

Yvette Cummings (Student 2117960)

BMPF 7010 Presentation

Ballet Terms in The Voice Studio: A Mixed Methods Study

Dewey's five step reflective model

- Identify a problem, the solving of which is beyond existing knowledge
- Reflection on the problem
- Devise a methodology for investigating the problem
- Refine the methodology and develop a hypothesis
- Test the hypothesis

(Costello, 2014; Dewey, 1933; 1910, Mohamed, Rashid and Alqaryouti, 2022)

Dewey's five step reflective model

Identify a problem

Reflection on the problem

Devise a methodology



(Haas, 2020)

Ballet



Foundational (Lambrinos, 2019; Greene Haas, 2018; Causey, 2024; Lambrinos, 2019; Woodward, 2017)

Long training (Twitchett, Koutedakis and Wyon, 2009)

Structured (Van Delinder, 2000)

Regimented (Laemmli, 2015).

French language terms (Kassing, 2013)

Dancers! What are they like?



Perfectionists (Angyal, 2021; Nordin-Bates, 2019)

Self-criticism (Fekih-Romdhane, et al., 2023)

Dichotomous thinking (Egan, S.J., Piek, Dyck, Rees, 2007; He, 2016)

Imposter Syndrome (Votaw, 2018).



Refine the methodology and develop a hypothesis

Conditioned motor-response

- During training, Ballet manoeuvres are linked to French terms and repeated until they become conditioned (Kassing, 2013; Crow, 2020; Lindblom, 2020; Karin, 2016 p2; Naito et al. 2002).
- A conditioned motor response to a stimulus begins to prime muscles before conscious awareness (D'Ostilio and Garraux, 2012).
- If instructed to carry out a different motor activity, such as singing, whilst muscles are primed for ballet, the priming for a dance manoeuvre may affect the motor-process for singing due to transference (Stoykov and Madhavan, 2015; Schaefer, Patterson, and Lang, 2013, Sefandonkis, no date).

(Karin, 2016; Melton, 2015)

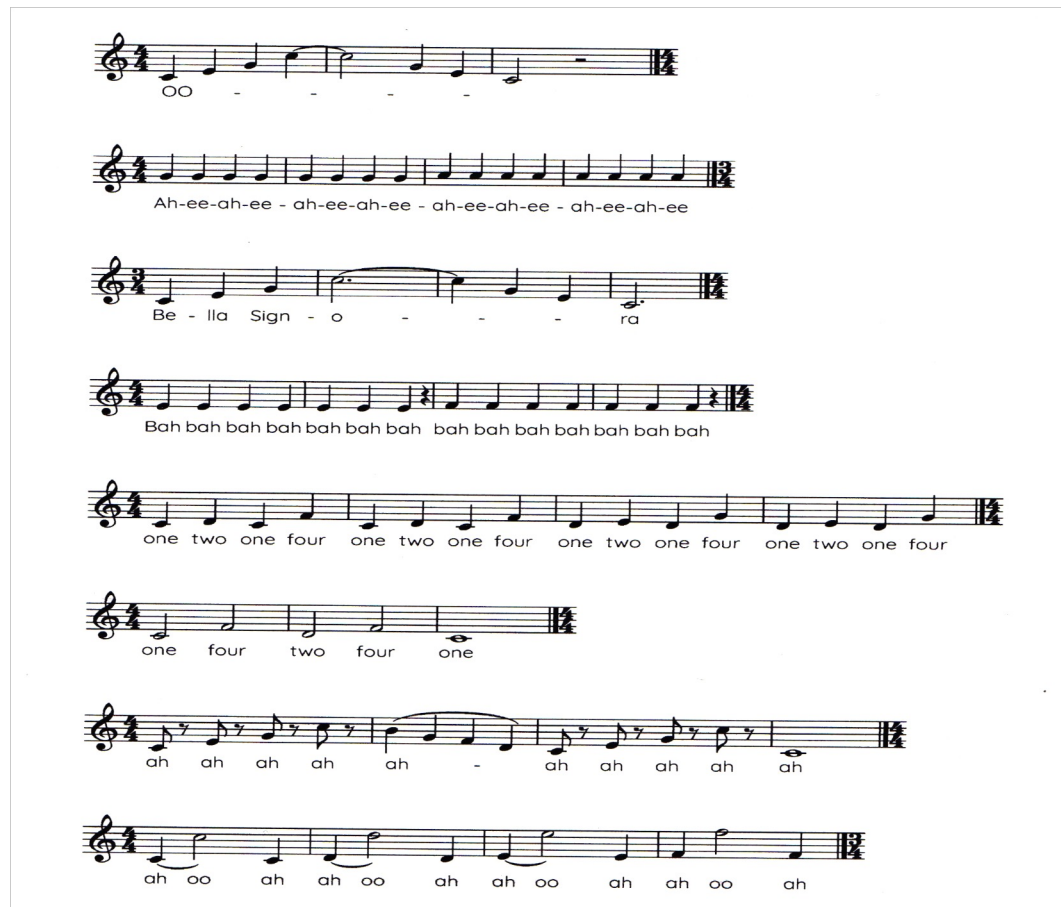
Familiar Language

Familiar language might have a positive psychological effect on the students, potentially alleviating their anxiety and allowing a greater focus on learning (Smith and Penazzi, 2020).



