https://doi.org/10.23925/2176-2724.2025v37i4e72677

Contemporary Belting method: Introductory vocal projection and resonance exercises for singers

Método Belting Contemporâneo: exercícios introdutórios para a projeção e ressonância vocal em cantores

Método Belting Contemporáneo: ejercicios introductorios para la proyección y resonancia vocal en cantantes

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Abstract

The contemporary belting method innovates in vocal training for musical theater and pop singers, seeking efficient vocal projection with minimal physiological effort. Updated from the belting method used in Broadway musicals, it incorporates fundamentals of vocal physiology adapted to the characteristics of Portuguese, with an eclectic approach and a focus on stage expressiveness. This communication presents a practical and systematic sequence of eight 10-minute vocal exercises from the contemporary belting method, adaptable to the singer's learning pace. Each exercise is clearly described in terms of objective, mechanism of action, order, and execution time, enabling its use in pedagogical and scientific contexts. The detailed description of this approach provides a relevant, accessible, replicable, and systematized vocal method with pedagogical and research potential. By publicizing a preliminary structure, this communication contributes to the transparency and technical foundation of the method's exercise sequence, fostering dialogue with the scientific community and paving the way for future studies, such

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Authors' contributions:
BAR: responsible for theoretical review; drafting and organizing the text; and critical review.
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Received: 07/24/2025
Accepted: 09/22/2025

as clinical trials and experimental validations to verify its effectiveness. Thus, this is an essential initial step toward consolidating an innovative approach consistent with the needs of contemporary singing.

Keywords: Music; Singing; Voice; Voice Training.

Resumo

O Método *Belting* Contemporâneo apresenta uma inovação no treinamento vocal de cantores de Teatro Musical e Música *Pop*, ao buscar uma projeção vocal eficiente com o mínimo de esforço fisiológico. Atualizado em relação ao *belting* utilizado nos musicais da *Broadway*, o método incorpora fundamentos da fisiologia vocal, adaptado às características da língua portuguesa, com abordagem eclética e foco na expressividade cênica. Esta comunicação apresenta uma sequência prática e sistematizada de oito exercícios vocais do Método *Belting* Contemporâneo, com duração total de 10 minutos, que podem ser adaptadas ao ritmo de aprendizagem do cantor. Cada exercício é descrito com clareza quanto ao objetivo, mecanismo de ação, ordem e tempo de execução, viabilizando sua utilização em contextos pedagógicos e científicos. A descrição detalhada dessa proposta é relevante por sistematizar, de forma acessível e replicável, uma metodologia vocal com potencial de aplicação pedagógica e investigativa. Ao tornar pública essa estrutura preliminar, a comunicação contribui para a transparência e fundamentação técnica dessa sequência de exercícios do método, favorecendo o diálogo com a comunidade científica e preparando o caminho para estudos futuros, como ensaios clínicos e validações experimentais que poderão verificar sua efetividade. Trata-se, portanto, de um passo inicial essencial para a consolidação de uma abordagem inovadora e coerente com as demandas do canto contemporâneo.

Palavras-chave: Música; Canto; Voz; Treinamento da Voz.

Resumen

El Método *Belting* Contemporáneo presenta una innovación en el entrenamiento vocal de cantantes de Teatro Musical y Música *Pop*, al buscar una proyección vocal eficiente con el mínimo esfuerzo fisiológico. Actualizado en relación con el *Belting* utilizado en los musicales de *Broadway*, el método incorpora fundamentos de la fisiología vocal, adaptados a las características del idioma portugués, con un enfoque ecléctico y centrado en la expresividad escénica. Esta comunicación presenta una secuencia práctica y sistematizada de ocho ejercicios vocales del Método *Belting* Contemporáneo, con una duración total de 10 minutos, que pueden adaptarse al ritmo de aprendizaje del cantante. Cada ejercicio se describe con claridad en cuanto a su objetivo, mecanismo de acción, orden y tiempo de ejecución, lo que permite su utilización en contextos pedagógicos y científicos. La descripción detallada de esta propuesta es relevante por sistematizar, de forma accesible y replicable, una metodología vocal con potencial de aplicación pedagógica e investigativa. Al hacer pública esta estructura preliminar, la comunicación contribuye a la transparencia y fundamentación técnica de esta secuencia de ejercicios del método, favoreciendo el diálogo con la comunidad científica y preparando el camino para futuros estudios, como ensayos clínicos y validaciones experimentales que podrán comprobar su efectividad. Se trata, por lo tanto, de un paso inicial esencial para la consolidación de un enfoque innovador y coherente con las demandas del canto contemporáneo.

