

**MODULE 3 BPMF7008**

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**Ways into Readiness**

**A mixed-methods research project to develop a preparatory practice  
routine for the spoken voice in rehearsal and performance**

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# RESEARCH PROPOSAL

## Ways into Readiness

A mixed-methods research project to develop a preparatory warm up practice routine for the spoken voice in rehearsal and performance.

## Context

I am a freelance voice coach working at the Royal Academy of Music (RAM) as well as at City Lit a further education college where I teach on a variety of voice related courses. I have skin in the game in this research topic, as I initially trained as an actor and worked as one for about five years. Research will be undertaken at (RAM) with current students training on the MA Musical Theatre actors in training (MTAT). My query began when I noticed MTAT working with unhelpful physical tendencies and speaking with voices that hadn't been warmed up sufficiently before speaking. There is currently a scarcity of research on the actor's spoken voice (Gates, 1998; Wilson, 2011; Evans, Thomaidis and Worth, 2019; Kruglova *et al.*, 2021). However, there is a particular dearth as it relates to musical theatre actors in training (MTAT). The focus is primarily on the singing voice, as Gates (1998) notes it is easier to "measure as it deals with exact, not approximate pitches" (1998, p.6). This proposal hopes to add to this nascent area of research on the preparation and training for vocalisation of actors coming into rehearsal and performance. This enquiry will endeavour to elicit what is useful for the actor to prepare muscularly and somatically to voice in performance/rehearsal. Rehearsal requires that the actor practice being in performance mode, therefore preparation or warm up, similarly to the athlete is necessary (Hoch and Sandage, 2018).

I hope to add to the knowledge base in this area, enhance my teaching practice and provide further areas of potential research. Additionally, I hope to add to the discussion of the legitimacy of research on the actors' voices. Should not MTAT, who are vocal athletes, deserve equal research output as their sporting equivalents?

## The Research

Before the research period begins, the participants will fill in a pre-research questionnaire to establish their existing warm-up protocols. Then, a short sequence engaging body and voice will be taught to participants at RAM or online. For two weeks, participants will capture data in participant diaries containing pre and post warm-up questions for quantitative and a

space for free form responses, for qualitative data. A post-research questionnaire will also be provided for their thoughts at the termination of the project.

This will be a mixed methods research (MMR) project using collection of qualitative and quantitative data, using a convergent parallel design. MMR is advocated in this case to capture a depth of responses, as voice work is both somatic and psychological (Garcia-Falgueras, 2019).

| RESEARCH TIMETABLE            |              |
|-------------------------------|--------------|
| WORK PROGRESSION              | DATES        |
| Participants sought           | w/c 2.6.25   |
| Warm up sequence taught       | w/c 9.6.25   |
| Research period               | 16 – 29 June |
| Draft                         | 31.7.25      |
| VSC Final Submission Deadline | 14.8.25      |

I will be undertaking the research in my place of work, therefore will be an insider researcher (Costley, Elliott and Gibbs, 2010; Bukamal, 2022). Mitigation of ethical considerations will be informed by my rigorous adherence to the guidelines outlined by RAM and UWTSD whose ethics committees have both reviewed and signed off my ethics forms. (Research Integrity and Ethics | University of Wales Trinity Saint David, Research strategy, policies and ethics | Royal Academy of Music). Participant confidentiality will be protected and compliance with data protection policy will be followed

Being an insider researcher which could involve bias will be counteracted by the use of a bracketing journal for the researcher (Rolls and Relf, 2006; Sansom, 2019) and the use of McCormack's lenses (McCormack, 2000) to ensure objectivity.

Desired personal learning outcomes are:

- Increased proficiency in appropriate technology to capture and analyse data i.e. google forms, Jamovi, Taguette
- Increased knowledge of student expectations and understanding of what a warm up is, and what their current practice is, to provide further clarity when teaching my next cohort of students.

- Increased awareness of what differing aspects students require to warm up
- Links to further study in how sports science might help combat vocal fatigue

It is hoped this study will provide the researcher with further directions of research into vocal preparation, as it relates to the (musical) theatre actor in training. Also, a congruent deepening of teaching practice within the studio.

## INTRODUCTION

A sculptor kneads clay before using it, before performing, Stanislavski extols actors to “to do something similar to tune our inner strings, to test the keys” (Stanislavski, 1989, p. 250,). Working MTAT who use their spoken and singing voice in rehearsal/performance, is the subject of my research. Melton notes that singers and actors often feel torn between their respective practices but:

“actors who sing and singers who act must have both (1) a concern for voice quality and (2) an unconscious availability of the whole instrument – body and voice “  
(Melton and Tom, 2022, p.xiii)

At RAM, I have witnessed MTAT working with unhelpful physical tendencies, as well as inadequate vocal expressivity. During class time in term two, we explored warm ups. This revealed their confusion about *what* they *were* and, what was required *in* them, thus my research question emerged. Through this research, what could I explore that might be practically useful for speaking text in rehearsal/performance and, could I discover current student practices?

There is not enough research on this aspect of the actor’s life and, specifically the MTAT who will use both singing/speaking when working. As there is a lack of research on actor’s voices, parallels must be drawn from singing pedagogy, but as Melton encourages, we should view it as one integrated voice used for speaking and singing (2022).

Actors transition from their body/voice into the character body/voice. Schechner (1985) describes the “polycorporeal” transition into presence as, *ways in* (WU) and *ways out* (cool down) moving between the ordinary and performative realms (see Figure 1.).

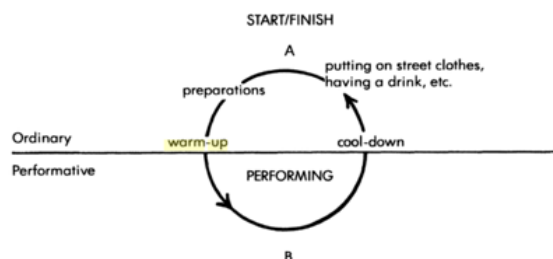


Figure 1 Ordinary/Performative (Schechner, 1985, p. 126)

## Learning Objectives

My learning objectives were an increased proficiency in data analyses technology, as well as increased knowledge of student practice when doing WU. I have also been provided with

my two final objectives of increased awareness of what differing aspects students require to warm up. This is a further area of research and additional research into what can be drawn from sports science to help the performance of the MTAT.

