The Female Broadway Belt Voice: The Singer’s Perspective

INTRODUCTION

The female music theater belt voice was heard on the musical comedy stage at the beginning of the twentieth century as a way for the unamplified female voice to be heard in its middle, more speech-like range. Thus, the belt sound emerged as female music theater singers reworked their vocal approach in the range of C₄ to C₅. This “traditional” belt production, in the range of C₄–C₅, can be described as full, bright, brassy, speech-like, and loud. Traditional female belt, demonstrated by singers like Ethel Merman and Patti LuPone, is typically a chest voice dominant production.

In rock/pop inspired music theater productions since 2000, such as Hamilton (2015) and Waitress (2016), females are now required to sound like rock/pop singers and produce the belt sound to the top of the staff and beyond. This higher extension of the female music theater belt voice in the range of D₅–F₅, demonstrated by singers like Jessie Mueller and Eden Espinosa, is a significant change. Female music theater singers have had to adjust their vocal strategies to sing these higher belt notes. This high belt is typically produced by a more mix-belt approach, which can be a more chest (dominant)-mix or head (dominant)-mix. Whereas traditional belt is produced on open vowels such as /a/ and /æ/ with vibrato, high belt sound is narrow, produced with more closed vowels, such as /e/, and very little use of vibrato.

With the relatively recent establishment and evolution of the belt sound, its pedagogy remains unsettled. However, singers continue to model the style on Broadway and in the music theater industry, and currently belting is the dominant style of singing required for females pursuing a professional career in music theater. To meet these industry demands, female singers need current, effective strategies to produce the belt sound. Therefore, the intent of this study was to gain a clear understanding of the techniques and strategies used to successfully produce the female music theater belt voice. Gaining insight into the way female singers successfully produce and approach the belt technique may offer clarity and inspiration to fellow music theater singers. In addition, voice teachers’ perception and instruction may also benefit from a student-centered perspective on the female music theater belt technique.
METHOD

The study was a qualitative design composed of two data collection methods: interviews with female belt students from the studios of nationally recognized master music theater voice teachers, and observations of these students working in private lessons with the master teachers. Each singer was observed for at least one hour-long lesson, for total of thirty-two hours of observations. The singers were also interviewed, using a specific interview protocol, yielding a total of ten hours of interviews.

Interviews took place in person in the studios of the master teachers, or over the phone; observations of voice lessons took place in the private studios of the master teachers. Geographically, the voice teachers were located in New York City metropolitan area.

The principal participants of this study were seventeen female music theater singers, with an age range between eighteen and forty. They were selected based on professional performance credits in music theater or participation in a music theater undergraduate or conservatory program, and the ability to produce the belt technique. These singers were currently students of four nationally recognized master music theater voice teachers, two male and two female, whose age range was between forty-five and sixty-five. Background information about each of the singers is listed in Table 1.

The majority of interview questions were Native–Language Questions, using terms that the participants regularly use to talk about their singing, such as belt, mix, and flip. These questions were intended to clarify how singers think and talk about the female music theater belt voice, as well as how they technically produce this technique. Several examples of interview questions are listed in Table 2.

During the lesson observations, field notes were taken. These notes included dialogue exchanges between the singers and teachers, work on vocal exercises and repertoire, and physical movements of the singers.

The interview responses from the singers were compared for similarities, differences, and emergent themes. Likewise, the field notes from lesson observations were also analyzed in this manner. Finally, a cross-comparison of the responses of the singers and observation field notes was analyzed for consensus or conflicting information on female music theater belt production.

RESULTS

The singers in this study discussed several strategies to produce the belt technique. These strategies are broken down into the following categories: vocal exercises, training, high range of belting, vocal maintenance, and motivation.

Vocal Exercises

All of the singers in this study reported that they primarily use their teacher’s vocal techniques to work on belting. The singers discussed their struggle with using too much chest register when belting, which can limit belt range and cause tension, and believe their teacher’s exercises are key to helping them find a lighter approach. This lighter approach is critical to their success as belters for vocal health, longevity, and producing higher belt notes. From the interview responses and lesson observations, several categories of vocal exercises did emerge.