Palabras clave: Música; Canto; Voz; Entrenamiento de la Voz.

Introduction

Musical theater is a genre that integrates music, singing, dance, and acting into a single narrative. It was established in the United States in the early 20th century by fusing genres such as opera, operetta, burlesque, and vaudeville, and was later influenced by jazz and minstrel traditions. This style was initially used in Brazil in musical revues known for their humor and strong songwriting. An adapted version of "My Fair Lady" was the first Broadway production presented in the country in 1962. In the late 1990s and early 2000s, Brazilian stages began to host major international productions, such as "Les Misérables" (2001), "Beauty and the Beast" (2002–2003), "Chicago" (2004), and "The Phantom of the Opera" (2005), among others[1].

With the development of this musical genre and its consolidation on Broadway stages, belting also emerged as a distinctive vocal style, widely associated with productions of this repertoire. However, this vocal aesthetic is not limited to musical theater and can be seen in contemporary commercial music (CCM), a term coined in 2000 to refer to non-classical musical styles such as rock, gospel, musical theater, country, pop, and rap[2].

Belt singing arose from the need to sing for large audiences, initially without microphones and with articulation close to that of speech. Musical theater uses it to approximate a character's singing voice to the vocal quality of their speaking voice. Since the text is paramount in theater, it must be interpreted with enhanced voices. Hence, when music distances from the range of speech, belting helps to preserve a more natural speech-like emission and articulation[3].

Thus, belters (singers who practice this singing style) resort to resonant modifications in vowel production to meet the stylistic and musical demands of the piece being sung. Such adjustments are particularly necessary when vowels in the song's lyrics lack resonance with a projection adequate for stage[4].

A study by Bourne and Kenny found no consensus among singing teachers regarding the physiological characteristics of belting, particularly regarding vocal register. Some believe that belting is associated with greater activation of the thyroarytenoid muscle, often described as chest voice. In contrast, other teachers argue that belting should not be completely confused with chest voice, emphasizing qualitative differences[5].

Roll's study noted that some teachers, from different methodological perspectives, describe belting as a blend of vocal registers. In this view, the belt sound would result from the coordination between the chest and head registers, especially as the tone rises[6]. Currently, belting is characterized by greater sonic freedom, less effortful delivery, reduced vibrato, and frontal projection with a bright timbre, without the vocal fragility previously observed[3].

These divergent understandings of belting may be linked to the lack of specific pedagogy for the style and many singing teachers' lack of training and professional experience in musical theater, even at universities. A survey by LoVetri and Weekly[7] revealed that only 18 out of 95 singing teachers who teach the style had specific training to teach musical theater. This highlights the need for universities to include vocal pedagogy in their singing program curricula, focusing on CCM styles, including musical theater.

Description

This short communication presents a descriptive study aiming to systematize eight introductory exercises of the contemporary belting method (CBM), whose main reference is the work, "*Belting Contemporâneo – Aspectos Técnico-vocais para Teatro Musical e Música Pop*" (Contemporary Belting – Technical-Vocal Aspects for Musical Theater and Pop Music), by Maestro Marconi Araújo. The method is based on vocal techniques and specialized literature on vocal pedagogy, integrating it with applied practice, especially in musical theater and pop music[8].

