture' the exercise] like picture and feel what I was meant to do I guess?

Q and did hearing the dance terminology affect your mood

A Erm, it made me probably less anxious because I feel less anxious in a ballet class then I would a singing lesson so that helped.[comparison to ballet class where participant feels 'less anxious'- ballet terminology lowered anxiety]

Q In your experience of your year group how do people often feel about singing?

A Scared [an extreme emotion]

Q Is that a general thing?

A I would say most people yeah, un-confident definitely. [participant suggests that singing anxiety is common amongst dancers]Q OK, and that's the end of the interview thank you very much. [overall this participant found that the intervention aided visualisation, understanding of the exercise and increased comfort but did not aid execution]

Appendix xii

INITIAL IN VIVO CODES

More Comfortable/comfortable Out of my comfort zone/Less comfortable/uncomfortable/struggle

Vulnerable stress/anxiety/anxious less stressed/less anxious

Imagine/imagery/visualise right/wrong/correct/incorrect/100%

In my head placement

Help/ helpful/understand/knowing confusing/didn't understand/distracting/not knowing

FIRST ROUND OF IN VIVO CODING

Positive words	Negative words
Comfort/comfortable/comforting	Uncomfortable/discomfort/struggle
More/most comfortable/settled	Less comfortable /nervous
Comfort zone/place/natural	Out of comfort zone/out of their depth
Less stressed/ took the stress away	Stressed/ stressing
Less anxious / scared	Anxious/ scared
Relaxed/ relax/ relaxing	Anxiety
Visual /visualisation /visually	Vulnerable
Imagine/picture/visualise/ to see	Confusing/distracting/don't understand
Imagery/image	
In my head / brain	
Thinking about moving through the movement	

SECOND ROUND OF IN VIVO CODING

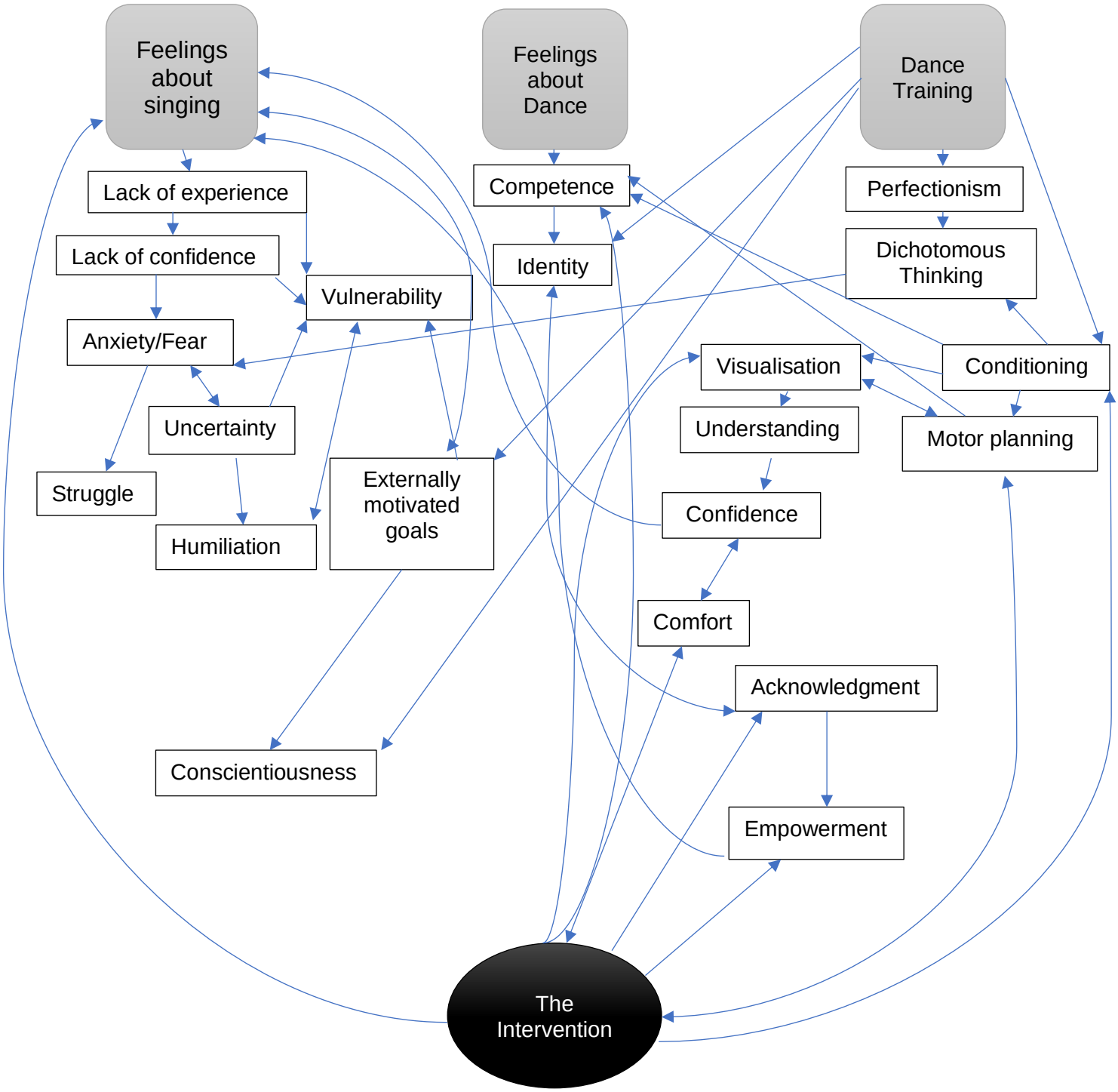
Dichotomous Thinking
proper how it should sound making sure I was sounding right I think I do it more correctly I didn't know I was doing it correctly and correct little things the correct posture you have to be in a certain position I'm doing it incorrectly like I felt I was doing it right as in get it vocally right abdominals are all up in the right place I know that I'm doing it wrong if you went wrong that probably isn't right if it's a ballet term it is what it is, there is no other version there is a right way to do it, and a wrong way constantly wanna get things right and when they don't get things right it makes them uncomfortable I can kind of feel that it's right I can hear that it's right when it is right like have the right posture