For three singers, a top-down approach to belting, gradually adding in percentages of chest voice to head voice, is a successful strategy. These singers like exercises that use the /æ/ vowel to help them find a more forward resonance, and “correct placement.” For example, using the syllable [ŋæ] on a descending major triad, starting at approximately F₅ and descending by half steps to an octave below, was a belt exercise utilized by several singers during their voice lessons. Similarly, singing the phrase “that’s mine” (which also uses the /æ/ vowel in the word “that”) on a descending 5–1 pattern helped singers produce and improve the belt sound in the traditional range up to C₅.

For eight singers, connecting speech to singing is an integral part of their belt voice work. When the singers are struggling with belting a phrase, they recall their teacher’s suggestion of “just say this sentence,” and find that they have better success with belting. Singer 16 stated, “It is just an elevated version of speech so it is not screaming.”

Four singers discussed the importance of the order of their vocal exercises, as much as the exercises themselves. Their teacher sets up a routine of vocal exercises that rotates between head voice, chest voice, belting, cool downs, etc. The singers reported that this development of the ability to easily maneuver within their entire vocal range was critical for belting.
### TABLE 1. Background information of Singer Participants.

<table>
<thead>
<tr>
<th>Singer</th>
<th>Education</th>
<th>Started Vocal Training</th>
<th>Started Belting</th>
<th>Natural Belter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singer 1</td>
<td>Music Theater Conservatory</td>
<td>Age 11</td>
<td>Age 15</td>
<td>Yes. “Imitated other people.”</td>
</tr>
<tr>
<td>Singer 2</td>
<td>Music Theater Conservatory</td>
<td>Age 15</td>
<td>Age 20</td>
<td>No.</td>
</tr>
<tr>
<td>Singer 3</td>
<td>BFA in Music Theater</td>
<td>Age 15</td>
<td>Age 13</td>
<td>Yes.</td>
</tr>
<tr>
<td>Singer 4</td>
<td>BFA in Music Theater</td>
<td>Age 18</td>
<td>Age 20</td>
<td>No.</td>
</tr>
<tr>
<td>Singer 5</td>
<td>BM in Vocal Performance</td>
<td>Age 13</td>
<td>Age 4</td>
<td>Yes. “I didn’t know what head voice was.”</td>
</tr>
<tr>
<td>Singer 6</td>
<td>BFA in Dance</td>
<td>Age 18</td>
<td>Age 10</td>
<td>Yes. “For me it was just singing.”</td>
</tr>
<tr>
<td>Singer 7</td>
<td>BA in Theater</td>
<td>Age 17</td>
<td>Age 16</td>
<td>Yes. “ Wanted to be a belter.”</td>
</tr>
<tr>
<td>Singer 8</td>
<td>BA in Theater and Speech</td>
<td>Age 18</td>
<td>Age 10</td>
<td>Yes. “I have always been able to belt.”</td>
</tr>
<tr>
<td>Singer 9</td>
<td>Music Theater Conservatory</td>
<td>Age 10</td>
<td>Age 22</td>
<td>No.</td>
</tr>
<tr>
<td>Singer 10</td>
<td>BFA in Music Theater</td>
<td>Age 12</td>
<td>Age 12</td>
<td>Yes. “It was my natural instinct.”</td>
</tr>
<tr>
<td>Singer 11</td>
<td>BA in Theater</td>
<td>Age 12</td>
<td>Age 6</td>
<td>Yes. “ Belting felt more comfortable.”</td>
</tr>
<tr>
<td>Singer 12</td>
<td>Music Theater Conservatory</td>
<td>Age 19</td>
<td>Age 21</td>
<td>No.</td>
</tr>
<tr>
<td>Singer 13</td>
<td>BM and MM in Vocal Performance</td>
<td>Age 15</td>
<td>Age 15</td>
<td>Yes. “ Wanted to be a belter.”</td>
</tr>
<tr>
<td>Singer 14</td>
<td>BA in Music</td>
<td>Age 14</td>
<td>Age 24</td>
<td>No.</td>
</tr>
<tr>
<td>Singer 15</td>
<td>BFA in Music Theater</td>
<td>Age 18</td>
<td>Age 16</td>
<td>Yes. “I have a good ear to mimic.”</td>
</tr>
<tr>
<td>Singer 16</td>
<td>MFA in Music Theater</td>
<td>Age 14</td>
<td>Age 14</td>
<td>Yes. “I imitated people.”</td>
</tr>
<tr>
<td>Singer 17</td>
<td>BM and MM in Vocal Performance</td>
<td>Age 16</td>
<td>Age 38</td>
<td>No.</td>
</tr>
</tbody>
</table>