Test the hypothesis

Vocal Exercises



oo - - - - -

Ah-ee-ah-ee - ah-ee-ah-ee - ah-ee-ah-ee - ah-ee-ah-ee

Be - lla Sign - o - - - - - ra

Bah bah bah bah bah bah bah bah bah bah bah bah bah bah

one two one four one two one four one two one four one two one four

one four two four one

ah ah ah ah ah - ah ah ah ah ah

ah oo ah ah oo ah ah oo ah ah oo ah

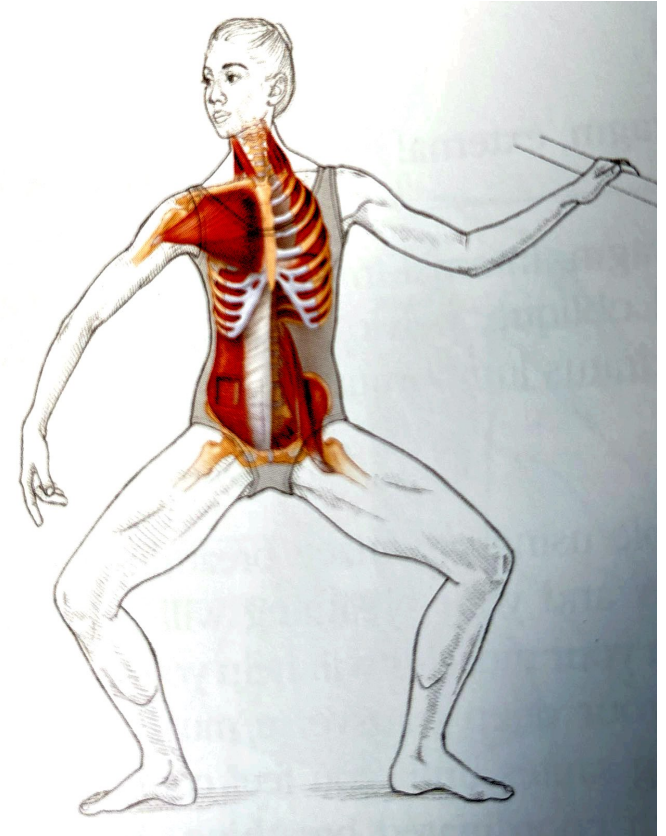
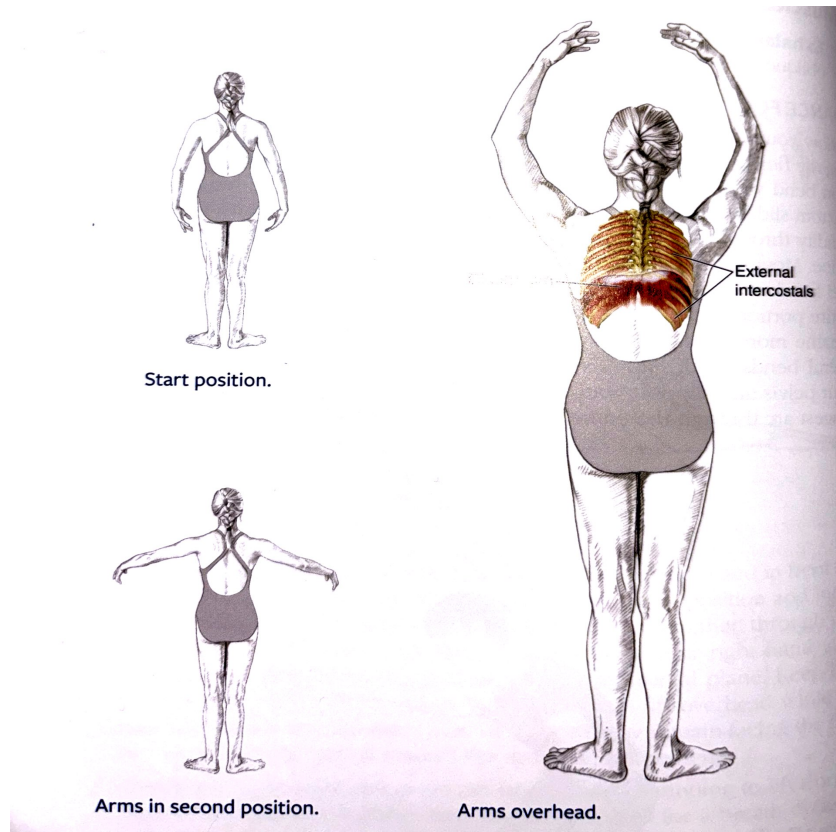
Exercise 1 : Arpeggio

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' which should be 'hooted' or 'whooped' and the transition from one note to next should be continuous. 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.

