Implications of Fascia-Based Exercises in the Voice Training Process: A Phenomenological Inquiry

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Abstract

This study aims to investigate the effects of fascia-focused exercises on students' bodily and vocal awareness, perceptions of voice production, and learning experiences during vocal training. The study was conducted with 13 undergraduate voice students (10 female, 3 male, ages 20–30) from a state conservatory. Using a phenomenological design, data were collected through weekly written feedback forms, semi-structured interviews, and observational notes over a six-week exercise program. Thematic analysis revealed five core themes: (1) Bodily awareness and postural transformation, (2) Increased breath awareness and control, (3) Contribution to voice production and technical performance, (4) Psycho-physiological relaxation and well-being, and (5) Contribution to the learning process and professional sustainability. Students reported improvements in recognizing muscular tension, postural alignment, diaphragmatic breathing, and producing a more open and supported sound. The exercises were also found to reduce performance anxiety and enhance confidence. Some students indicated that they transferred the exercises to their own students, highlighting pedagogical benefits. This study contributes a holistic framework that integrates fascia awareness into vocal pedagogy.

Keywords: Vocal training, fascia, bodily awareness, breath control, somatic education, thematic analysis

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Introduction

Voice training requires not only the instruction of vocal production techniques but also a holistic evaluation of the body's postural balance, respiratory capacity, musculoskeletal coordination, and sensory awareness. In recent years, the integration of somatic education approaches into vocal pedagogy has been increasingly emphasized, and the significance of bodily awareness in voice production is frequently highlighted in the literature (Helding, 2020; Stark, 1999). In this context, exercises based on the fascial system offer a new perspective on voice training processes.

Fascia is a dynamic network of connective tissue that envelops all muscle groups, internal organs, and the skeletal structure. This network plays a crucial role not only as a supportive structure but also in proprioception, interoception, force transmission, balance, motor control, range of motion, and intermuscular coordination (Schleip et al., 2012; Wilke et al., 2018). Recent research on the fascial system has revealed indirect yet significant effects on vocal performance, particularly in relation to resolving chronic muscular tension, functional use of the diaphragm, and enhancing the efficiency of the breathing cycle (Myers, 2014; Calais-Germain, 2006).

While most traditional techniques in voice training focus directly on the larynx, diaphragm, and respiratory control, fascia-based exercises offer indirect support by releasing and enhancing the flexibility of the connective tissues surrounding these structures (Stecco et al., 2020). Specifically, practices such as myofascial release, vibration-based relaxation techniques, superficial fascial release, and postural alignment contribute to producing the voice in a more natural, tension-free, and sustainable manner (Steinhauer, 2008; Cardoso et al., 2023). Furthermore, how students experience these exercises constitutes a valuable area of data in the pedagogical context.

This study qualitatively investigates the effects of fascia-focused exercises—implemented over six weeks with undergraduate voice students—on their bodily awareness, perceptions of vocal production, and overall learning experiences. Weekly observations and student feedback were systematically collected to explore the educational contribution of fascia-based exercises in voice training. Accordingly, this study aims to reveal the role of somatic awareness in vocal pedagogy and to evaluate the impact of body-centered approaches on students.

Problem Statement

Voice training is not merely the acquisition of vocal techniques; rather, it is a holistic process involving multiple components such as bodily awareness, respiratory coordination, and postural balance (Helding, 2020; Cardoso, 2023). However, traditional approaches to voice education often lack this integrative perspective, particularly in terms of incorporating the fascial system—the connective tissue network of the body—into pedagogical practice. Fascia is directly associated with the musculoskeletal system and plays a central role in the continuity of movement, balance, flexibility, and in proprioceptive

and interoceptive perception (Schleip et al., 2012; Wilke et al., 2018). In recent years, fascia-based exercises have been shown to improve both movement quality and respiratory function, a development that has also drawn attention in the field of vocal pedagogy (Myers, 2014; Stecco et al., 2020).

Nevertheless, research exploring the effects of fascial exercises in the context of voice training remains quite limited. The existing gap in the literature highlights the need for qualitative studies that examine student experiences, perceptions, and subjective responses to such exercises. This gap underscores the necessity for more holistic and somatically aware teaching methods in voice pedagogy (Helding, 2020; Morrison, 2017).