CBM was developed to address the need to adapt traditional belting vocal practices, widely used in North American musical theater, to the specificities of the Portuguese language and the Brazilian vocal context. CBM's main objective is to minimize vocal strain and optimize the performance of musical theater and pop singers, whose specific vocal demands require preparatory strategies to improve resonance and projection, while also helping to maintain vocal health.

In CBM, belting is predominantly produced by activating the thyroarytenoid (TA) muscle. The cricothyroid (CT) muscle also plays a significant

role within the mid-modal register, though not in the chest register. It is based on vocal physiology, structured around three pillars (Propulsion, Formation and Retention/Source, and Resonance), and uses exercises for developing "sub-registers," maintaining the stylistic characteristics of belting with greater vocal comfort[9].

The goal of Propulsion is to work the muscular function of breathing without overloading glottal closure, controlling the muscles of the respiratory system, by a set of maneuvers called "floating support"[9]. This principle is similar to the Italian *appoggio* (support) described by Miller, which advises keeping the sternum slightly elevated, favoring rib expansion and a more efficient diaphragm descent[10].

Araújo's CBM revisits and updates this concept by proposing the floating technique for a balanced air release, as if the air column were flowing outward rather than being pushed out. This approach is based on the coordination between subglottic pressure and respiratory muscles, providing the singer with an experience more compatible with the demands of contemporary singing[8]. Once respiratory support is established, the method progresses to working with the sound source.

The method in Formation and Retention/Source focuses on adequate glottal closure (with a semi-soft vocal onset or Italian *attacco del suono*, as proposed by the method) and vocal registers[9]. This concept is in line with Riggs, who emphasizes the importance of breath balance for a stable emission[11], and with Miller's work, which describes Italian *attacco del suono* as a vocal onset technique that promotes efficient closure[10]. CBM articulates these principles by using a semi-soft onset to ensure adjusted glottal closure without overload, integrating propulsion and retention[9]. The balance between propulsion and source is consolidated in the third pillar, Resonance.

The goal of Resonance is to work on somatosensory perceptions (i.e., sound amplification and optimization in the resonance cavities), using the laryngopharynx, oropharynx, and rhinopharynx as the main resonators. Musical theater and pop music use oropharyngeal resonance in combination with other cavities, such as the nasal cavity, to obtain a bright voice. Several structures (the tongue, jaw, lips, and soft palate) actively participate in adjusting these resonances; as they rise, they increase the involvement of the rhinopharynx and the extrinsic laryngeal muscles, whose elevation or lowering modifies the laryngopharyngeal space[9].

This practical concept is based on acoustic foundations described in the literature. Sundberg relates vocal projection to formant configuration, emphasizing that adjusting these parameters directly influences the intensity and clarity of emission[12]. Pinho et al., in turn, emphasize that vocal intensity results from the balanced interaction between the subglottic, glottic, and supraglottic levels[13]. CBM incorporates these contributions by proposing resonance exercises involving the laryngopharynx, oropharynx, and rhinopharynx, promoting projection and clarity without compromising vocal health[9]. The integration of propulsion, source, and resonance also supports the development of so-called "sub-registers."

"Sub-registers" are defined as vocal adjustments that combine source (vocal registers) and filter (resonators). The concept of vocal registers described in the method agrees with Pinho, Korn, and Pontes[14], who distinguish registers based on the mucous wave behavior and intrinsic muscle activity, and with Hirano[15], whose theory of the involvement of cricothyroid and thyroarytenoid tensors underpins the understanding of transitions between registers. CBM reorganizes these contributions into pedagogical sub-registers, applied to contemporary popular singing[8].

Each sub-register is based on this foundation, combining these specific elements to optimize the voice within the intended vocal style and to unite registers and colors. The method describes several sub-registers, which the singer can develop according to the desired style. Nevertheless, two sub-registers are initially recommended: soul belting and covered soul belting[9].