## LITERATURE REVIEW

I began consulting grey literature from voice practitioners, who have provided valuable tools and insight to my practice. Practitioner empiricism, given that voice is a somatic, psychophysical undertaking (Patel, Shrivastav and Eddins, 2010) felt important to honour. Whilst surveying these practitioners, I was looking for an explicit pedagogical statement of intent for WU and, of connecting to the body, breath, then the making and shaping of sound. Surveying the literature (Berry, 1973; Linklater, 1976; McCallion, 1988; Rodenburg, 1997; Houseman, 2002; Nelson, 2015) there were exercises relating to these elements, but there was no explicit outlining of its' foundational aspects, as a regular practice, embedding knowledge and building expertise. Nor was there any mention of the WU's capacity to act as a diagnostic tool, giving the speaker/singer feedback about how their voice feels and what more they may be required to do (Miller, 1996; Moorcroft and Kenny, 2013).

### Peer Reviewed Literature

Master et al. (2012) note the intensification of research into actor's voices from 1980's. However, considering that research into singing voice began in the C17th, taking hold in the C19th with the bel canto tradition (Stark, 2003), there is currently a significant imbalance. In their review of articles on WU and cool downs (Ribeiro *et al.*, 2016), from an initial 1782 reduced to 11, only one specifically addressed actors (McHenry, Johnson and Foshea, 2009) and there appear to be only two studies, that specifically address the actresses voice (Master, De Biase and Madureira, 2012; Master *et al.*, 2013).

This lack of literature on the actors' voice forces the researcher to turn to other resource to find parallels and useful data. Therefore, I focussed on two streams:

- sport
- singing

### Sport

McArdle, Katch and Katch (2010) note that preliminary exercise helps the 'performer', their term for a sports person, prepare physiologically and psychologically also reducing the

possibility of injury. They define two categories of WU, a “loosening up” of body exercises such as calisthenics and/or stretching, the second, specific, relates to “big muscle, rhythmic movements that provide skill rehearsal in the activity”(McArdle, Katch and Katch, 2010, p.568,) whilst increasing body temperature and stimulating the neuromuscular system (Fradkin, Zazryn and Smoliga, 2010). Principles which relate to the actor, as part of a vocal WU, the body is normally stretched to release tension and increase flexibility, then through phonation and articulation the vocal muscles are warmed up. Because WU increases blood flow to muscles and decreases viscosity in the vocal folds (Elliot, Sundberg and Gramming, 1995) and therefore, making voicing easier.

The relevance of the sports literature is its’ alignment with WU principles because of the necessity of specific exercise for specific sports (Samson *et al.*, 2012) as well as in addition, combating fatigue and preventing injury (Safran, Seaber and Garrett, 1989). This tallies with Hoch and Sandage (2018) whose review of exercises principles for singing pedagogy note that skill acquisition exercises had historically been the foundation of WU before Miller (1986) and Titze (2000). However, the exercises principles of specificity, overload and reversibility need to be present, as well as fatigue resistance training in WU exercises (Titze, 2000; Hoch and Sandage, 2018). Balance needs to be maintained between muscles being worked beyond what they are used to develop but not “detract from optimal performance’ (Hoch and Sandage, 2018, p.80).

### **Singing WU Strategies**

I was looking for a similar articulation of the WU framework from singing pedagogy. I found research into choral WU singing strategies ( Telfer, 1995; Jordan, 2005; Titze, 2008; Katada, Yoshida and Kita, 2025) and Elliott et al’s (1995) research, titled “*What happens during vocal warm-up?*” Subjects were first recorded, then received a WU protocol from a professional singer. Although their subjects articulated their voice feeling ‘better’, there was a lack of consistency in a concomitant lowering of phonation threshold pressure (PTP), concluding that a “decrease in vocal fold viscosity which accompanies a vocal WU” was not a primary factor in PTP. (Elliot, Sundberg and Gramming, 1995b, p.43). Although of course there are more measures than just PTP to assess the voice.

### **Conclusion**

Grey literature provided exercises, but not an explicit assertion of the pedagogy that underpins the WU. The studies reviewed are looking at specific interventions mostly affecting acoustic parameters (PTP, jitter, fundamental frequencies, noise to harmonics ratio

and singing power ratio) (Elliot, Sundberg and Gramming, 1995b; Bough *et al.*, 1996; Motel, Fisher and Leydon, 2003; Amir, Amir and Michaeli, 2005; Portillo *et al.*, 2018). However, this fundamentally fails to address central connections in the actor's panoply between body-voice-mind-emotion. There is work to be done to enlarge the breadth of work looking at what the actor vocally, physically and psychologically has to do to prepare to perform. Neither I, nor my students have access to scientific equipment and laboratory support to carry out this kind of research. However, I would also assert that just assessing voices acoustically cannot be taken as a measure of how the singer/actor moves the listener. As Bozeman and Ragan (2022) note, teachers in the voice studio do not have the luxury of practicing protocols like scientific studies but things discovered in the studio have "ecological validity" because they are centred on the practitioners' experience and because they derive from "intelligent, attentive, creative, and intuitive response to what the, student is presenting". (Bozeman and Ragan, 2022, p.390). Part of this research necessitated the participants listening to and assessing themselves. The only feedback they had being somatic, aural, or if they chose, to record their voice. As well as learning to sing, dance, act, train their voices, they are also training to listen to themselves, to ask a simple question, did this WU work for you and do you feel physically/vocally better? Yes, of course, we can question their responses, but ultimately we have to trust their instinct.

## **Methods and Methodology**

### **Research Paradigm**

This research is grounded in a constructivist paradigm, which offers the opportunity to bridge the gap, through practitioner-based enquiry, between theory and practice (Scott, 2024). As Cresswell (2003), notes, constructivists "generate or inductively develop a theory or pattern of meanings" as they research (2003, p.9). The learner, in this paradigm is centred and feeds into my own desire to depart from any master/student binary and from Freire's (1970) "banking" model of education, where the teacher deposits knowledge into the student. What the student knows is less central than *how* they know, and it can offer a "deeply humanistic and respectful approach to the researched" (Pilarska, 2021, p.64) whilst deeply engaging with the "participants' views of the situation being studied" (Creswell, 2003, p.8). I would concur with Sansom (2016) that constructivist principles exist in the voice classroom with explorations and activities that involve the student's collaboration with others and engagement of their senses.