Research Problem

In light of the issues outlined above, the primary research question guiding this study has been formulated as follows:

Main Research Question: How do fascia-focused exercises applied during the voice training process influence students' bodily and vocal awareness, their perceptions of vocal production, and their overall learning experiences?

Sub-Questions: In addition to the main research question, the following sub-questions have also guided the study:

1. How do students experience the impact of fascia-based exercises on their vocal production?
2. In what ways do these exercises affect students' awareness of their bodies and control over breath/voice?
3. How do students evaluate these exercises in the context of their voice training process?

The answers to these sub-questions will, in turn, contribute to addressing the main research question. Before presenting the findings and results, however, it is essential to examine related studies in the Literature Review section, which forms the conceptual basis of this research.

Literature Review

Voice pedagogy has long been defined as a multidimensional process encompassing technical, physiological, and artistic aspects (Miller, 1996). However, in recent years, there has been a growing interest in the importance of bodily awareness and somatic approaches in vocal production (Bunch, 2018). Somatic education techniques such as the Alexander Technique, the Feldenkrais Method, and Body Mapping have been widely applied in voice training to improve the functional use of the body (Conable, 2000; Cardoso et al., 2023). The primary aim of these methods is to help students release unnecessary muscular tension and enable freer, more natural vocal production.

The literature frequently emphasizes the significance of posture, breath control, and muscular balance in voice production (LeBorgne & Rosenberg, 2014). Breath support and diaphragmatic control are considered fundamental components of vocal training, as proper breathing is said to support both technical and artistic performance (Sundberg, 1987). Nevertheless, studies focusing specifically on the role of fascia tissue in this process remain limited. Fascia is defined as the connective tissue network that surrounds muscles, organs, and tissues, and it plays a critical role in bodily mobility, tension regulation, and posture (Schleip et al., 2012). While studies on fascia have increased in the fields of sports science and physical therapy, research on this subject within music pedagogy and voice education is still in its early stages (Stecco, 2015).

In the context of vocal training, fascial work has been indirectly addressed in a small number of studies, typically within the broader category of general movement exercises for the musculoskeletal system (Linklater, 2006). For example, some somatic awareness practices mention the indirect benefits of fascial mobility, but there is a lack of comprehensive studies that systematically integrate fascia-focused exercises into voice pedagogy. Moreover, there is a noticeable gap in the literature regarding holistic approaches that address breath control, postural alignment, and vocal support from an integrative perspective.

The present study aims to fill this gap by investigating the impact of fascia-focused exercises and breathing practices used in voice training on students' learning experiences. As there is no previous comprehensive study directly combining fascia-based exercises with vocal pedagogy, this research is expected to offer a new conceptual and pedagogical contribution to the field. Furthermore, by presenting experiential data on bodily awareness, breath control, and psychophysiological balance in the voice training process, this study provides valuable support for the integration of holistic approaches into vocal education.

Method

Research Design

This study is a qualitative research aimed at exploring the impact of fascial exercises used in voice training on student experiences. Among qualitative research methods, the phenomenological design was adopted. The phenomenological approach seeks to reveal how individuals perceive a particular experience and how they make sense of it (Creswell, 2013). In this context, the study aims to conduct an in-depth investigation into the participants' experiences with fascial and breathing exercises.

Participants

The study group consists of 13 undergraduate students receiving vocal training, who were invited to participate in the research through an open call using maximum variation sampling. Participants were selected based on voluntary participation. As shown in Table 1, the participants' ages

range between 20 and 30, and the group includes 10 female and 3 male students. All participants attended the fascial and breath-focused voice training sessions conducted by the researchers regularly for a duration of six weeks.

Table 1. Gender and age distribution of participating students

Code of Participant	Gender	Age
P1	Female	22
P2	Female	21
P3	Male	23
P4	Female	21
P5	Male	22
P6	Female	30
P7	Female	23
P8	Female	24
P9	Female	23
P10	Female	23
P11	Female	21
P12	Male	23
P13	Female	22

Implementation Process

The study was conducted as part of a six-week educational program. In each 60-minute weekly voice training session, fascial-focused body exercises were systematically integrated alongside traditional vocal techniques. The exercises were structured under the following key components:

Myofascial release (particularly around the neck, shoulders, and jaw area)

Superficial fascial mobilization (including facial muscles, tongue root, and laryngeal region)

Postural alignment practices (such as pelvic balance, sternum expansion, and cervical alignment)

Breath-focused bodily awareness (involving diaphragmatic movement, costal expansion, and intercostal release)

Data Collection Tools

Two primary tools were employed for data collection in this study:

Written feedback forms: At the end of each week, students completed open-ended forms in which they shared their experiences, emotions, and observations.