Externally set goals
I understood where my placement was meant to be how I was meant to do it meant to do I know what I was meant to do what I was meant to be doing made me feel physically how I was meant to do it how you were meant to do what I was meant to do what I was meant to achieve how they are meant to feel what we were meant to do I could understand what I was meant to do I couldn't really do it, do what I was meant to be doing made it clearer what I was meant to do feel what I was meant to do it's meant to sound like was meant to be doing what you want me to achieve

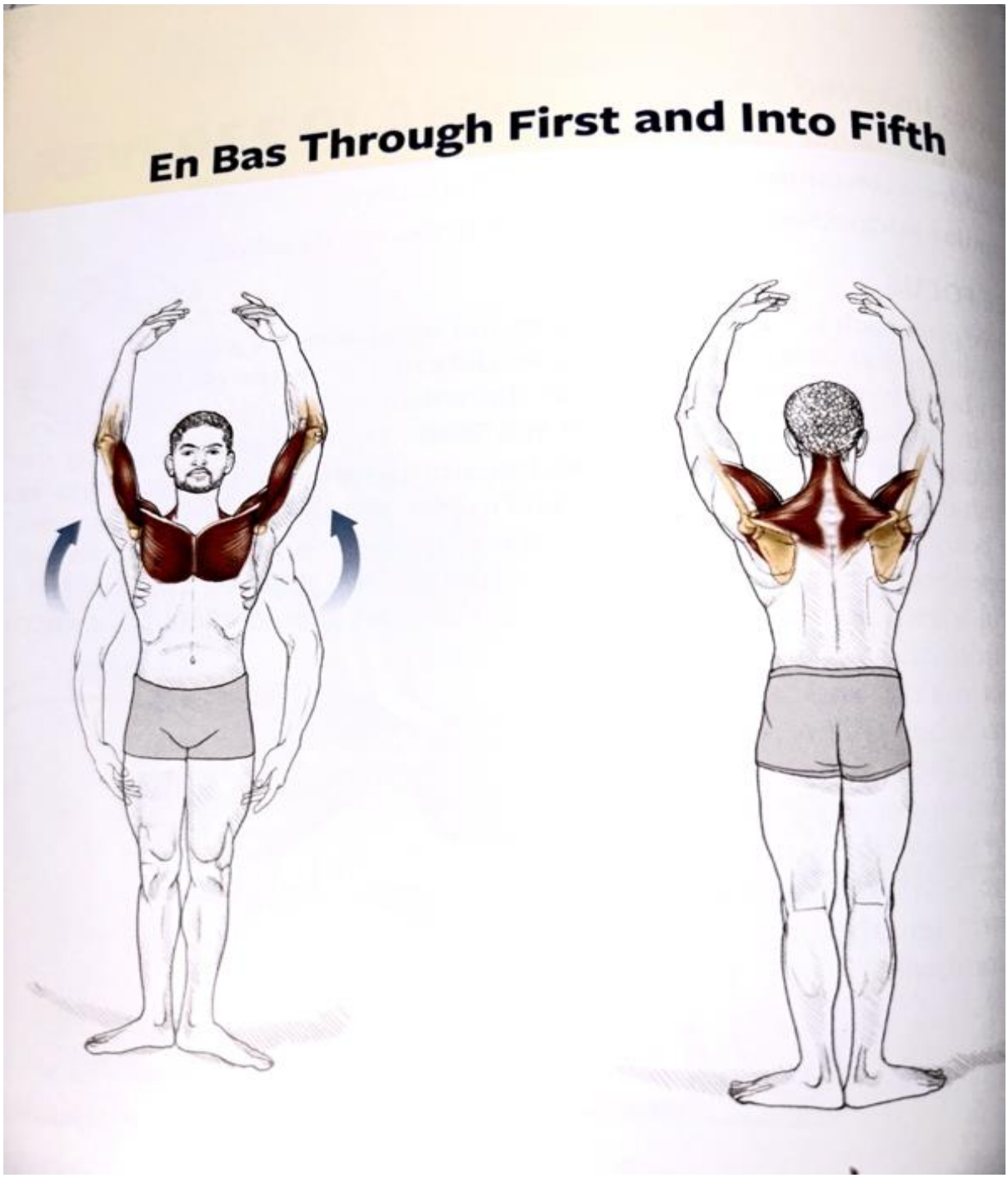
Perfectionism
I'm a perfectionist if you're a dancer you're constantly wanting to be perfect and there is no perfect like perfect it I am a bit of a perfectionist 100% 100 per cent I knew exactly meant you knew exactly helped me to know exactly what I was being asked for like I knew exactly what to do to stick to the exact vocal terms it just doesn't click exactly