## Research Design

This research uses a mixed methods design involving both quantitative and qualitative data, allowing as it does a “synergistic combination” of these two approaches (Plano Clark, 2017, p.2). As Tashakkori and Creswell (2007) note when your research includes interconnected qualitative and quantitative elements, answering what, how and why will necessitate both elements to reach conclusions. My research is qualitative first, with the quantitative data used to supplement the data and attempt to draw out patterns. Mason (2006) states that social experience is multidimensional and, we are “impoverished” (2006, p11) if we only view a single dimension. She further adds that social lives are lived and experienced on macro and micro levels and therefore lived experience “transcends and transverses them...and so should our methods” (Mason, 2006, p.12). My design prioritised qualitative data because it potentially offered more insight into the somatic and psychological state of the participants, which I felt the quantitative data alone would not. Additionally, my research question needed the quantitative data to map physical conditions which influence voicing, with the hope that the qualitative would elicit insights into practices, questions, ideas the participants had about the task project. As Shorten and Smith (2017) note, MMR provides further directions of study illuminated by the connections and contrasts of the two data sets.

Before the commencement of the live research period, I wished to assess the participant somatic equilibrium and collect data about what their daily practice was and how their somatic state might feed into that. Using MMR, capturing both quantitative data, through questionnaires and qualitative data through research diaries, to assess what was currently being done seemed the most appropriate. There is concurrence with the necessity to prepare across the three strands whether it is somatically, psychologically or technically.

## Scales

In the PDQ I used a Likert scale with four points, which retrospectively I realised, having completed the research, should have been five as it did not leave me with a mid-point in the data. The other scale, drawn from an established model, the Evaluation of the Ability to Sing Easily (EASE) scale as developed by Phyland *et al.* (2013) to assess the participants voice, was an attempt, in conjunction with the former, to draw out useful quantitative data.

## Ethics and Insider Research

Ethics forms were signed of by my respective institutions (see Appendix 2 & 3). Participants were provided with consent forms, informed participation was voluntary, and they could withdraw at any time. Data was stored in a password protected cloud storage and nonymity was preserved by assignment of unique identifiers. Given the neurodiversity of my participants (6 of the 7) attempts were made with the design and provision of questionnaires, to make them accessible. Clear instructions and timings were provided as recommended by Le Cunff et al. (2024) for working with neurodiverse participants

As an insider researcher, there is always the possibility of bias, however, Greene (citing Aguiler 1981, 2014) states that bias may be a source of “insight as well as error”(Aguilar, 1981, p.26), which can be offset by reflective writing (journal). Van Heugten (2004) suggests that stream of consciousness writing is one way to experience creating distance and “deconstruct the familiar world” (Van Heugten, 2004, p.28) which my journal has proved useful for.

## The Research

My sample was my current cohort of students, who wished to participate and is both purposive as the students fulfil the requirement of being MTAT and convenience sampling. For the progression of the research (see Figure 2).

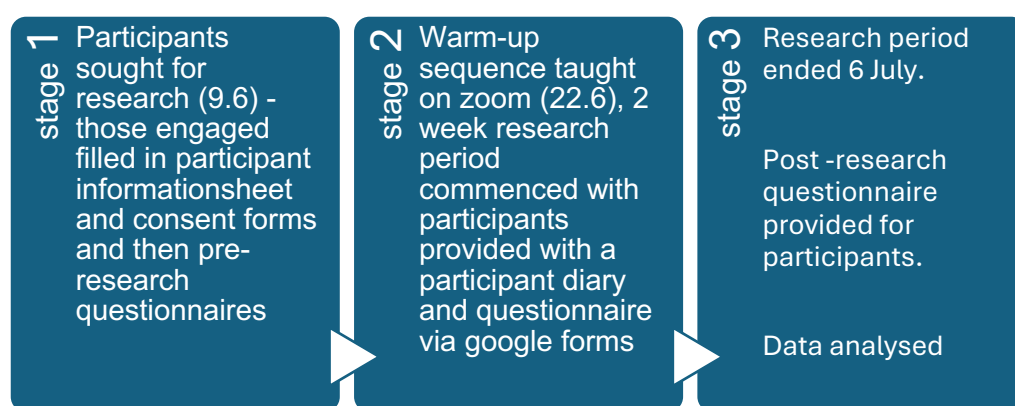


Figure 2 Research Timeline

## **Justification of Lugering for WU**

Similarly to McHenry et al (2009) I have successfully used a floor to standing progression using semi-occluded vocal tract exercises (SOVTs), releasing unvoiced then voiced sounds. SOVTs already have an established track record of beneficial usage in the voice world (Titze, 2006; Ford, Hunter and Deliyski, 2023). Lugering (2013) whose background includes training with Linklater, influences from somatic psychology and work with the Eric Hawkins dancers seeks to integrate actor training with its “specificity, its interdisciplinary thinking and visionary approach” (Espinosa, 2016, p.85) integrating, body, thought and feeling in actor training. The Lugering WU (LWU) sequence (see Appendix 6) comprised physical release exercises on the floor. Kooijman et al. (2005) found a positive link between postural imbalances and muscular tension leading to an increase in voice disorders. Therefore, physical release in the WU is important. Craig et al (2015) note connective tissue “remodels in response to tension and stress” (Craig et al., 2015, p.171). Their study used voice therapy, physical therapy and combinations of, to treat patients with muscle tension dysphonia seeking a holistic approach to the entire voicing mechanism. Thus, it was central to physically release before, standing and walking which used sighing, panting, also used in (Houseman, 2002), a SOVT [s] release, proceeding on to vowel sounds and exploring pitch range in conjunction with movement.

## **Findings**

### **Quantitative Data**

After an invitation to the student cohort of thirty-two, eleven stated interest, seven completed some aspect of the data collection; no participants completed all three research measures. Participants R5 and R6 explained that they had been unwell during the research period. Participant R7 was in technical rehearsal/performance with 10-hour days for 12 out of the 14 days of the research period which may have made participation unrealistic. The adherence to the research was severely limited see (Figure 3).