Semi-structured interviews: At the end of the implementation process, all participants engaged in individual semi-structured interviews to reflect on their overall experiences.

Observer notes: Throughout the study, two expert supervisors in the field of voice education recorded observational notes regarding participants' conditions and responses.

Data Collection Procedure

The data collection process took place over the course of the six-week implementation period. During weekly one-hour sessions, participants engaged in fascial-based movement exercises, breathing practices, and relaxation techniques. Following each session, students submitted their weekly reflections through written forms. Upon completion of the program, semi-structured interviews were recorded using an audio recorder and transcribed by the researchers. The final findings were derived from the combination of interview transcripts, written feedback, and the observation notes recorded by expert observers throughout the entire process.

Data Analysis Methods

The written feedback forms, interview transcripts, and observer notes were analyzed using the thematic analysis method proposed by Braun and Clarke (2006). The analysis followed these steps:

1. Transcription of the data
2. Reading and familiarization
3. Coding of meaningful units
4. Grouping similar codes into overarching themes
5. Supporting the themes with explanatory narratives.

Two independent experts in the field supported the researchers during the coding process, and a high level of inter-coder agreement was achieved. The identified themes were reported alongside illustrative student quotes.

Results

The data obtained in this study were analyzed using thematic analysis based on three main sources: weekly written feedback forms from students, semi-structured interviews, and observer notes. Each data source was analyzed independently, and the resulting findings were organized into themes

and sub-themes, supported by illustrative student quotes. In alignment with the research aim, the findings present a multidimensional perspective on the effects of fascia-based exercises on the experiences of voice training students.

The analysis process revealed that recurrent and common themes emerged across all data sources. These themes were identified as follows:

1. Bodily Awareness and Postural Transformation
2. Increased Awareness and Control of Breathing
3. Contribution to Vocal Production and Technical Performance
4. Psycho-physiological Relaxation and Well-being
5. Impact on the Learning Process and Professional Sustainability

For each data source, the related themes, codes, and sample expressions are presented in tables within the corresponding subsections and elaborated in detail according to each thematic category.

Table 2. Thematic Analysis and Coding of Weekly Student Reflections

Theme	Code (Subtheme)	Example Student Statement	Frequency (n)
Bodily Awareness and Postural Transformation	Awareness of muscular tension	"I realized I was tensing everywhere." (K11)	11
	Improved posture	"My spine felt more upright." (K1)	9
	Back relaxation	"My back opened up, my waist felt relieved." (K8)	8
Increased Breath Awareness and Control	Extended breath duration	"I could hold my breath longer." (K3) "I realized that I can control my breathing more easily." (K4)	10
	Diaphragmatic breathing	"My diaphragm was more active than my chest." (K4)	8
Contribution to Vocal Production and Technique	Openness of voice	"My voice felt more open and comfortable." (K2)	9
	Enhanced breath support	"I managed to complete longer phrases." (K3)	8
Psycho-physiological Relaxation and Well-being	Meditative effect	"The exercises felt like meditation." (K6)	6
	Psychological relief	"They provided psychological comfort." (K10)	7
Pedagogical Impact and Professional Sustainability	Sharing with students	"I applied these exercises in my own teaching." (K9)	2

Note: Themes and codes were derived from open-ended weekly feedback forms completed by 13 participants during a six-week vocal training program.

As seen in Table 2, thematic analysis of the weekly written reflections revealed five main themes and their associated subthemes. All participants indicated that the fascia-based exercises enhanced their bodily and mental awareness throughout the vocal training process.

Under the theme of Bodily Awareness and Postural Transformation, most students reported becoming aware of habitual muscular tension during vocal production and learning how to release this tension through the exercises. K11 emphasized, "I realized I was tensing everywhere," while K1 noted, "My spine felt more upright," reflecting changes in posture. Similarly, K8 stated, "My back opened up, my waist felt relieved," describing a sense of relaxation in the back region.

In the theme of Increased Breath Awareness and Control, students highlighted improvements in both the duration and regulation of their breathing. K3 remarked, "I could hold my breath longer," while K4 commented, "My diaphragm was more active than my chest" and "I noticed I could control my breath more easily." These findings suggest that the exercises contributed to deeper breathing and more effective engagement of the diaphragm.