Appendix xiii

MIND-MAP OF INITIAL FOUR THEMES THAT WERE CONSTRUCTED AND THEIR RELATIONSHIP TO THE CODES



Appendix xiv



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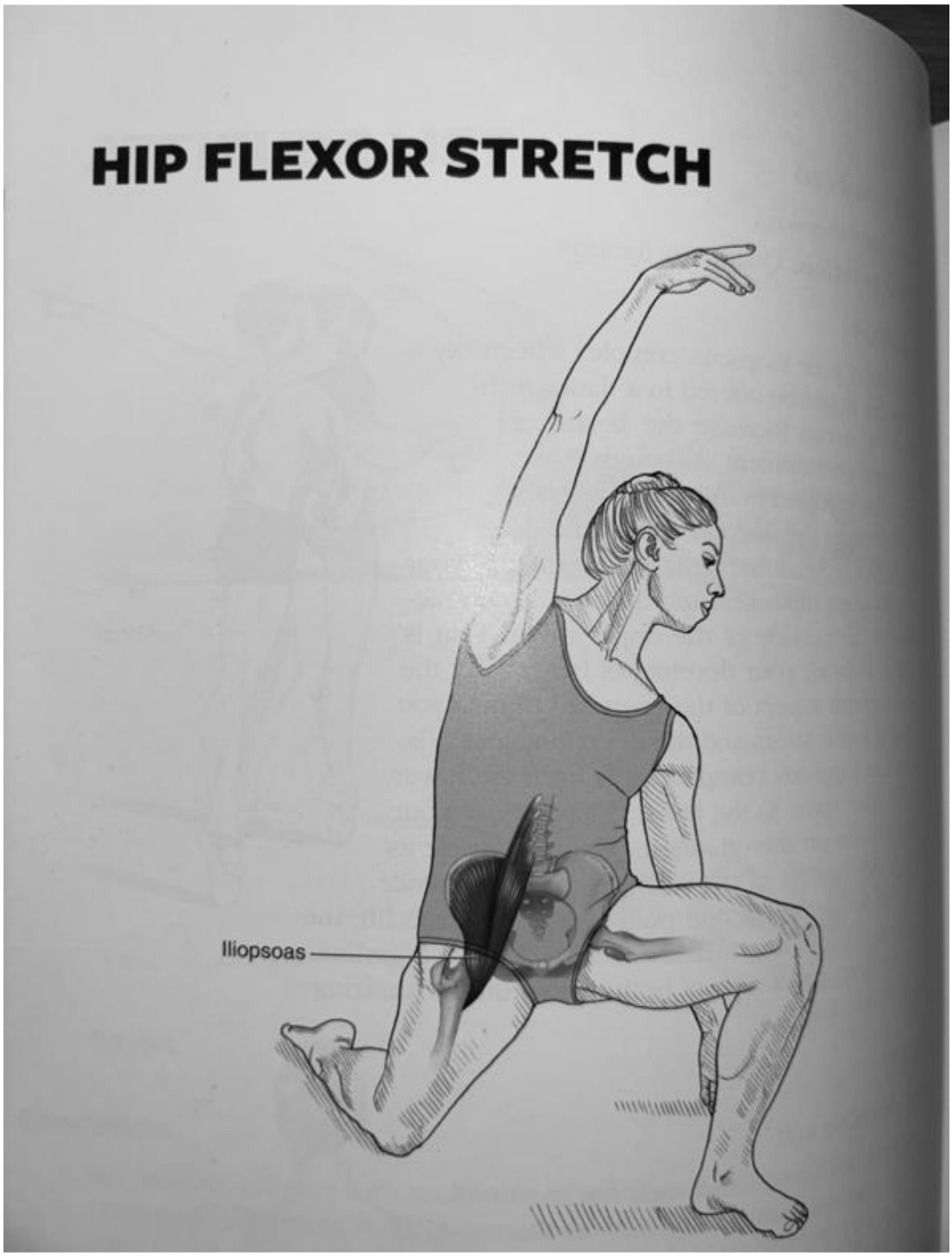
Green Haas, J., (2918) DANCE ANATOMY 2nd ed. Jacqui p250 *Human Kinetics* IL.USA