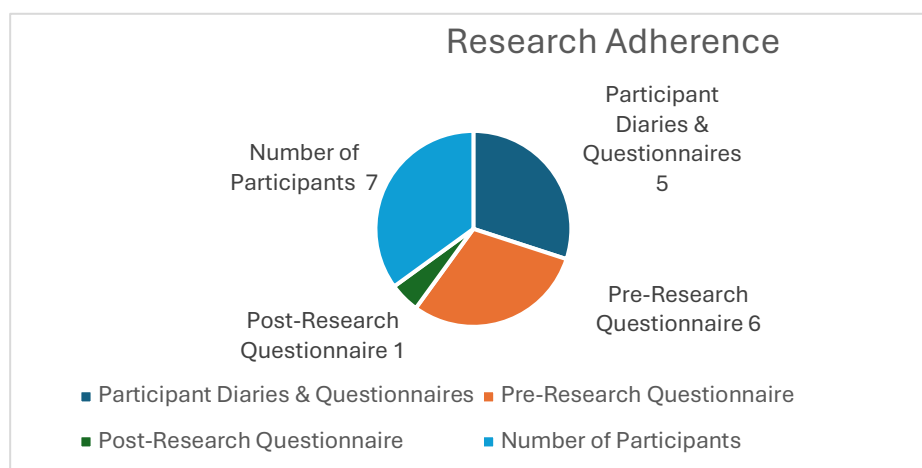


Figure 3 Research Adherence

Except one, all respondents were female and with a median age of 28.2. The PRQ, provided baseline data on their physical conditions and what their current WU practice was. Hydration is obviously of paramount importance to the voice user, as studies have shown (Hartley and Thibeault, 2014; van Wyk *et al.*, 2017) and the range was 1.5-4 litres daily and in two participants up to 5/6 teas/coffees/cafeinated drinks. The low liquid intake in some of the participants and at the frequency of teas/coffee/cafeinated drinks was surprising to note, given they are made aware throughout the year of the importance of hydration for vocal hygiene. For a summary (see Figure 4).

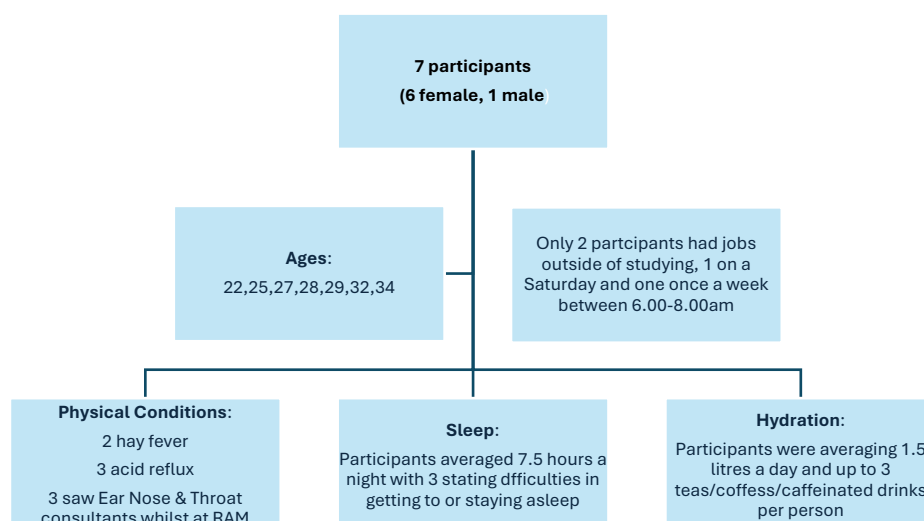


Figure 4 Age, Gender, Physical Conditions, Sleep, Hydration

In the Pre-Research Questionnaires, the participants' current warm-up times ranged in total between 10-15, in the PDQ the shortest time was 15 minutes and the longest 30 spent doing the LWU sequence .

The EASE (Phyland *et al.*, 2013) scale originally included 40 statements but mindful of not overwhelming the participants and, the time stated that it would take to complete the WU and PD&Q, I chose 6 statements from each section, which I hoped would provide some useful quantitative data, 6 positive, 6 negative:

| Negative                               | Positive                                                      |
|----------------------------------------|---------------------------------------------------------------|
| 1. my voice is husky                   | my voice is flexible across my pitch range                    |
| 2. my voice feels dry and scratchy     | my voice sounds rich and resonant                             |
| 3. My voice feels tired                | my voice feels ready for performing today if it was necessary |
| 4. my voice is breathy                 | my voice feels refreshed and recharged                        |
| 5. my voice feels strained             | I can project my voice easily                                 |
| 6. I feel phlegm or mucus in my throat | my voice is rejuvenated                                       |

Figure 5 Questions for Pre and Post WU Assessment

After analysing the pre and post data, a paired sample t- test was carried out and revealed that there was a statistically significant difference between pre and post test scores ( $T(4) = 5.39$ ,  $p = 0.006$ ). Doing a reversed analysis of the pre-WU assessment and post-WU assessment, it can be seen from the table below that following the intervention of the WU sequence, there was a statistically different result for post-WUA, that their negative measures around the statements: my voice is husky/breath/tired/strained/feels dry/feels phlegmy had shifted, positively. Again, because of the small sample it is difficult to infer wider generalizations, but it provides some positive indicative results for the intervention.

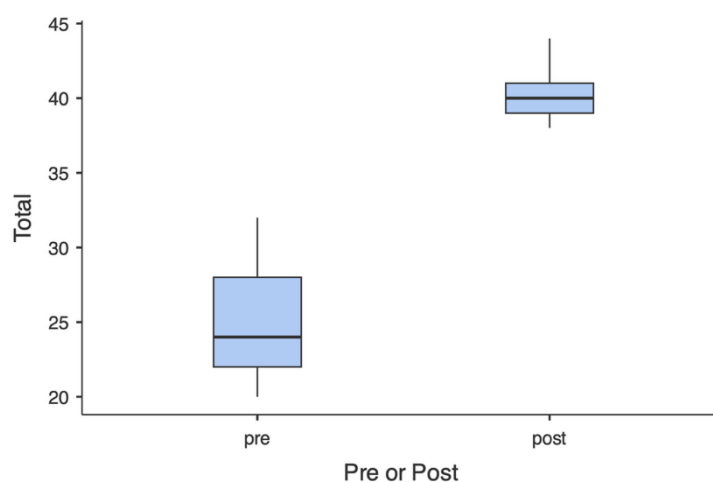


Figure 6 Pre and Post Test Scores

## Qualitative Data

Using Braun & Clarke's Thematic Analysis(2006) (see Figure 7) and looking at the data