The theme of Contribution to Vocal Production and Technical Performance was also frequently mentioned. Students expressed that their voices felt more open, supported, and effortless. K2 stated, "My voice felt more open and free," and K3 added, "I managed to complete longer phrases," emphasizing the enhanced breath support and its impact on vocal performance.

The theme of Psycho-physiological Relaxation and Well-being revealed that students experienced mental and emotional relief following the sessions. K6 shared, "The exercises felt like meditation," while K10 noted, "They provided psychological comfort." These statements support the idea that fascia-based practices contributed positively to stress regulation and emotional well-being.

Finally, under Pedagogical Impact and Professional Sustainability, K9 explained, "I applied these exercises in my own teaching," indicating that the benefits of the practice extended beyond individual growth to include pedagogical value.

Taken together, these findings suggest that fascia-focused exercises provided students with multidimensional support, enhancing technical vocal function while also fostering holistic development.

Table 3. Thematic Analysis and Coding of Semi-Structured Student Interviews

Theme	Code (Subtheme)	Example Statement	Frequency (n)
Bodily Awareness and Postural Transformation	Realization of tension patterns	"I realized I was tightening my neck and let go." (K1)	10
	Habitual posture awareness	"I noticed I was usually tensed." (K13)	8
	Relief in back and shoulders	"My shoulder knots started to ease." (K12)	7
Increased Breath Awareness and Control	Enhanced breath control	"It helped me control my breath better." (K4)	9
	Emotional impact of breathing	"Breathing made me feel happy." (K13)	6
Contribution to Vocal Production and Technical Performance	Openness of tone	"My voice felt more natural and open." (K2)	8
	Vocal stamina and strength	"I felt my voice got stronger." (K3)	7
Psycho-physiological Relaxation and Well-being	Grounding and calm	"Closing my eyes on the mat was deeply relaxing." (K6)	5
	Emotional relief	"I felt happy after the exercises." (K13)	6
Pedagogical Impact and Professional Sustainability	Career impact awareness	"This kind of work prolongs a singer's career." (K13)	3

As shown in Table 3, the thematic analysis of the semi-structured interviews revealed the same five main themes identified in the written reflections. The students' responses reflected both technical and psychological benefits of the fascia-based exercises within the vocal training process.

Under the theme of Bodily Awareness and Postural Transformation, students described how they became aware of unconscious muscular tensions in different parts of their bodies. K13 noted, "I realized I was tightening my neck and learned to release it," while also stating, "I found that I usually held tension in my body." K12 added, "My shoulder knots started to ease," indicating a physical release in the upper back area.

The theme of Increased Breath Awareness and Control included reports of improved control and emotional responsiveness to breathing. K4 shared, "It helped me control my breath better," while

K13 remarked, “Breathing made me feel happy,” highlighting both technical and affective dimensions of respiratory awareness.

In Contribution to Vocal Production and Technical Performance, students expressed that their vocal tone became more open, natural, and supported. K2 stated, “My voice felt more natural and open,” and K3 commented, “I felt my voice got stronger,” pointing to enhanced vocal stamina and breath management.

Regarding Psycho-physiological Relaxation and Well-being, students emphasized the mental and emotional relaxation they experienced during and after the sessions. K6 shared, “Closing my eyes on the mat was deeply relaxing,” while K13 said, “I felt happy after the exercises,” suggesting a meditative and mood-enhancing effect.

Finally, under Pedagogical Impact and Professional Sustainability, K13 stated, “This kind of work prolongs a singer’s career,” reflecting an awareness of the long-term professional benefits of somatic training.

These findings support and reinforce the themes identified in the written reflections, providing additional depth to the multidimensional impact of fascia-based exercises on the students’ vocal training experience.

Table 4. Thematic Analysis and Coding of Observer Field Notes

Theme	Observed Behavior or Note	Frequency (n)
Bodily Awareness and Postural Transformation	Student noticed neck tension and released it	10
	Spinal alignment appeared more upright	9
	Back and shoulder area showed visible relaxation	8
Increased Breath Awareness and Control	Students sustained breath longer over the course of the sessions	9
Contribution to Vocal Production and Technical Performance	Voice output became more open and relaxed	8
	Breath support maintained through longer phrases	7
Psycho-physiological Relaxation and Well-being	Student appeared mentally calmer post-session	5
	Facial relaxation was observed after exercises	6
Pedagogical Impact and Professional Sustainability	Students reported applying the exercises with peers or students	2

Note: Observer field notes were recorded by two expert vocal educators who monitored students' behaviors and responses throughout the six-week intervention.