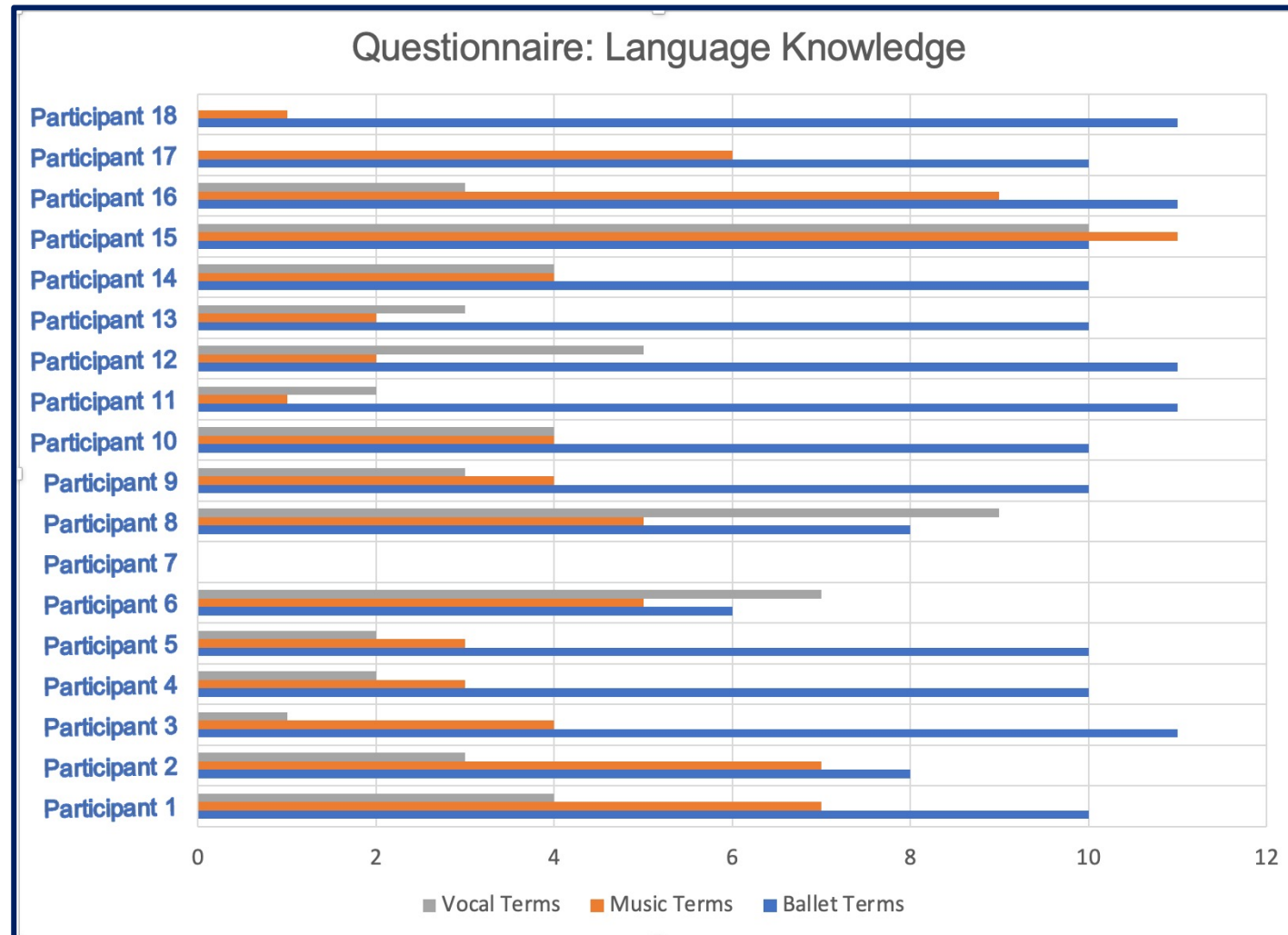
Images from Dance Anatomy by Jacqui Green Haas



(Siccardi, Tariq and Valle, 2023; Emerich Gordon and Reed, 2020; Volløyhaug, Semmingsen, Laukkanen et al., 2024; Greene Haas, 2018) .

A summary of questionnaire answers, regarding ballet, vocal and music terms.

Participants' scores relate only to terms where they indicated they were confident in their knowledge of a term



For example, Participant 18 indicated confident knowledge of all 11 Ballet terms; 1 of the music terms but none of the vocal terms, hence there is no grey bar. Participant 6 had a moderate knowledge of all three categories, but knew the fewest ballet terms; and Participant 15 had the best all round knowledge