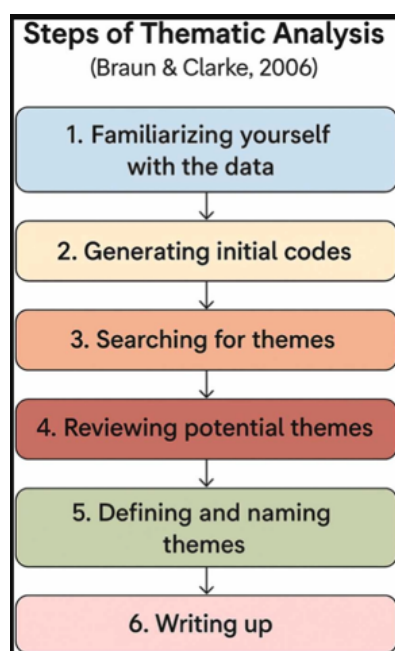
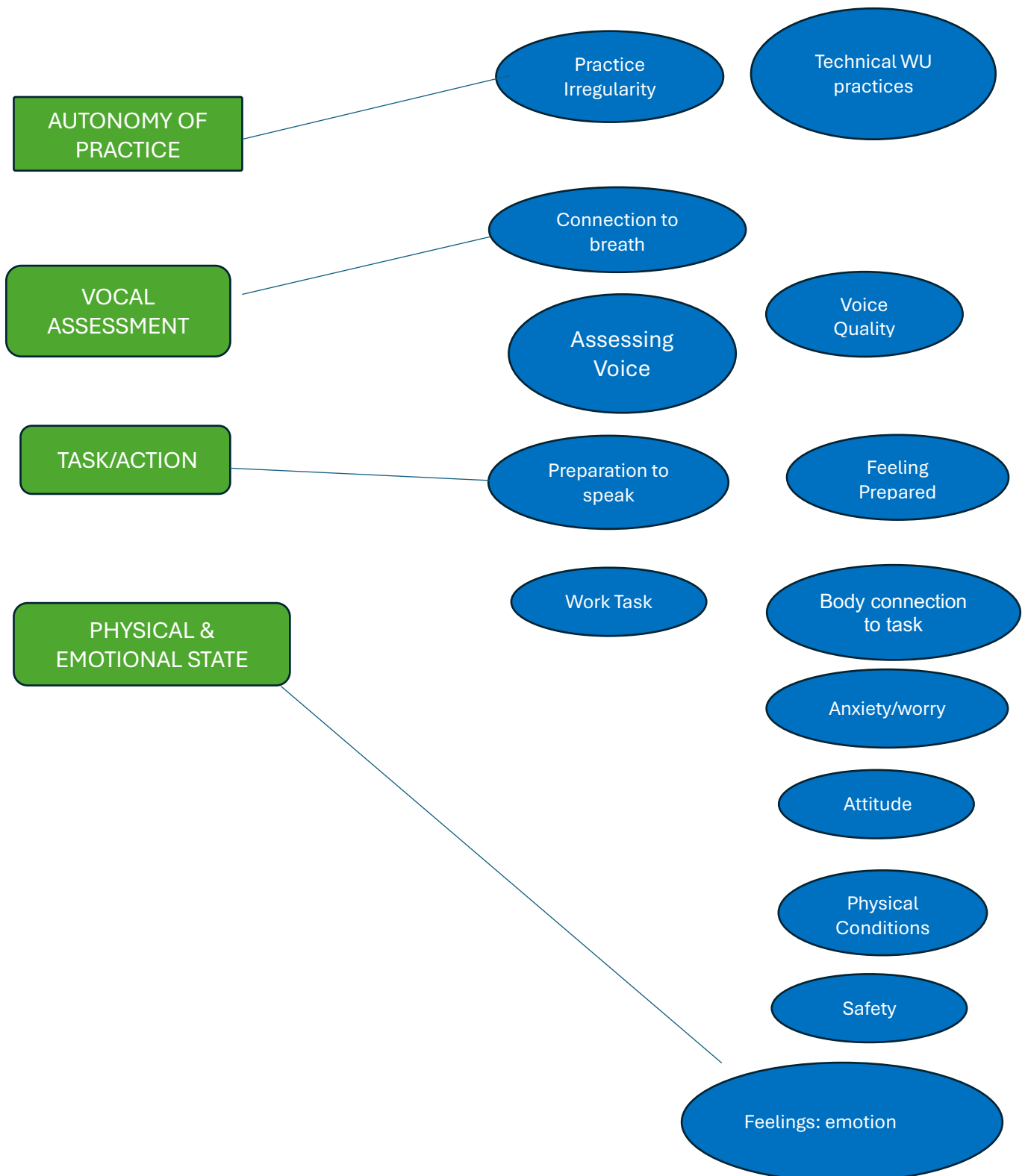


*Figure 7 Braun & Clarke (2006) Steps of Thematic Analysis*

initially generated initially 17 codes including fatigue, safety, anxiety/worry, voice assessments and voice quality, preparation to speak, feeling prepared, physical conditions, connection to breath, emotional feelings, feeling prepared, time spent carrying out WU and technical data. There appeared to be themes related to their emotional and physical state, their actions related to the task, vocal categorisation and practical/technical exercises. (See Figure 8). Also, a broader theme emerged of the participants either existing, or growing sense of their autonomy of their practice.

This ties in with the constructivist paradigm, because, over their year, myself and the other practitioners they have met (movement, acting, singing ) have given them tools from which they can construct their learning and put it into practice. Through their training, amongst other things, they are achieving more autonomy over their instrument through gaining an understanding of how it works, how to maintain vocal hygiene, what helps or hinders their voice and crucially, how to troubleshoot when problems arise.

Figure 8 Qualitative Themes



Their qualitative data also provided a unique insight into their perceptions of their voice, both physically, acoustically (their perception) and given that the MA consists of only 20 weeks teaching, what they now understood about their instrument and their practice. Attitude relates both to how they view themselves and their voice and, their attitude to the work.

### **Qualitative Theme: Attitude**

R6 stated that although always knowing WU was important, they “often didn’t feel it was needed – I could get by pretty well without WU” stating it was “laziness/complacency” adding “this is an attitude I need to change”. Interestingly, R7 comments that WU in rehearsal itself “often have little value to actually preparing my voice for the work” is ironic. We had discussed in class that company WUs are for the company to build cohesion and get them ready to perform, but that individuals needed to be aware that either before or after, they would need to WU in a way that was specific to their needs (Meyer-Dinkgräfe, 2013). R7 seemed to be negating company WU and whilst they did a singing WU, did not add aspects for their spoken voice which they described as “bad form but getting more aware of importance”.