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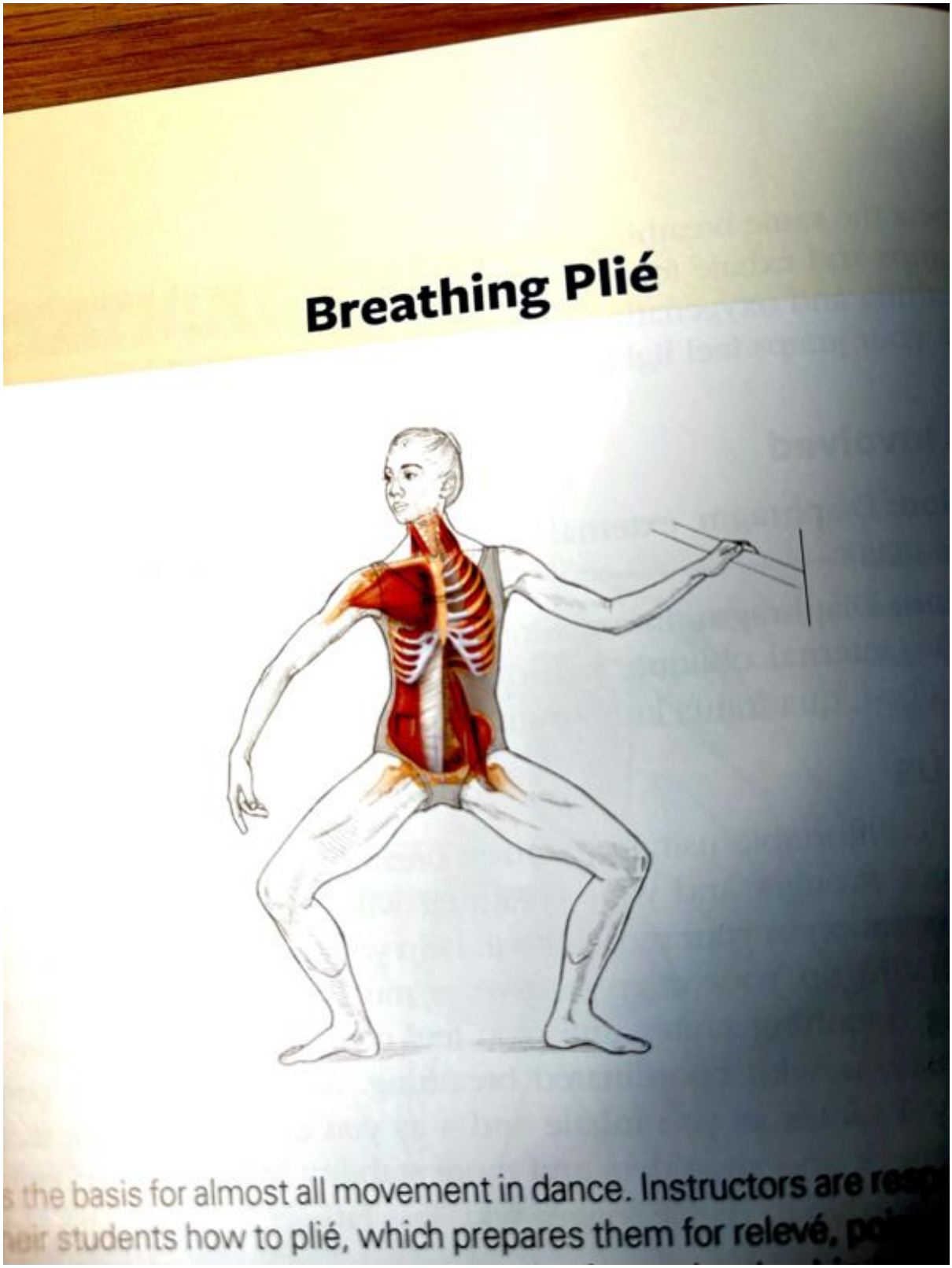