### TABLE 2. Research Questions Paired with Interview Questions.

| What strategies do singers use to produce the belt technique? | • Are there any other exercises that you normally use to work on your belt voice that I may not have observed in your lesson? If so, can you tell me about them?  
• How do you approach higher notes using your belt voice? What does it feel like to belt higher than a C above middle C? |
| How do physiological, developmental, and psychological factors affect the belt technique? | Talk me through your practice schedule. How much time would you say you spend practicing your voice throughout the week? How much of that time is devoted to working on your belt voice? |
Two singers credited the use of physical adjustments to the lips, tongue, and vowel shapes as being most helpful to their belt voice work. For Singer 8, reshaping vowels for belting “has been mind blowing.”

Although each singer discussed specific, preferred vocal exercises during the interviews, work in voice lessons was not limited to this one approach. During lessons, each singer was observed to use multiple strategies, such as vowel modification and speaking lyrics, to enhance belt ability.

Additionally, all singers in this study credited bodily support, specifically engaging the abdominal muscles, as a necessary component for belt vocal exercises. This support from the body while singing higher and sustained belt notes protected the singers from the uncomfortable feeling of tension and, as Singer 12 called it, “grabbing” in their throats.

Training
When asked what is more successful for developing their belt voice, their teacher’s exercises or figuring it out on their own, all of the singers reported that it is a combination of both. Singer 8 said, “You need someone to plant that seed, to walk with you to get you there. But my cords are my cords and I know how they work.”

All of the singers of this study stressed the importance of always starting practice sessions with head voice warm-ups. Those who were enrolled in a college, university, or conservatory music theater program reported practicing singing between thirty and sixty minutes a day, at least five days a week. The professional singers aim to practice singing thirty minutes every day, but reported that their routine varies greatly depending on their audition, performance, and work needs. These singers mentioned that they will do longer and more frequent practice sessions during audition season, which is approximately January through March.

High Range of Belting
The singers were asked to discuss their vocal approach to the higher range of belting, which was defined as D₃–F₅ for this study. When specifically asked if the use of their mix-belt voice played into the production of the higher belt range, fifteen singers responded yes. (Since two singers were not completely comfortable high belting, they were unable to answer this question.) To produce a mix-belt vocal production in the higher range of belting, the singers use several similar strategies.

For three singers, regardless of the pitch, belting is a constant negotiation of registration and resonance. For higher belt notes, these singers discussed the need for very high resonance, more head voice, and letting go of a lot of chest voice weight while still maintaining a thread of connection to it. According to Singer 2, “The notes that are in that high, high belt are in a mix. Mixing and belting are pretty synonymous. If it’s in full chest, the audience is going to worry about the singer.”

Six singers discussed the need for a higher placement, more physical energy, bright and narrow vowels, less vibrato, and fighting the urge to flip to a legit sound. For Singer 5, the higher belt sounds are like a “high energy scream with control. You can trick the listeners into hearing the mix and they think that you are belting and you are really saving yourself.” Singer 8 said that there are five or six notes in the high belt range that she can produce either more legit or more belt-like, and it is a choice to keep them belt-like by pushing her sound forward into a horizontal, biting sound.

For another group of six singers, belting is produced by linking the sound to speech, regardless of pitch. According to Singer 15, “When I do it, I just feel where I would say it in that range and that’s where I put it.” These singers also mentioned the need for a more forward and pointed resonance for producing notes in the high belt range.

Two singers of the study, who were sopranos with classical training, compared the feeling of high belting to their experience with whistle register. Singer 17 said that high belting “almost feels the same as my high whistle register. It’s just thinning out. If you want to talk specifically, there is head [voice]. But we’re not singing it with the same vowel that you would sing in classical. But to me it just has a lot of /e/ and /æ/. Just totally out of the throat. It’s like narrowing.”