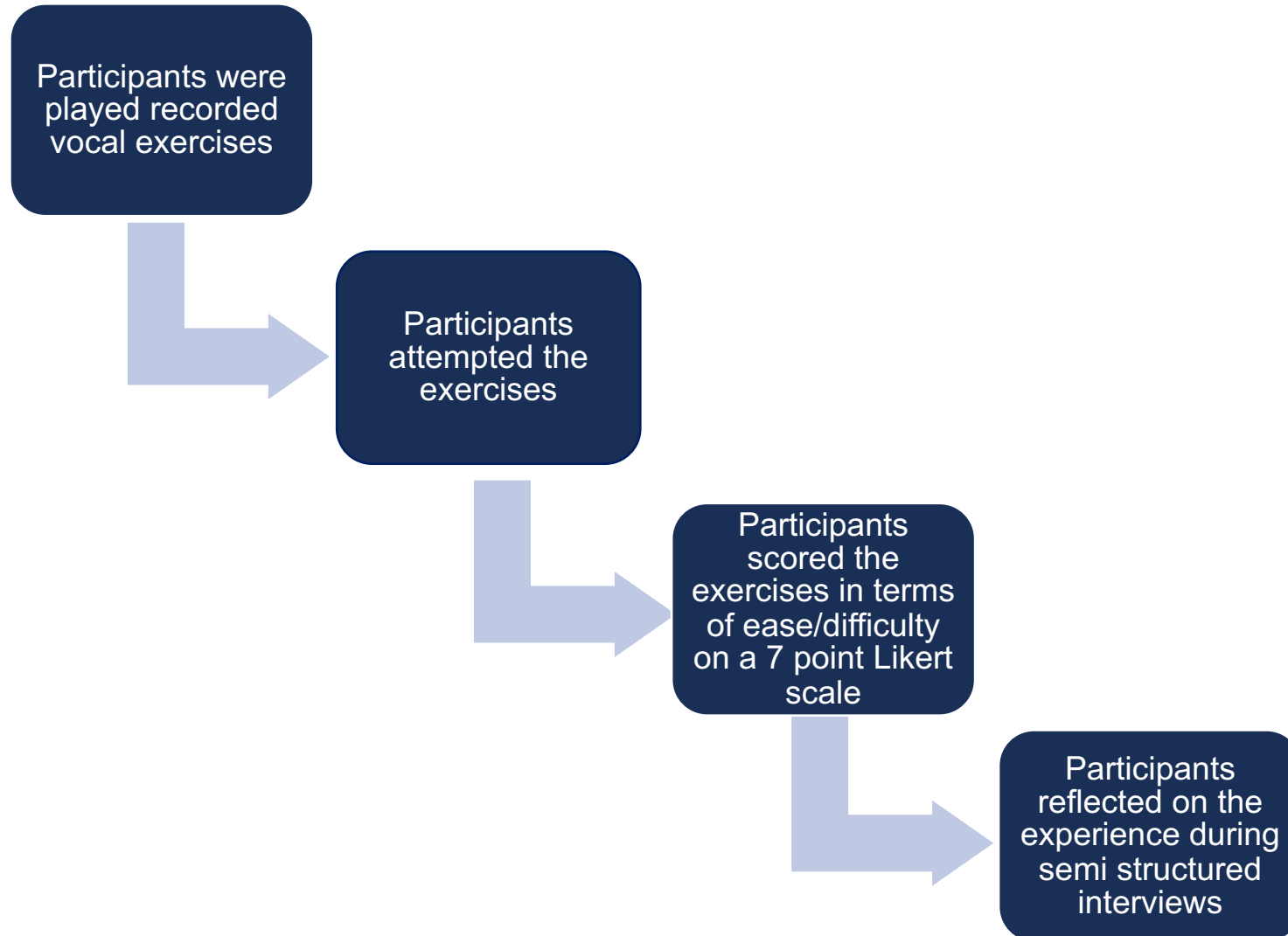
Vocal exercise randomization sheet

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										

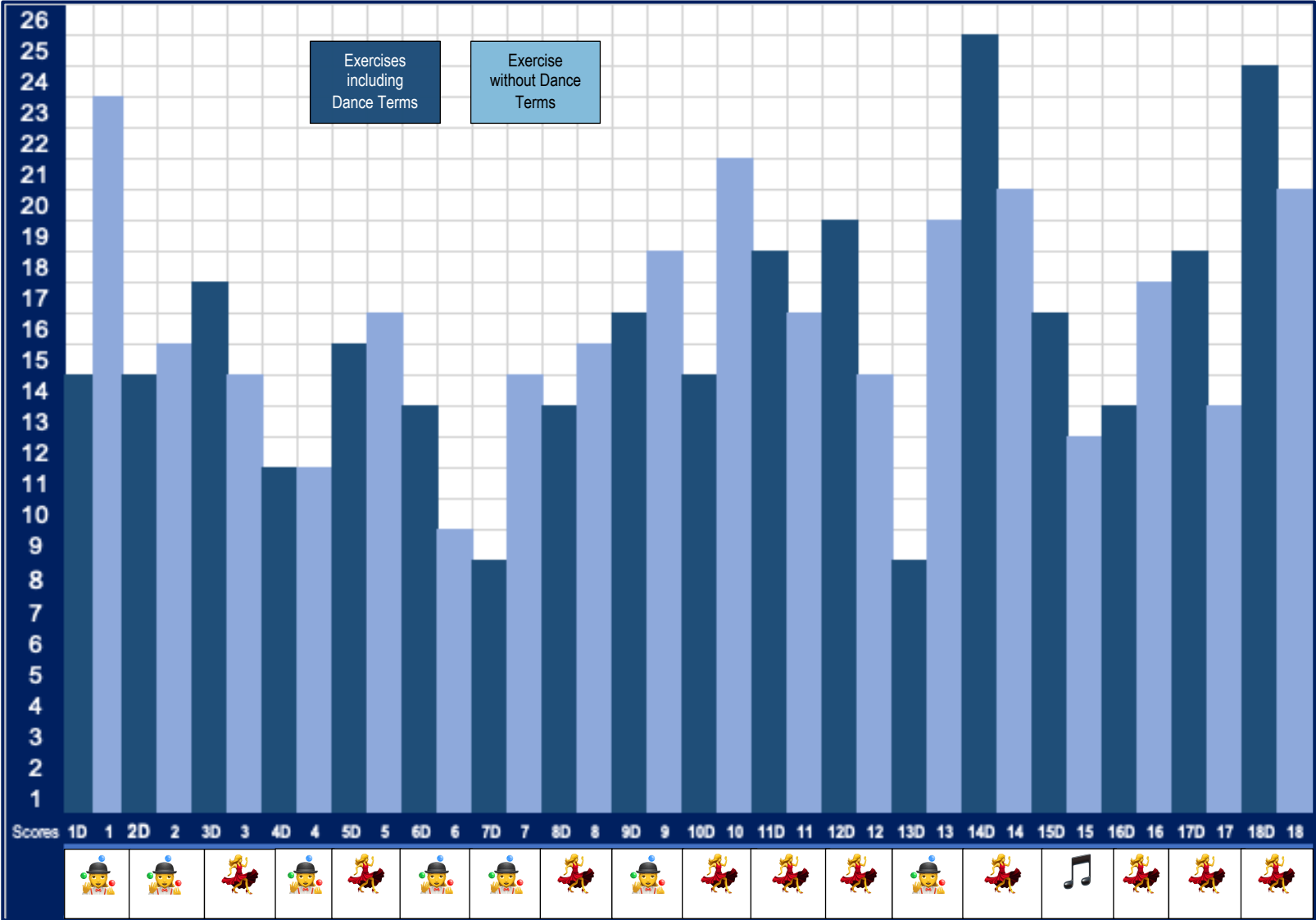
 = Exercise has instruction and demonstration only

 = Exercise has an additional dance descriptor (recording will be stopped and this will be spoken by the researcher)