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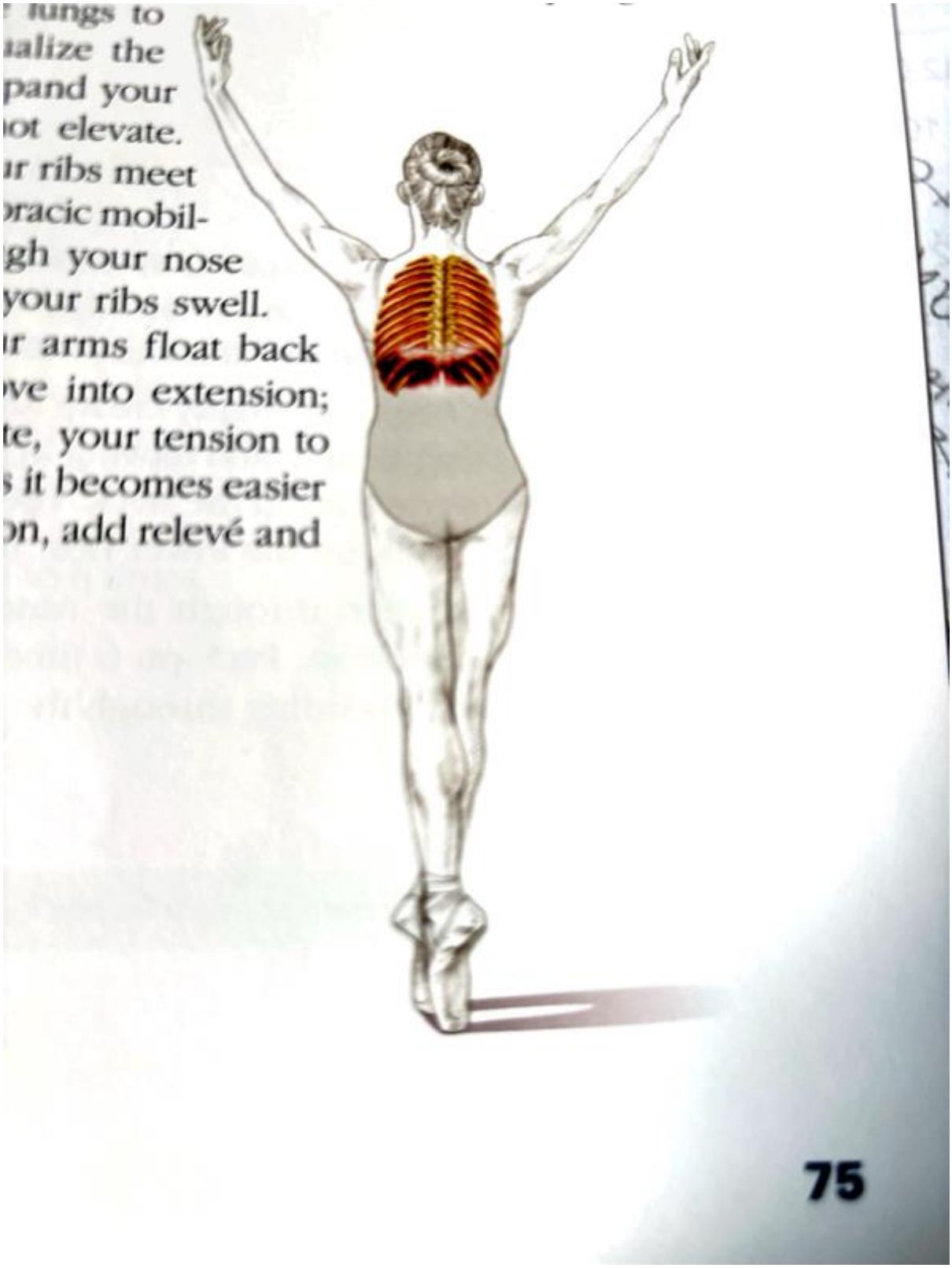
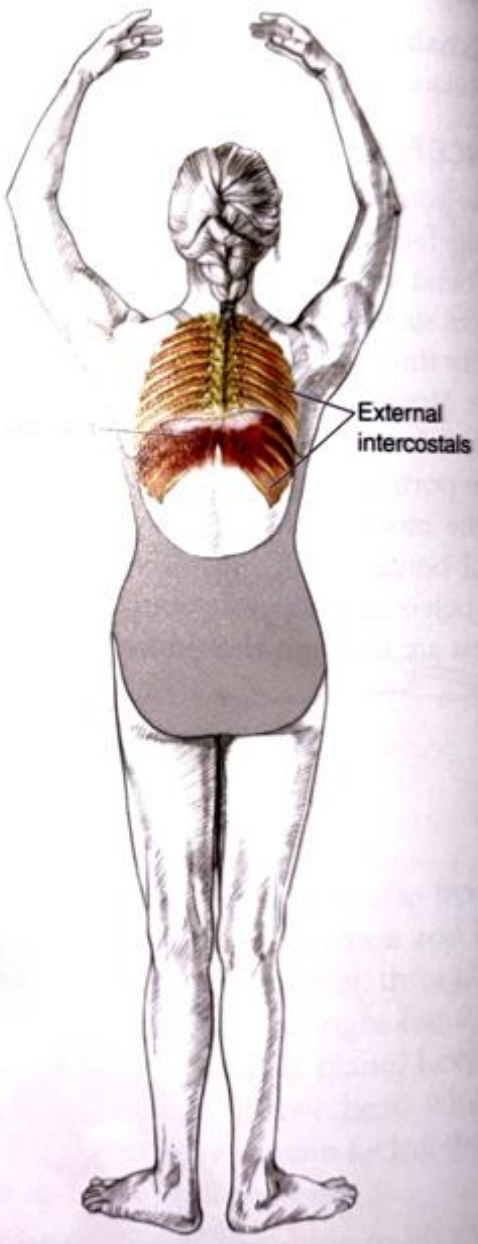


Green Haas, J., (2918) DANCE ANATOMY 2nd ed. Jacqui p75 *Human Kinetics* IL.USA

BREATHING WITH PORT DE BRAS

Start position.

Arms in second position.



Arms overhead.

Green Haas, J., (2918) DANCE ANATOMY 2nd ed. Jacqui p74 *Human Kinetics* IL.USA