As shown in Table 4, the thematic analysis of the observer field notes yielded the same five primary themes as those identified in student reflections and interviews. These notes provided an external perspective on the physical, respiratory, and psycho-physiological changes students experienced during the intervention, offering valuable triangulation for the study.

Within the theme of Bodily Awareness and Postural Transformation, observers documented moments when students appeared to notice and release muscular tension in specific regions of their bodies. One note stated, "The student became aware of neck tension during the exercise and released it." Additional observations such as "More upright spinal alignment was observed" and "Noticeable relaxation occurred in the back and shoulder areas" highlighted improvements in posture and fascial release.

In the theme of Increased Breath Awareness and Control, observers recorded measurable changes in respiratory behavior. For example, "A significant increase in breath duration was noted as the sessions progressed," suggesting students began to utilize breath more consciously and efficiently over time.

Regarding Contribution to Vocal Production and Technical Performance, observers noted audible and visible changes in vocal expression. Statements like "Voice output became more open and relaxed" and "Breath support was maintained through longer phrases" point to technical improvements in tone and vocal endurance.

In the theme of Psycho-physiological Relaxation and Well-being, observers remarked on students' emotional and mental shifts. Observations included "Student appeared mentally calmer post-session" and "Facial muscles appeared more relaxed after exercises," suggesting the exercises had a mood-stabilizing and calming effect.

Finally, under Pedagogical Impact and Professional Sustainability, one observer noted, "Some students shared how they adapted the exercises for their own students," indicating a transfer of somatic knowledge into teaching practice. This reflects the pedagogical applicability and broader professional relevance of the exercises.

Overall, these observational findings support and enrich the data gathered from student self-reports, further evidencing the multidimensional impact of fascia-based training in vocal education.

Table 5. Integrated Thematic Analysis and Coding Summary Across All Data Sources

Theme	Code (Subtheme)	Sample Student Statement	Frequency (n)
Bodily Awareness and Postural Transformation	Awareness of tension	"I realized I was tensing while singing." (K11)	11
	Improved posture	"My spine felt more upright." (K1)	9
	Back relaxation	"I felt the tension in my shoulder blades dissolve." (K12)	8
Increased Breath Awareness and Control	Longer breath duration	"I could hold my breath for longer." (K3)	10
	Conscious breathing	"Breathing makes you feel alive." (K5)	7
	Use of diaphragmatic breathing	"My diaphragm was more active than my chest." (K4)	8
Contribution to Vocal Production and Technical Performance	Vocal openness	"My voice felt more open and relaxed." (K2)	9
	Vocal release through muscular awareness	"I noticed my neck tension and learned to release it." (K13)	7
	Enhanced breath support	"I managed to complete longer phrases." (K3)	8
Psycho-physiological Relaxation and Well-being	Meditative effect	"The exercises created a meditative state." (K6)	6
	Relief from panic symptoms	"Breathwork helped with my panic attacks." (K7)	4
	Psychological relaxation	"The exercises provided psychological comfort." (K10)	7
Pedagogical Impact and Professional Sustainability	Application to teaching	"I applied the exercises with my own students." (K9)	2
	Career sustainability	"This work prolongs a musician's career." (K13)	3

As illustrated in Table 5, thematic analysis of all three data sources, student reflections, semi-structured interviews, and observer field notes, resulted in the identification of five overarching themes. The analysis revealed a strong consistency across the data sets, indicating that students' experiences were multidimensional yet characterized by similar patterns. The identified themes were: (1) Bodily Awareness and Postural Transformation, (2) Increased Breath Awareness and Control, (3) Contribution to Vocal Production and Technical Performance, (4) Psycho-physiological Relaxation and Well-being, and (5) Pedagogical Impact and Professional Sustainability. To ensure clarity and avoid unnecessary complexity, the same theme labels were used across the three data sets, as the findings showed conceptual alignment. Particular attention was paid to the similarity and convergence of expressions and frequency counts across sources.

In Bodily Awareness and Postural Transformation, students reported discovering previously unnoticed muscular tension and experiencing positive changes in posture through the exercises. K11 stated, "I realized I was tensing while singing," and K1 noted, "My spine felt more upright." Observer notes confirmed this, stating, "More upright spinal alignment was observed."