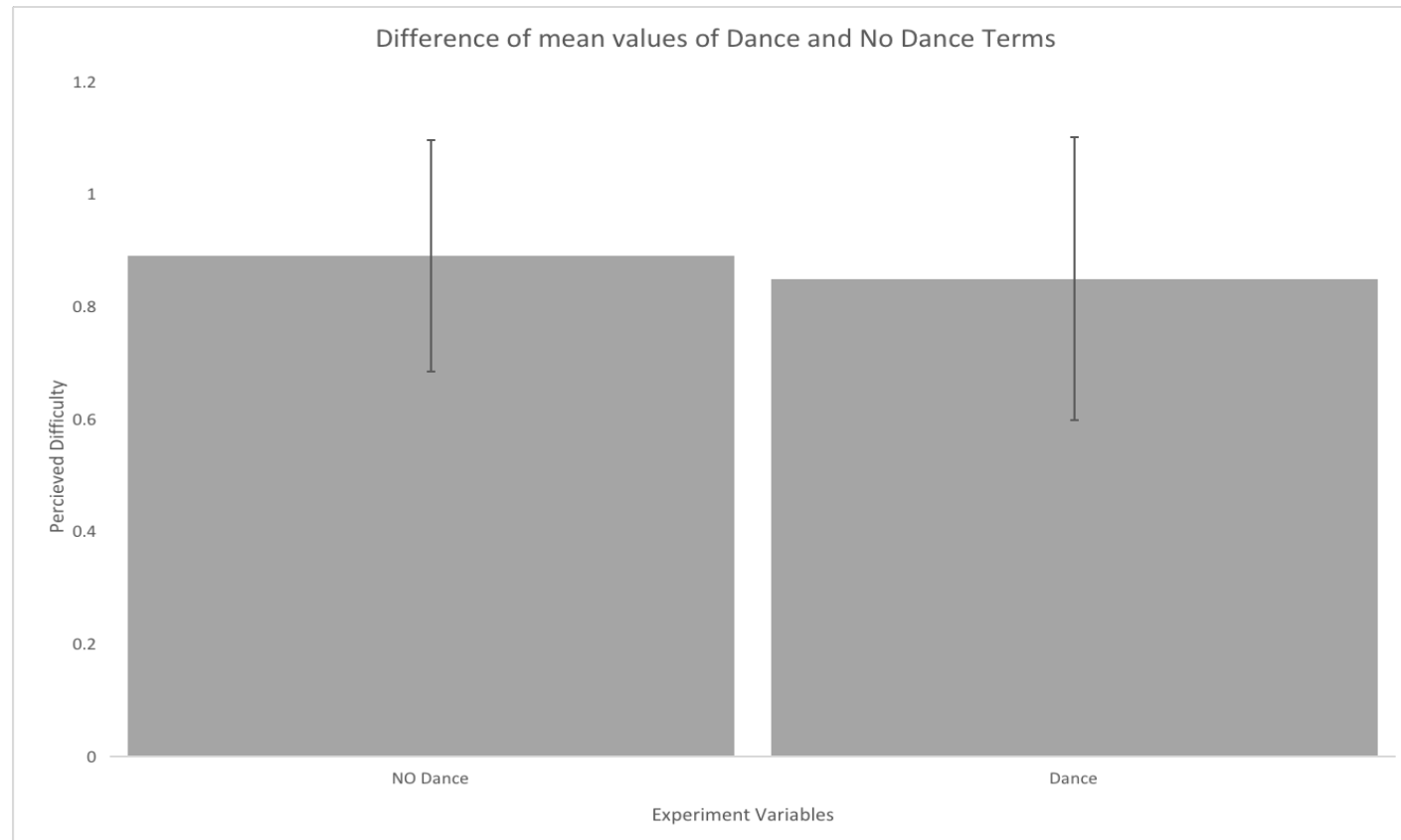
The experimental stages



Combined Likert scores for the vocal exercises divided into 'dance' and 'no dance' conditions



The results of SPSS analysis of Likert data from the experiment



The mean average of scores for exercises without an additional dance descriptor was higher than the mean average of score for exercises that included dance terms. The difference of mean averages shows a trend indicating that exercises with additional dance descriptors were perceived as easier by the participant cohort, as indicated in figure 1. No dance mean =0.8858 Dance term mean = 0.8519.

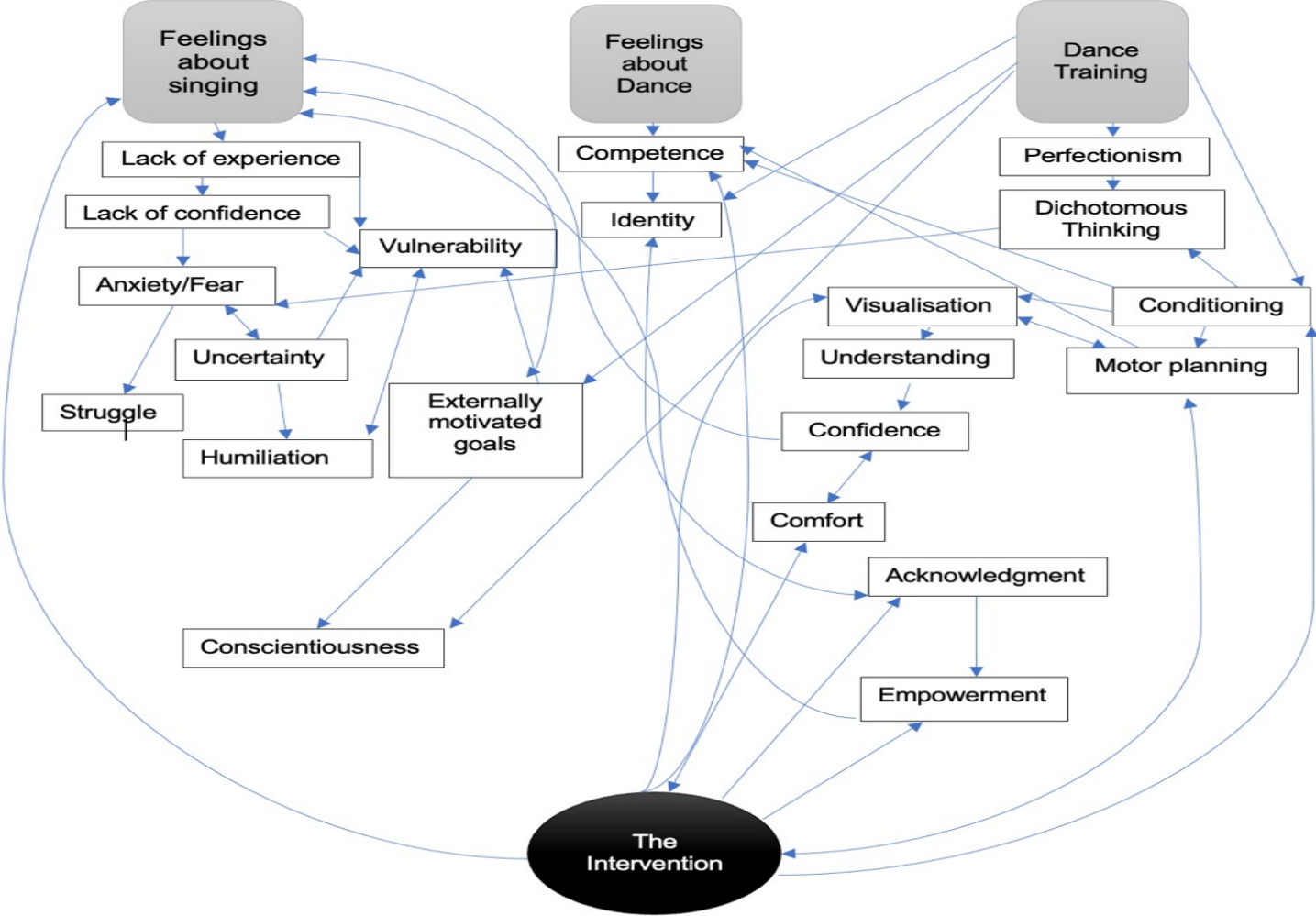
A paired T test however, was non-significant. $t(17) = .508$, $p = .618$, $d = .120$.