Reflecting on their statements in my journal, I first acknowledged my frustration with them, for not “getting it”, but then reflected that a practical result of this research is the necessity for me to explore and provide alternate ways in for them to feel not only that the WU is useful for them, but also practically advantageous. As Biggs notes students need to understand, through their learning that “that a particular sector of their world has changed and is now coming under their control” (Biggs, 2012, p.66). In my journal, I acknowledged my own experience as a jazz singer some years ago. I found that sometimes when I sang I would be ok and, sometimes not, I noted:

“What I didn’t realize then was that I did not have a practice and, that I was trying to get my voice to do things without realizing how much body release I needed to do.”

LWRJ

I asked before their commencement at RAM how aware were they of the necessity of WU? R3 stated that though aware, they were “not as equipped to formulate my own routines and have more autonomy over my vocal health on a day-to-day basis”. R2’s response that they didn’t realize how “thorough and gentle you should be” is particularly pertinent, as they required an ear nose and throat (ENT) consultant intervention and, as a result of this,

considerably shifted their vocal effort. Four out of the seven participants had to attend an ENT during their year. In their description of their routine R1 noted “I am getting as much vocal fold closure as possible to make my voice as clear as possible” and R2 “doing exercises given by my speech therapist (accent method, bubbling, lip trills and humming)” their responses had a noticeably more detailed aspect than their non-ENT visiting colleagues. Pre-existing symptoms such as hay fever (Brodnitz, 1954), reflux (Loor, Nedelcuț and Dumitrașcu, 2020), inefficient technique and a new pressure of much increased vocal load whilst training puts the student at increased risk of encountering problems (Phyland and Miles, 2019), so they need to be mindful of pushing themselves beyond the training load that is useful (Branquinho *et al.*, 2025). R7 put it in a different way that muscles should be stretched not “blitzed”. Certainly from their descriptions of the physical work they were doing there was stretching, sun salutations head, shoulder and spine rolls but no mention of callisthenic or aerobic activity. Potentially because my questions were about their singing/spoken voice warm up, their responses, were understandably more weighted towards technical voice aspects. In future, I think I needed to capture more detail of how they are weighting their WU physical and vocal aspects, as I only captured overall WU times, so cannot draw more conclusions. It may potentially be a reflection, subconsciously on the part of the participants that there is less ‘need’ to WU the body. Although a paired t-sample revealed a p-value of 0.001 comparing the pre/post WU “my muscles are rejuvenated”.

R2’s response was that they were aware of the importance for a WU in singing but “not at all regarding speaking” and R7 said that they were now more aware of

“how to pick and choose exercises to suit the demands of the work. More sensitive to different areas of voice, sensations experienced after connecting body work and better awareness of the breath”

R7PRQ

The attitudinal aspect the data generated, is the kind of valuable insight I was hoping for in undertaking this research. With my next teaching cohort, exploration and discussion of their understanding of their MTAT’s body needs to begin from day one and not, as I had been doing, in term 2. I had missed valuable time, to begin to embed, slowly, this understanding. This is a major evidenced practical learning tool to work on in my practice.

Attitude was notable when related to the questions around warming up for singing or spoken voice. It revealed both how the task at hand gave them a requisite focus and a locus of effort. As R3 said they would run lines and “text with my tongue out to help refresh the mind for the

track that I have that day". It was also present in their differing approaches to, having warmed up the instrument, then transitioning into the work. I initially coded these as preparation to speak, feeling prepared, body connection to task and work task.

R3 noted that they would also do "scales to match the kind of work being done that day", whilst R6 noted that they would then just need "the specifics towards the end of the WU related to what I'm singing or the space I'm speaking in". Whilst R5 said it gave them a sense of what their voice could "manage to do" in the space. Participants were not explicit about how they were measuring their post-WU voices. I was expecting they might speak text in the space before and after, which can be a useful individual form of feedback, but none of them mentioned this, most finished with a siren as their end of WU. There are two possibilities, either this is an expected element they are missing or, my measure questions were not specifically explicit about what the measure contained.

### **Anxiety/worry**

Another aspect of the attitude was the psychological element to the WU ahead of the task, R1 noting it put them in the "right mindset to perform or rehearse". Whilst R6 noted it gave them "mental peace of mind and good psychological preparation" with R3 stating that WU gave them "the best foundations both mentally and physically in which I can safely apply myself in the room without worrying". Training to work in MT, a demanding genre, requires expertise in motor control, technical ability, emotion, learning (Hallam, 2006) and can cause psychological and physical stresses (Papageorgi, 2021). Anecdotally I have heard from this cohort comments on perfectionism, anxiety disorders, depression, as well as their own pressure to get an agent and a job – it's a heady mix!

As they note in their chapter on anxiety, artistic temperament and the voice, Davies, Jahn and Keidar (2004), singers and actors are working under conditions which are "which are physically difficult, mentally and emotionally demanding and tension-provoking" (Davies, Jahn and Keidar, 2004) The aspect of anxiety or worry seemed to manifest in the connection to an assessment of where they felt their voices were at, tired, sore, not 100% and their capacity to do their job. R2 "I was ill yesterday (not sure what) but coughing loads", whilst R4 "I swallowed something sharp a few days ago and it hurts a bit when I swallow from a small wound, whilst R1 said "I had a few drinks last night for E's birthday, so my voice is feeling a little more tired than usual". Sandgren (2002) noted a preoccupation in opera singers with vocal indisposition. MTAT are still working to build and maintain a vocal practice and vocal hygiene, that meets the demands of the job. They were all performing (or going

to) over the research period, so one can understand the anxiety around uncertainty of whether their voices would perform on cue. Indeed, R7 talked about a “sense of reassurance with the sound I can make, what I can manage to do.” The PDQ contained a Likert scale with questions concern anxiety, worrying about bad things happening. The participant who filled in the PDQ noted these aspects occurring for several days. Three participants R3, R1 and R6 mentioned warming up their body/voice as giving them “peace of mind” whilst R1 said it provided the “right mindset to perform or rehearse”. R6 noted it gave them “mental piece of mind and psychological preparation”. Sandgren (2009) in her study noted that opera singers can be prone to health anxiety that is related to performance anxiety. The ultimate fear of any performer, will my voice behave tonight? Music performance anxiety is currently a growing field of research (Juncos and Markman, 2016; Henshaw and Collyer, 2022) but it is beyond the scope of this essay to discuss further, suffice to say that it is a common experience for many performers. Therefore, it was sad, but not a surprise to see its appearance in the data.