Voice Maintenance
For these singers, maintaining vocal ease while belting is dependent on bodily support, the use of resonance, and a personal awareness of the sounds they are making and the corresponding physical feeling. While belting, they use the exertion and engagement of the core muscles to take pressure away from the neck muscles. According
The singers also know that belting cannot be their only vocal approach, and they use this vocal technique in moderation. Singer 3 compared her decision to belt with her decision to eat desserts. The singers shared moderation strategies for rehearsals and practice, such as making sure they warm up their entire voice prior to belting, having access to water, and flipping to a lighter vocal approach for belt passages during long, repetitive rehearsals. They also discussed the importance of the preparation leading up to the belt note. “It’s not the high note, it’s what comes before it. Your belting has to start even before that.”

The singers’ voices still get tired, usually from a lack of sleep, sickness, or extended periods of singing. However, the singers of this study claimed the main cause of vocal fatigue was from speaking, not singing.

Motivation
Physical and mental reasons affect these singers’ motivation to belt. If they are sick or if they are physically or emotionally tired, they report not having the energy required to belt, and in these situations, refrain from belting. Being physically tired might even influence their belt work within the context of a song, causing them to choose a lighter approach on a belt note.

The singers in this study compared belting to a full-body workout, where every part of their body needs to be engaged to produce the sound correctly. Singer 6 mentioned, “I sometimes don’t feel like I have it in me that day.”

Personal Thoughts on Belting
When asked about what it is like to belt, each singer responded with a unique answer. The majority of the singers described belting as their “home base.” Singer 1 reported that, “It is where I started as a singer.”

Four singers shared that belting, when it is done correctly, feels easy and free; they appreciate the sense of release, emotion, and power that belting brings to their lives. According to Singer 10, “It feels really good. I feel like I am completely free.” Singer 11 agreed, saying, “I personally like it when it feels justified from the character’s standpoint and we are just not belting because that is how the person on the recording did it.”

The singers in this study clearly differentiated between their traditional belt and their high belt, yet concern was raised only about the higher range of belting. Singer 6 questioned, “You’re going to have people belt Gs?” But she recognized that “we all have to learn how to do all of it” to work in the business. Singer 8 originally stayed away from the higher belt sound saying, “Your voice just doesn’t do that!” She now feels comfortable singing in this higher belt range, but still does not like the sound as much as her traditional belt. Singer 10 also shared her views on traditional belting compared to higher belting. “I think of Ethel Merman. That to me is belting. I don’t think of Idina Menzel belting Wicked, which is now what most people think of. So the new style . . . it just sounds like screaming to me. It’s not written to be sung.”

DISCUSSION
The intent of this study was to gain a clear understanding of the techniques and strategies used by singers to successfully produce the female music theater belt voice. Through interviews and lesson observations, each singer of this study shared her individual ability, outlook, and experience with the female belt voice. Yet several similar strategies and theories for producing the belt voice did emerge from the singers.

The singers seemed to understand that belting, although extremely important, was only one part of their music theater voice. An interesting finding of the study was that the singers also demonstrated legit head voice technique during technical work, showing that these singers were not just belters. They produced a “vocal arc” of legit, mixed voice, and belt sounds that are currently required by the music theater industry. However, the development of the entire voice should be augmented by specific belt exercises, and such exercises were always a part of singers’ warm-ups. The singers understood that working on classical exercises exclusively would not improve belt production ability.

Another commonality among the singers was the reliance on the physical energy and support from the body,
specifically the abdominals, to create the belt sound. The extra physical energy required for belting may be caused by the higher level of subglottal pressure required under the vocal folds to create the sound. To prepare for the physical requirements of healthy belting, the singers aim to stay in good shape.

Eleven of the singers reported that they were able to create the belt sound without the instruction or help of a teacher. Yet these “natural belters” still relied on their teachers’ exercises to help them find a more healthy and sustainable approach to the technique. Six of the interviewed singers were not able to belt before their work with a voice teacher. However, even these singers who were initially reliant on teachers to produce the belt sound reported the need to explore their belt voice on their own. All of the singers believed that their belt voice is developed through their own work, in conjunction with their teacher’s exercises. This finding suggests that developing the belt voice is a mutual process, shared between teachers and students, but cannot be created only by the work being done in the lessons.