First and second rounds 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	

Dichotomous Thinking proper how it should sound <u>making</u> 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 <u>wanna</u> 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

Mind-map of the initial four themes constructed after In Vivo and latent coding



Final themes generated from coding

Dancers are nervous singers

Sub themes: Lack of experience – lack of competence – lack of confidence
Master > student power - perfectionism – dichotomous thinking
Visual learners – lack of visual elements in singing lessons
Identity – lack of relatedness
Fear – avoidance

Pedagogical language can be excluding

Sub themes : Discomfort
Confusion - humiliation - vulnerability
Does not aid visualisation
Lack of relatedness
Negatively affects self esteem

Dance language is relatable and prompts visualisation and motor planning

Sub Themes: Familiarity – comfort - competence
Identity – being 'seen'
Safe
Relatable
Visualisation – motor planning – understanding

Perfectionism: feelings of inadequacy and nervousness

“If you’re a dancer you’re constantly wanting to be perfect and there is no perfect. 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 7)

“I know some people that I’m friends with, they’ll just won’t come to the one-to-ones ‘cause they’re scared to sing. They don’t wanna sing, it doesn’t make sense to them. That whole negativity around singing for dancers.. a lot of people wanna do it, they just find themselves that they can’t. It puts them under pressure it makes them vulnerable. Dancers don’t like to be vulnerable in a situation”(Participant 7)

Pedagogical language can be excluding

“If you were to give me lots of fancy singing terms I don’t think I’d understand. It makes me feel a bit like, not intelligent because I don’t know what they are talking about.” (Participant 3).

“There was so many like new words..., I kinda go all scary... Like they kind of just throw all the terms out at you” (Participant 10).

“They are talking to you, like trying to make you understand, you are maybe a tiny bit babied...you do feel a little bit silly.” (Participant 17)

Pedagogical language may not be helpful to this cohort

“...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.” (Participant 4)

“...it takes a longer time for me to process and I have to either watch them do it, or ask them to repeat it again and,.. it’s a bit more time consuming.” (Participant 7)

“If somebody describes to me a singing term I think they have such subjective meanings, whereas dance tends to be quite cohesive 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”. (Participant 6)



Pedagogical language is “subjective” (participant 6)

Pedagogical language is evolving and is not standardised (Rollins Biglerand and Osborne, 2021).

For example: Four types of belt voice (Popeil, 2007).

Vocal practitioners are schooled in different pedagogies:

Estill Voice Training (Fantini et al, 2016),

Complete Vocal Technique (CVT) (Sadolin, no date),

Classical Bel Canto (Magid, 2023)

Hustler Technique (Hustler and Rodd-Marling, 1976).

Dance language aids visualization and motor planning

“I really liked the visualisation stuff like with the dance ...when the imagery that was with it, it was easier.” (Participant 1)

“when I had a ballet demonstration,...it made it so much easier. And ...it made so much more sense to me because I could visualise it!”
(Participant 12)

“When you explained.. what it would look like in my head...it made me visualise it better... I could see a picture in my head. I can like see myself doing it and like, well then it almost feels like the same but not the same.” (Participant 4)



Dance language aids visualization and motor planning

“Even if I can’t do it yet vocally, I still know what it’s meant to sound like just from picturing it with the arms for example” (Participant 5).

“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” (Participant 6).

“When ...you were saying about arabesque and everything and I pictured in my mind but also the muscle memory of it...and I think when you are ...doing it, it actually helped...I could make the sounds better and easier.” (Participant 10)



Conditioned Ballet Terms

```
graph TD; A[Conditioned Ballet Terms] --> B[Visualisation and motor planning]; B --> C[Understanding of vocal technique on a somatic level]; C --> D[Potentially, increased competence]; D --> E[Potentially, increased confidence and perhaps, motivation.];
```

Visualisation and motor planning

Understanding of vocal technique on
a somatic level

Potentially, increased competence

Potentially, increased confidence and
perhaps, motivation.