### **Technical Warm-up**

Bodily stretches included sun salutation, head, neck, shoulder and body rolls ups and connecting to breath exercises, some on the floor, were used by the participants as elements of their physical WU in order to, as R3 stated, “to focus in on my job and what I need to do for my body to be able to do my job”. As they assessed their voices through sound and feeling, they were plain about elements of tension and tiredness, which as I’ve already mentioned may have been, partly, because it was the end of their year.

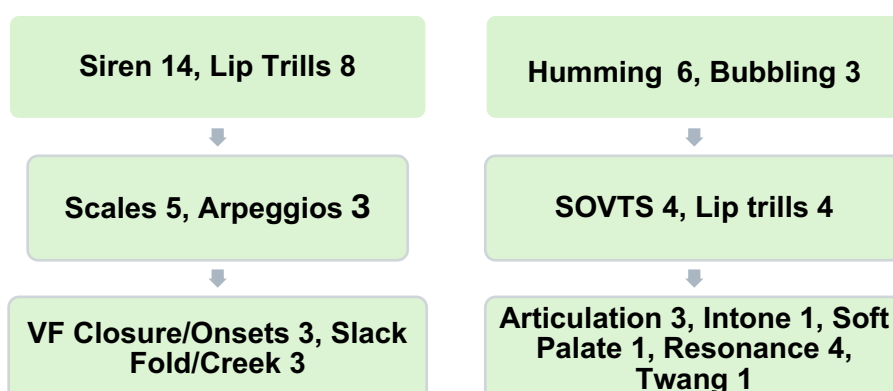
Only two participants of seven did not have either reflux or hay fever, both of which, anecdotally I have witnessed frequently, particularly the former (Ayazi, Pearson and Hashemi, 2012; Loo, Nedelcuț and Dumitrașcu, 2020). In their study on opera students, Loo, Nedelcuț and Dumitrașcu (2020) noted a prevalence of anxiety because of the vocational demands placed on the voice. Additionally, when describing/assessing their body landscape sickness. Of those five participants, with existing conditions, what was of note to me, was how they chose to describe the effect of these conditions, as well as of the fatigue. To describe physical sensations, they used: tension, tired or more tired than usual, sore, sniffy, stuffy, burning, dry, raspy, sharp, hurts. I reflected in my journal that future students and I potentially could explore finding language together to describe what they’re feeling that is less prescriptive and negative in tone, to descriptive. This, given the prevalence of anxiety and depression in the student cohort which as Robb and Due (2017) note student actors in

training are highly susceptible to, might be a way to navigate a way through a negative mindset. Additionally, acknowledging that bodies are in a state of flux continually and, perhaps there is a degree of separation that might be useful for the student in between navigating their body into performance (Zarrilli, Hulton and Barba, 2012; Kapsali, 2013; Thomaidis, 2013)

My co-voice teacher is an Estill Voice Technique (EVT) trainer, as are members of the singing staff, thus EVT vocabulary populated their responses to what they were currently doing as part of their WU for singing and speaking. The most frequently stated barometer and parameter of how their voice was feeling, before, during and after a WU, was the siren (going up and down the scale on an  $\eta$  (as in sing). It appeared over 14 times in their responses across the questionnaires. It was also used as way of registering a perceptually different effort level at the end of the WU. They have undoubtedly been given other methodologies during their training, but this was uniform across the participants. Both the siren and effort levels are fundamental elements of EVT. Going high up into your pitch range increases the feeling of effort. Once the voice has been warmed up and the siren repeated, it should feel slightly less effortful. R3 noted a “sense of effort” as they sirened, or a general sense of effort related both to the individual exercise they were practicing, or the task, they further stated that the measure of effort is “related to the effort needed connect to the text”. It is beyond the scope of this essay to discuss the merits of EVT (Steinhauer and McDonald Klimek, 2019). Sansom (2016) in his discussion of voice pedagogy in the classroom, relishes the detailed specificity to the vocal tract given by EVT, whilst also stating he uses imagination exercises too. Students are given this methodology as well as others during their training, it is their prerogative to choose which they utilise. I would assert that this alone is not enough and that the MTAT need to speak text which they will be performing to connect body, voice, breath and thought, as Luger (2013) suggests, expressivity needs to be integrated.

The exercises participants did, included both WU exercises, i.e. SOVTs, humming and more technical drills i.e. scales, arpeggios (see figure9).

*Figure 9 Technical Warm up and drills*



### Assessing Voice, Voice Quality and Feeling: Emotions

One of the broader themes related to how the participants assessed their voice, its' quality and how they expressed this through feeling. They do not have access to the kinds of acoustic parameters used in so much voice research, but additionally, because acting is also about psychologically and emotionally connecting to the material, it behoves the researcher to listen to how they express their judgements and assessments of their voices. In all three strands of the questionnaires in their qualitative assessing and describing of vocal quality they used these words:

#### Positive

|           |        |              |                                   |            |         |
|-----------|--------|--------------|-----------------------------------|------------|---------|
| Resonance | clear, | expressive “ | on voice                          | accessible | clarity |
| Grounded  | better | richer       | access to vocal colours and range |            |         |

#### Negative

|            |                    |                   |                                     |
|------------|--------------------|-------------------|-------------------------------------|
| not 100%   | tired              | not at its' peak, | not at its' most resonant, clear or |
| expressive | tension and effort |                   |                                     |

This then bridges into the question of feeling, as R6 noted “feeling it in different parts of my body and trying to isolate the sounds and feel the feedback”. Some students may use technology to record themselves pre and post WU, but mostly they are using physical and aural feedback to assess, and I would add judge, how their voices are. It is beyond the scope of this essay to begin to branch off into a discussion of perfectionism but there is a proven link between perfectionism and (performance) anxiety (Mor *et al.*, 1995). I would posit that this does colour the language that some students use when describing/judging the sound they are making. Their use of the word feeling in the qualitative data both refers to their physical sensations, aural feedback, and emotional judgement. Their feelings answered the central question of whether they felt warmed-up after the progression (see Figure 3) and the words give clues as to the psychological aspect of preparing to perform that must also be addressed in my future teaching.