Soul belting is a feminine sub-register of contemporary belting, characterized by a sonority resulting from the interaction between source and filter. The source uses the mid-register with a predominance of thyroarytenoid and a semi-soft onset, while the filter uses a large amount of "male soft-palate singing," giving the emission a posterior resonance. According to the method, male soft-palate is a vocal maneuver that increases oropharyngeal space by slightly elevating the tongue dorsum, elevating the soft palate, opening the pharyngeal pillars, and slightly lowering the larynx. This sub-register is characteristic of rhythm and blues (R&B) and pop styles and is

widely recognized in the performances of singers such as Beyoncé, Jennifer Holliday, and Christina Aguilera[8].

In turn, covered soul belting is essential for performing high notes combined with textual articulation. It adds nasal twang to soul belting, expanding the use of the rhinopharyngeal cavity combined with the nasal cavity, along with the vocal adjustments described above, making the final sound brighter[9]. Kelly describes twang as a bright and penetrating vocal sound, common in styles such as musical theater, R&B, gospel, salsa, country, pop, and even opera. This vocal quality is produced by specific vocal tract configurations, including a narrowed epilaryngeal tube, an elevated larynx, a mid-positioned soft palate, and a light register, resulting in efficient projection without excessive vocal effort[16].

It should be noted that the exercises presented in this paper, described in Chart 1, are an initial CBM approach. Their correct performance can be followed in video lessons[17].

Chart 1. Description of the initial exercises of the contemporary belting method.

Exercise 1: Training the floating support maneuvers
Goal: To activate the muscular function of breathing, improving floating support to avoid overloading the glottal closure.
Duration: 1 minute or 10 repetitions – breathing as needed, without using residual air.
Instructions: • Keep your sternum slightly elevated (similar to the Italian *appogio*) • Keep your shoulders low (avoiding clavicular breathing) • Open your ribs in an east-west (horizontal) direction • Inhale without changing your posture and, silently, perform apnea (hold your breath for a few moments) • As you exhale, maintain the posture, releasing the air evenly, as if the column of air were simply floating outward, not being pushed out.
Exercise 2: Posterior vibrating tube
Goal: To expand the pharyngeal space, keep the larynx low, control airflow, and activate the respiratory muscles. To optimize the source-filter ratio, promoting greater resonance and less vocal effort.
Duration: 1 and a half minutes
Instructions: Vocalize five notes with a combined vibration of /b/ and /v/, with your cheeks full of air, projecting the sound posteriorly toward the pharynx. Perform three times for each tone of the scale. **Adjustments:** • Head relaxed down (chin toward chest) • Tongue with a high dorsum and tip away from teeth **Female tessitura:** from D flat 3 to E 4 and back to D 4. **Male tessitura:** from B flat 2 to C4 and back to A flat 3. The exercise should be performed in head voice, a register with greater cricothyroid muscle activation.
Exercise 3: Anterior vibrating tube
Goal: To improve glottal closure and increase vocal brightness.
Duration: 1 minute
Instructions: Vocalize five notes with a combined [b] and [v] vibration, projecting the sound to your teeth. Repeat it on a descending scale for each tone of the scale. **Adjustment:** • Head slightly back **Female tessitura:** from D flat 4 to D flat 3. **Male tessitura:** from A flat 3 to E flat 2. The exercise should be performed in head voice, a register with greater cricothyroid muscle activation.
Exercise 4: Tongue or lip trill technique with adjustments
Goal: To relax tongue muscles, stimulate the sliding of the mucous layer of the vocal folds, activate peripheral blood flow, and exercise the soft palate and pharyngeal space in isometry.
Duration: 1 and a half minutes
Instructions: Do a tongue or lip trill, raising your soft palate and widening your pharyngeal space. Perform octave glissandos. • Head relaxed down (chin towards chest) **Female tessitura:** from A flat 2 to E 4 and back to A flat 2. **Male tessitura:** from E flat 2 to A flat 3 and back to E flat 2.