REFERENCES

- Angyal, C.,(2021) 'The Toll of Perfectionism: On the Physical and Mental Health of Ballet Dancers' in *The Literary Hub* available at: <https://lithub.com/the-toll-of-perfectionism-on-the-physical-and-mental-health-of-ballet-dancers/> (Accessed: 3 May 2024)
- Braun, V., and Clarke, V., (2020) 'One size fits all? What counts as qualitative practice in (reflexive) thematic analysis?' *Quality Research in Psychology*. Advance online publication
- Causey, T., (2024) 'Dance Training for Music Theatre Students' *Majoring in Music.com* Available at: <https://majoringinmusic.com/dance-training/> (Accessed 13 May 2024)
- Chua, L. K., Jimenez-Diaz, J., Lewthwaite, R., Kim, T., and Wulf, G. (2021) 'Superiority of external attentional focus for motor performance and learning: Systematic reviews and meta-analyses'. *Psychological bulletin*, 147(6), 618–645. Available at: <https://doi.org/10.1037/bul0000335>
- Costello, M. (2014) 'Situatedness'. In: Teo, T. (eds) *Encyclopedia of Critical Psychology*. (pp.1757-1762) Springer, New York, NY. Available at: https://doi.org/10.1007/978-1-4614-5583-7_470
- Crow, S., (2020) 'The ballet class: educating creative dance artists?' *Doctoral Thesis* University of Roehampton available at: https://pure.roehampton.ac.uk/ws/portalfiles/portal/3906328/The_Ballet_Class.pdf (Accessed 28 May 2024)
- Dewey, J. (1933). *How We Think: A Restatement of the Relation of Reflective Thinking to the Educative Process*. Boston, MA: D.C. Heath & Co Publishers.
- D'Ostilio K, Garraux G. (2012) 'Brain mechanisms underlying automatic and unconscious control of motor action'. *Front Hum Neurosci*. 26;6:265. doi: 10.3389/fnhum.2012.00265. PMID: 23055963; PMCID: PMC3458240.

Egan, S.J., Piek, J.P., Dyck, M.J., Rees, C.S., (2007) 'The role of dichotomous thinking and rigidity in perfectionism', *Behaviour Research and Therapy*, Volume 45, Issue 8 pp.1813-1822 ISSN 0005-7967, Available at: <https://doi.org/10.1016/j.brat.2007.02.002>.

Emerich Gordon, K., Reed, O., (2020) 'The Role of the Pelvic Floor in Respiration: A Multidisciplinary Literature Review', *Journal of Voice*, Volume 34, Issue 2, Pages 243-249, ISSN 0892-1997, Available at:
<https://doi.org/10.1016/j.jvoice.2018.09.024>.
(<https://www.sciencedirect.com/science/article/pii/S0892199718302558>)

Fantini, M., Fussi, F., Crosetti, E., and Succo, G., (2016) 'Estill Voice Training and voice quality control in contemporary commercial singing: an exploratory study', *Logopedics Phoniatrics Vocology*, DOI: 10.1080/14015439.2016.1237543 Available at: <http://dx.doi.org/10.1080/14015439.2016.1237543>

Fekih-Romdhane, F., Sawma, T., Obeid, S., & Hallit, S. (2023) 'Self-critical perfectionism mediates the relationship between self-esteem and satisfaction with life in Lebanese university students'. *BMC psychology*, 11(1), 4. Available at:
<https://doi.org/10.1186/s40359-023-01040-6>

Greene Haas, J., (2018) *Dance Anatomy* second edition Pub. Human Kinetics USA

Hass, L., (2020) 'Vocal training for dancers' *Dance Australia* available at: <https://www.danceaustralia.com.au/expertise/vocal-training-for-dancers> (Accessed: 24 March 2024)

He, X., (2016) 'When perfectionism leads to imperfect consumer choices: The role of dichotomous thinking', *Journal of Consumer Psychology*, Volume 26, Issue 1, pp. 98-104, ISSN 1057-7408, Available at: <https://doi.org/10.1016/j.jcps.2015.04.002>.

Hustler, F. and Rodd-Marling, Y., (1976) *The Physical Nature of the Vocal Organ. A Guide to the Unlocking of the Singing Voice Hardcover* – Unabridged, 12 July 1976
by Hutchinson & Co; 3rd edition

Karin J. (2016) 'Recontextualizing Dance Skills: Overcoming Impediments to Motor Learning and Expressivity in Ballet Dancers'. *Frontiers in psychology*, 7, 431. p2 Available at: <https://doi.org/10.3389/fpsyg.2016.00431>

Kassing, G., (2013) *Beginning ballet* Published by Human Kinetics Available at: <https://us.humankinetics.com/blogs/excerpt/the-importance-of-becoming-proficient-in-ballets-several-languages> (Accessed 23 May 2024)

Laemmli, W.E. (2015). A Case in Pointe: Romance and Regimentation at the New York City Ballet. *Technology and Culture* 56(1), 1-27. <https://dx.doi.org/10.1353/tech.2015.0011>

Lambrinos, E. M. (2019) *Building Ballet: developing dance and dancers in ballet* Doctoral Thesis Department of Sociology and Special Policy Faculty of Arts and Social Sciences The University of Sydney Available at: https://ses.library.usyd.edu.au/bitstream/handle/2123/22101/2020_Elena%20Lambrinos_Thesis_Complete.pdf?sequence=1 (Accessed: 20 August 2024)

Leech, K. A., Roemmich, R. T., Gordon, J., Reisman, D. S., & Cherry-Allen, K. M. (2022) 'Updates in Motor Learning: Implications for Physical Therapist Practice and Education'. *Physical therapy*, 102(1), pzab250. Available at: <https://doi.org/10.1093/ptj/pzab250>

Lindblom, E., (2020) *Rethinking Classical Ballet Pedagogy: Examining Advancements that Integrate a Modern Approach* Master's Thesis 187 University of Colorado Available at: <https://digscholarship.unco.edu/cgi/viewcontent.cgi?article=1243&context=theses> (Accessed: 3 July 2024)