### Discussion

I would refer to my earlier assertion that merely assessing actor's voices within narrow acoustic parameters does not give us a full picture of the somatic, psychological and emotional factors that feed into the MTAT work. Therefore, this research, with the LWU, was an attempt to assert the necessity and validity of, consciously addressing specific areas of

the body for release (legs, pelvis, vertebrae and neck) beginning to WU the physical mechanics, whilst also warming up the vocal mechanics by connecting breath, SOVTS and vowel sounds. (Lã, 2017) asserts that teachers, or voice builders as she calls them, understand not just the acoustic aspects of voice, but the physiological and psychological. The concept of allowing time, whilst carrying out a WU to mentally prepare for the task ahead, as well as warming up the muscles is key, as evidenced by Brewer et al. (2019). R3 and R1 specifically noted this in their PD&Q referring to WU for the task they were carrying out that day.

### **Limitations and Recommendations for Future Research**

As my first piece of research, errors were of course made. Pre-planning for lack of adherence, potentially sourcing other participants as a back-up, in hindsight would have been beneficial. It was unfortunate that my research period for the participants was at the end of their exacting year and, were experiencing heavy rehearsal/performance schedules. I should have foreseen that whilst enthusiasm to participate might have been there, the reality of adherence might be impractical. The lack of adherence could be a combination of practical and neurodiversity. As stated, given that 6 of the participants are neurodiverse, other strategies drawn from (Le Cunff et al, 2024) may be useful in the future to mitigate this.

Structurally I think my choice of WU with new elements, which I was not able to teach in person, only providing videos and a guide to the exercises, was insufficient to give the participants sufficient time to embed the work. I recognize that with the WU I provided, I was giving them a different practitioner, with different vocabulary which would have benefitted from a longer lead-in time, to pilot the work. In future research, I need to ensure a longer research lead in time, that is built step by step with students in the studio. I did not clearly explain my rationale for the new practitioner. I have met Luger's work and been interested by it and think it has great potential, but for the participants this was new, at a time when their 'bandwidth' may have been challenged. Carrying out the research has given me more sense of just how many tributaries may run from the initial stream of research. I was unaware of the multi-angular aspects to undertaking this project which only became clearer after cessation of the research period. Also, the choice of both negative and positive multi-barrelled questions was not helpful and in my relative youth as a researcher, had assumed that taking an established scale, such as the EASE one, would not present any issues. I now recognize that perhaps because of my own neurodiversity (dyspraxia) I need to

lengthen, deepen my research for tools and seek more additional student support before commencing my next piece of research.

### **The Tangibly Intangible**

Stanislavski's correlation with the sculptor is a useful one. A sculptor may work with different materials and in different styles and genres as the artist does. The actor's craft and exposition of that craft draw on their body, mind, experiences, personalities and character which they use with a combination of technique, craft, artistry to move us to laughter or tears. I must acknowledge the inherent difficulty in trying to scientifically make tangible what still feels intangible. This is both a reflection and frustratingly, a limitation of the research. I would assert whilst I hoped to explore general principles for a warm-up, I am now more convinced of the importance of providing a framework, vocabulary and library of resources, pedagogically underpinned, which give the MTAT agency to draw on what feels appropriate for them, specifically to feel that they are warmed up.

My research was in WU, I have not addressed the cool down. Suffice to say that as theatrical anthropologist Schechner (1985) notes cool down is not a focus in the Euro-American tradition. Panoutsos (2021) cites the discussion around cool downs for actors being ongoing, but that a gap still remains. This is a further comparative area of study but, beyond the bounds of this essay.

I wanted to gain an insight into what participants' current knowledge and practice was, which has been hugely enlightening. Errors made in the planning and carrying out of the project, have revealed the necessity to build with students a supporting network of vocal hygiene knowledge, postural understanding and how it underpins efficient voicing, appropriate vocabulary to use about their voice that is nonjudgemental. Additionally, to, as well as their singing WU practices, give them a range of exercises that they can refer to so they have agency and autonomy over their day-to-day practice. One of the key learning moments came when one of the participants in the zoom session asked, "what is the difference between a singing and a voice WU?" I realized then, my bias as a voice teacher, that I wanted the spoken voice WU to feel as 'legitimate' to them as their singing WU. In bifurcating these practices, I acknowledge I was doing them a disservice. It is not an either-or condition. Singing exercises can be used alongside and in addition to, exercises from the spoken voice canon, they should mutually support each other. My potentially divisive mindset as to these seeming opposing disciplines, was blown apart and I can only humbly acknowledge that this has been a late but huge insight gained from this research project. R7 put it rather beautifully

“I’d be interested to work out whether one is separated from the other since effectively it’s the same instrument...Surely it all comes out in the wash”

If the sound, expression and feeling of confidence with the voice, comes from the individual drawing on both disciplines to design their own tailored WU that works for them, then perhaps how they get there finally “all comes out in the wash”.

## Conclusion

Part of the “electric air” that described by Heim (2020) as existing between actor and audience, is a somatic and psychological response amongst many things, to the voice of the actor. Therefore, my initial proposal “ways into readiness” was an attempt to pilot a preparation to voice. To ask of myself as a practitioner, can I help the MTAT get ready to voice? The research has proved a complex undertaking, given, as already stated, the multi-striated work of MTAT. Simply, I wanted to trial for efficacy a WU, although the sample size was small, there did seem to be a positive effect but the small data set limits drawing wider conclusions. I recognise the WU was too long, complex and weighted to physical release and not enough was present to work on areas of pitch range in their spoken voice, as revealed by R1 “I think I could do with spending longer on the pitch side of things, with the vowel sounds to sufficient warm up more of my range”. It also needed to be done with them, over a longer period, so that they really had ownership of it, before commencing the research period.

I have achieved my learning objectives with regards to data analysis software but will need support to continue this learning. I have been educated through my participants’ responses to their deep knowledge of themselves and have learnt to trust their instincts, as opposed to my expectations, of what they should think/feel. This has provided me with further areas of research as I continue to deepen and reflect on my practice. I will continue to build, through practice as research, a framework with students of resources to aid their readiness to perform/rehearse. Further research will be drawn from sports psychology on how mindset and psychological preparation feed into the WU. I will leave the last words with R1 “for the speaking voice this warm-up is a good start”. This project was *a* way, rather than *ways* in, and not *the* (only) way into WU. However, if you will forgive the pun, this was a warm-up to continuing research in this area.

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