The singers of this study shared many strategies for maintaining good vocal health. They spoke about a personal physical awareness, mentioning that they know when belting does not feel right, particularly in their throats. They are also realistic about their belt voices. To avoid overuse of belting, practice of head voice is essential. Being their own vocal advocate in rehearsals and performances was another theme that emerged from the singers. The singers reported that they depend on water, plenty of sleep, exercise, and nutrition to create and maintain their belt sound. Interestingly, the singers did not consider belting to be the main cause of losing their voice. Six participants shared that their voice becomes tired from speaking more than belting.

The singers relayed various exercises that they used to specifically work on belt voice. However, a common trait of these belt techniques did emerge. Whether sung or spoken, the singers preferred belt exercises that encourage a forward resonance. Many belt exercises discussed by the singers, and observed in voice lessons, used bright syllables such as [njæ] and [wei]. The singers felt that these exercises help them get into a “correct place” for belting. A closer look at these belt exercises shows an inclination for working with a closed, bright vowel to perform the high belt and more open, bright vowels for the traditional belt.

Differences in preferred belt exercises also emerged. Eleven singers said using spoken phrases was their main strategy to produce the belt technique. Two singers report that adjusting the shape of their mouth, such as lifting the tongue and modifying vowels, was their main strategy to produce the belt technique. And four singers credited the order of exercises, “head voice, chest voice, mix voice, belt, head voice,” and not necessarily the exercises themselves, as most helpful for creating a successful belt production. Since the singers communicated that they primarily used their teacher’s exercises, it is not surprising that their preferred belt exercises differed, due to the influence of their individual teacher’s guidance and pedagogy.

According to the criteria of the study, all the singers in this study could produce the belt technique. The singers were observed producing belt notes in the traditional belt range up to C₅, as well as the higher belt range between D₅–F₅. The singers reported that to produce belt sounds in this higher range, they use their mix-belt voice. This finding is extremely interesting since there is strong agreement among the singers about a subject that is typically viewed as indefinite. Mix-belting seems to have emerged as a new type of belting technique to produce the higher range of belting in an easier way.

Defining the high range of belting by using the term “mix” is problematic, since it is not truly defined. Mixing is generally considered to be the ability to sing with both registers. With that in mind, it is impossible to understand the physical sensations that the singers are referring to when they reported that they mix to belt in the high range. What can be surmised from the responses of the singers is that belting in a higher range feels different to them from belting in the traditional range.

The singers described their vocal approach in the D₅–F₅ belt range as a mix-belt, which is most likely a head voice dominant production. To avoid sounding like a legt soprano on these high belt notes, the singers focused on creating a forward, high, narrow, and bright sound with closed vowels. Belting beyond C₅ “really asks for a great deal of stamina and strength to continue without modifying the sound to a lighter production.” This claim, that the high range of belting is created by a head voice dominated registration and forward, bright reso-
nance may be supported by a study that compared the legit, mix, and belt sounds of music theater. The results of this study showed that the mix sound was similar to the legit sound in terms of subglottal pressure and closed quotient of the vocal cords, and similar to belting in terms of resonance. This research supports the high belt strategies of the singers of this study.

Producing the high belt sound, in a consistent, healthy manner, was a concern of the singers. Many reported the need to “not be afraid” of a higher belt note, suggesting that it may be a harder technique than the traditional belt. Singers were not only concerned with the vocal health to create a higher belt sound, but they were also concerned with the sound itself. As Singer 10 mentioned, “it sounds like screaming to me... It’s not written to be sung.”

It is interesting to note that the singers who were most forthcoming about their dislike of the sound and the production of the high range of belting were in their 30s. Although these singers could produce the high belt, they preferred the traditional belt sound. Unlike most of their counterparts in their twenties, these singers experienced the recent, rapid evolution of the belt voice after their college or university training. They graduated near the turn of the twenty-first century with the ability to belt a C₅ or D₅ because that range matched the requirements of music theater repertoire, as reflected by the casting requirements from a 1999 edition of Backstage. To continue to pursue a career in music theater, these singers had to adjust their concept of what the belt sound was and how to produce a belt sound.