Magid, B. A. (2023) 'Beyond Bel Canto: Applications of Contemporary Commercial Music (CCM) Voice Pedagogy in the Secondary Choral Classroom'. *Music Educators Journal*, 110(2), 54-58. Available at: <https://doi.org/10.1177/00274321231212773>

Melton, J., (2015) *Dancing with Voice: A Collaborative Journey Across Disciplines* Voice Theatre Solutions NY USA

Mohamed, M., Rashid, R. A., and Alqaryouti, M. H. (2022) 'Conceptualizing the complexity of reflective practice in education'. *Frontiers in psychology*, 13, 1008234.
<https://doi.org/10.3389/fpsyg.2022.1008234>

Naito, E., Kochiyama, T., Kitada, R., Nakamura, S., Matsumura, M., Yonekura, Y., and Sadato, N. (2002) 'Internally simulated movement sensations during motor imagery activate cortical motor areas and the cerebellum'. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 22(9), 3683–3691. Available at:
<https://doi.org/10.1523/JNEUROSCI.22-09-03683.2002>

Nordin-Bates, S.M., (2019) 'Striving for Perfection or Creativity? A Dancer's Dilemma', *Journal of Dance Education*, 20(1), pp.23-34
<https://doi.org/10.1080/15290824.2018.1546050> (Accessed: 29 May 2024)

Popeil, L., (2007) 'The Multiplicity of Belting' *Journal of Singing*, Volume 64, No. 1, pp. 77-80 National Association of Teachers of Singing Available at:
https://www.nats.org/Library/Science_Informed_Voice_Pedagogy_Resource/Article_Popeil_Multiplicity_of_Belting_JOS-064-1-2007-077_1_.pdf (Accessed: 8 August 2024)

Rollins Bigler, A., and Osborne, K., (2021) 'Voice Pedagogy for the 21st Century: The summation of Two summits' *Journal of Singing* volume 78, No. 1, pp. 11-28 Available at: https://www.nats.org/Library/JOS_On_Point/JOS-078-01-2021-11.pdf (Accessed: 21 May 2024)

Sadolin, C., (no date) 'Complete Vocal Technique in Four Pages' Chapter 15 in: *So You Want to CCM (Contemporary Commercial Music): A Guide for Performers* Published by NATS Available at: https://www.nats.org/SYWTS_CCM_-_Online_Resources.html (Accessed: 3 August 2024)

Salters-Pedneault, K., (2024) 'What is Dichotomous Thinking?' *Verywellmind.com* Available at: <https://www.verywellmind.com/dichotomous-thinking-425292#:~:text=When%20people%20engage%20in%20dichotomous,some%20types%20of%20eating%20disorders>. (Accessed: 13 June 2024)

Schaefer, S. Y., Patterson, C. B., and Lang, C. E. (2013) 'Transfer of training between distinct motor tasks after stroke: implications for task-specific approaches to upper-extremity neurorehabilitation'. *Neurorehabilitation and neural repair*, 27(7), 602–612. Available at: <https://doi.org/10.1177/1545968313481279>

Sefandonkis, A., (No date) 'Principles of Neuroplasticity' *AOTA.Org* Available at: <https://www.aota.org/-/media/corporate/files/publications/otp/principles-of-neuroplasticity-final.pdf> (Accessed: 21 August 2024)

Siccardi, M.A., Tariq, M. A., Valle, C., (2023) 'Anatomy, Bony Pelvis and Lower Limb: Psoas Major' *StatPearls Publishing LLC*. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK535418/> (Accessed: 10 April 2024)

Smith, C., and Penazzi, D., (2020) 'Triggering Language and maths anxiety in non-medical prescribing students' *Journal of Prescribing Practice* 2:5, 226-232 Available at: <https://www.magonlinelibrary.com/doi/abs/10.12968/jprp.2020.2.5.226> (Accessed: 14 June 2024)

Stoykov, M. E., and Madhavan, S., (2015) 'Motor priming in neurorehabilitation'. *Journal of neurologic physical therapy : JNPT*, 39(1), 33–42. Available at: <https://doi.org/10.1097/NPT.0000000000000065>

Twitchett, E. A., Koutedakis, Y., & Wyon, M. A. (2009) 'Physiological fitness and professional classical ballet performance: a brief review'. *Journal of strength and conditioning research*, 23(9), 2732–2740. Available at: <https://doi.org/10.1519/JSC.0b013e3181bc1749>

Van Delinder, J. (2000). Dance as Experience: Pragmatism and Classical Ballet. *Social Thought & Research*, 23(1/2), 239–250. <http://www.jstor.org/stable/23250406>

Volløyhaug, I., Semmingsen, T., Laukkanen, AM. *et al.* (2024) Pelvic floor status in opera singers. a pilot study using transperineal ultrasound. *BMC Women's Health* 24, 67
Available at: <https://doi.org/10.1186/s12905-024-02895-6>

Votaw, A., (2018) 5 “Musical Notes” to Get Your Dancers Singing Available at: <https://dance-teacher.com/5-musical-notes-to-get-dancers-singing/amp/> (Accessed: 20 June 2024)

Wierzbicka, Anna,(2007) 'The Story of right and wrong and Its Cultural Implications', *English: Meaning and Culture* (New York, 2006; online edn. Oxford Academic, Available at: <https://doi.org/10.1093/acprof:oso/9780195174748.003.0003>,

Woodward, H (2017) ‘The Importance of Ballet’ *Inspiration Dance academy* website. Available at: <https://inspirationdance.com/blog/the-importance-of-ballet/#:~:text=Both%20strength%20and%20flexibility%20are,to%20an%20increase%20in%20confidence!> (Accessed: 12 June 2024)

Wulf, G., (2012) ‘Attention focus and motor learning: a review of 15 years’ in: *International Review of Sport and Exercise Psychology*, Available at: https://gwulf.faculty.unlv.edu/wp-content/uploads/2018/11/Wulf_AF_review_2013.pdf (Accessed: 9 July 2024)