Exercise 5: Vocal economy voice
Goals: To maintain a semi-soft onset, low larynx, widened pharyngeal wall, and controlled respiratory flow.
Duration: 1 minute or 5 repetitions
Instructions: Chant the months of the year in *recto tono* (maintaining the same tone), in a single breath, with: ○ Semi-soft onset ○ Lowered larynx ○ Widened pharyngeal wall ○ Minimal vocal emission and sensation of apnea **Adjustment:** • Head relaxed down (chin towards chest)
Exercise 6: Vocal economy voice with modulation
Goals: To work on the same adjustments as in the previous exercise, but with control over the vocal adjustments during register changes.
Duration: 1 minute or 5 repetitions
Instructions: Chant the months of the year with the same settings as the previous exercise, but this time, modulating the tone as follows: • Start in the mid-low range of the voice, move up to the mid-high range, then to the high range, and return to the mid-low range.
Exercise 7: Soul belting
Goals: To develop soul belting, a contemporary belting sub-register, maintaining a semi-soft onset, and expanding oropharyngeal and pharyngeal space, with slight laryngeal lowering.
Duration: 1 and a half minutes
Instructions: Vocalize five notes with the combined vowels [ue], going up half tone at a time. Repeat it three times for each tone of the scale. • Keep: ○ Slightly lowered larynx. ○ Widened pharyngeal space ○ Head relaxed down (chin toward chest) ○ Tongue with a high dorsum and tip away from the teeth. **Female tessitura:** from A flat 2 to B flat 3 and back to D flat 3. **Male tessitura:** from A flat 2 to F sharp 3 and back to A flat 2.
Exercise 8: Covered soul belting
Goal: To develop the covered soul belting, another contemporary belting sub-register, expanding the use of the rhinopharyngeal cavity combined with the nasal cavity and maintaining the previously mentioned vocal adjustments, making the sound brighter.
Duration: 1 and a half minutes
Instructions: Vocalize five notes with twang [uẽ], going up half tone at a time. Repeat it three times for each tone of the scale. • Keep: ○ Head relaxed down (chin toward chest). ○ Tongue with high dorsum and tip away from teeth. ○ Widened pharyngeal space ○ Slightly lowered larynx **Female tessitura:** from A flat 2 to B flat 3 and back to D flat 3. **Male tessitura:** from G 3 to B 3 and back to G 3.
General observations: • **Frequency:** Perform the exercises once a day for 3 weeks, resting 1 day per week. • **Posture:** Maintain floating support during all exercises. • • **Low larynx:** Maintain the larynx low to avoid constrictions.

Final considerations

The eight initial CBM exercises have been systematized here to assist vocal work with musical theater and pop singers. Its principles can also benefit singers of different styles who require efficient vocal projection. The sequence of exercises develops proprioception, including the widening of the pharyngeal space and its isometry, effective glottal closure, maintenance of a semi-soft onset, laryngeal lowering, minimal vocal emission, and respiratory flow control. These adjustments aim for greater phonatory comfort, promoting vocal projection and resonance.

The approach described in this paper is an essential step toward the technical and pedagogical consolidation of the eight introductory CBM exercises, paving the way for future research. Although CBM is already widely disseminated and recognized in the artistic world, this systematization offers a practical and scientific contribution by organizing the exercises in a clear, structured, and replicable sequence. This formalization favors its use in different contexts of vocal teaching and practice, expanding its reach and facilitating its application by voice professionals.

As for the academic context, controlled randomized clinical trials are needed to evaluate the effectiveness of the method's exercises and define the ideal number of sessions and combinations for consistent results. The framework published here is a solid foundation for future research and experimental validation, helping to consolidate CBM as a technically and scientifically grounded approach to teaching contemporary singing.

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