When it is done correctly, the singers reported that the belt production feels comfortable, easy, and free. The participants also discussed the emotional experience of belting. They described the experience of belting as empowering, cathartic, and otherworldly. Belting also gives the singers a sense of pride. It seems to be part of their identity. Singer 5 summed up the belt experience by saying, “It is spectacular that the human voice and the human body can do this.”

CONCLUSION

Several themes emerged from this qualitative study of the female music theater belt voice. From a technical perspective, developing the entire voice is essential for successful belting. Belting is not perceived as a pure chest voice function. Every female belter in this study was observed to have easy access to her head voice. Working in head voice allows a female to create a lighter belt sound in the traditional belt range, and a lighter belt was considered better for transitioning into the higher belt range. Since the singers reported that they employ mix-belt in their high belt range, meaning there is most likely more head voice involvement, the development and coordination of head voice is also helpful for high belting.

From a classification perspective, the singers spoke clearly about the perceived differences of the traditional belt and the high belt. The two types of belting differ in terms of sound production and approach, but both benefit from brighter vowels and mindful abdominal engagement.

From an educational perspective, belting can be taught, and is a mutual process between teachers and students. Belters, even those who had initially discovered the belt technique on their own, reported the need for their teachers’ instruction. However, there is an element of independent self-exploration for the belt technique. Each female belter must figure out how her teacher’s exercises and instructions actually work for her own voice.

From a personal perspective, belting, when done correctly, feels good. A female singer should choose to belt a note or passage because of the emotional demands of the song. The act of belting is considered cathartic, empowering, and transcendent. The female singers in this study are proud of their belt ability.

Recommendations for Further Research

Future study might be conducted to see if there is a correlation between what is occurring at the vocal fold level and the female belter’s perception of what she is doing. Some of the singers in this study were very clear about how much head voice and chest voice they believed they were using to create the belt sound. However, singers’ perception of what is occurring physically is not always accurate. For example, the famous opera singer, Enrico Caruso, believed his soft palate was lowered when singing, yet x-ray pictures showed that it was raised. Studies that include singers’ constant feedback about the type of belt voice they perceive they are creating during a physiologic and acoustic analysis might help voice scientists
and voice teachers understand the coordination of the mental and physical aspects of the female belt voice.

NOTES

5. Edwards, 105.

Mezzo soprano, Christianne Roll, received her BFA in Musical Theatre from New York University, where she was a Tisch Scholar and was selected as one of the top performers of her graduating class. Her doctorate is from Columbia University, where she focused her studies and research on music theater voice pedagogy.

As a member of the Actors’ Equity Association, Christianne has performed at the Goodspeed Opera House, the Lucille Lortel Theatre, the York Theatre, and internationally as the principal singer for Norwegian Cruise Lines. She has soloed at Lincoln Center, Carnegie Hall, and has sung the national anthem for the Philadelphia Eagles. Christianne competed in the BBC’s international vocal competition, “Voice of Musical Theatre,” in Cardiff, Wales, and was a finalist in that competition.

As an educator, Dr. Roll is an associate professor and head of the Musical Theatre BFA Program at Florida Southern College. In 2017, she won the college’s Miller Distinguished Faculty Award for excellence in teaching. Previously, she served as the head of the music theater program at Emory & Henry College. A recognized expert on the female music theater voice, Dr. Roll is a frequent presenter at conferences such as The Voice Foundation Symposium, the Musical Theatre Educators’ Alliance, the National Association of Teachers of Singing, the Southeastern Theatre Conference, the Virginia Theatre Association, and the Florida Theatre Conference. She has served as the music director for Norwegian Cruise Lines, teaching hundreds of performers from around the world.

When forty winters shall besiege thy brow,  
And dig deep trenches in thy beauty's field,  
The youth's proud livery so gazed on now,  
Will be a tattered weed of small worth held.  
Then being asked, where all thy beauty lies,  
Where all the treasure of thy lusty days,  
To say within thine own deep sunken eyes,  
Were an all-eating shame, and thriftless praise.  
How much more praise deserved thy beauty's use,  
If thou couldst answer, "This fair child of mine  
Shall sum my count, and make my old excuse,  
Proving his beauty by succession thine.  
This were to be new made when thou art old,  
And see thy blood warm when thou feel'st it cold.  
Wm. Shakespeare, Sonnet II