Under Increased Breath Awareness and Control, students described improvements in their breathing capacity and control. For instance, K3 shared, "I could hold my breath for longer," and K4 said, "My diaphragm was more active than my chest." These perceptions were supported by observers who noted, "A noticeable increase in breath duration was observed as the sessions progressed."

In Contribution to Vocal Production and Technical Performance, students reported that their voices felt more open, natural, and supported. K2 remarked, "My voice felt more open and relaxed," while K3 commented, "I managed to complete longer phrases." Observers echoed this improvement: "Voice output became more open and relaxed."

Within Psycho-physiological Relaxation and Well-being, students highlighted emotional and psychological benefits. K6 noted, "The exercises created a meditative state," and K7 shared, "The breathing exercises helped with my panic attacks." Observers confirmed, "Facial relaxation was observed after the exercises."

Finally, in Pedagogical Impact and Professional Sustainability, K9 stated, "I applied the exercises with my own students," and K13 emphasized, "This work prolongs a musician's career." Observers noted, "Some students shared how they adapted the exercises for their own teaching," and "Students reported feeling energized after class, with no signs of fatigue during sessions."

These findings underscore the multifaceted benefits of fascia and breath-based exercises in vocal training ranging from enhanced body awareness and breath control to technical improvement and psychological well-being.

Discussion, Conclusion and Recommendations

The findings of this study reveal the multidimensional effects of fascial and breath-focused exercises in the context of voice training. These results demonstrate that the exercises contributed to students' development not only in terms of technical performance but also in terms of psychophysiological well-being.

The students' increased bodily awareness, recognition of muscular tension, and positive postural changes support previous studies emphasizing the importance of body awareness in the voice training process (Bunch, 2018; Cardoso et al., 2023). Somatic approaches such as the Alexander Technique and the Feldenkrais Method have been widely utilized in voice pedagogy to foster the functional use of the body (Conable, 2000; Linklater, 2006). Student statements reflecting increased awareness of muscular contraction and the development of more functional posture during vocal production align with the somatic view that the body plays a central role in voice production (LeBorgne & Rosenberg, 2014).

Findings related to breath control and diaphragmatic engagement are consistent with literature asserting that breath-supported vocal production is a cornerstone of voice training (Sundberg, 1987; McCoy, 2019). Students reported increased breath duration, greater awareness of diaphragmatic use, and improvements in conscious breath control, demonstrating that breathing serves both as a technical tool and a psychological regulator. These results support studies suggesting that breathing exercises can contribute not only to vocal support but also to the management of performance anxiety and stage fright (Kenny, 2011; Wells et al., 2012).

Student feedback indicating improvements in vocal clarity, ease, and breath support aligns with pedagogical approaches that emphasize the importance of holistic voice training (Callaghan, 2000; Titze, 2008). Theoretical frameworks that consider voice production not as the result of isolated laryngeal function but as a coordinated activity involving structural and neuromuscular systems further validate these findings (Sataloff, 1998). Students' reports of reduced effort and increased vocal sustainability indicate the significance of proactive strategies for maintaining vocal health (Thurman & Welch, 2000).

Findings under the theme of psychophysiological relaxation and well-being are in line with the growing emphasis on somatic awareness and mindfulness practices within the voice education literature (Czajkowski & Greasley, 2015; Cohen et al., 2021). Students associated the exercises with feelings of meditation, mental calmness, and psychological relief, supporting the idea that voice training requires not only technical but also bodily, emotional, and mental integration (Zarate, 2013). Previous studies also support the role of breathing practices in anxiety regulation, self-regulation, and emotional balance (Balban et al., 2023; Bentley, et al., 2023).

Similarly, previous studies conducted with pre-service teachers have demonstrated that psychological well-being is not merely an individual trait, but rather a multidimensional construct closely associated with lifestyle factors, social support, and self-regulation skills. These findings suggest that educational programs should extend beyond the development of technical competence and incorporate holistic structures that actively support students' well-being and vocational resilience (Sezer, 2022).

In addition, research involving pre-service music teachers has revealed that stressors encountered during educational and performance-related processes exert a significant influence on psychological well-being. This evidence indicates that, particularly in performance-based disciplines, body-oriented and mindfulness-informed practices that enhance students' self-regulation capacities and overall well-being should be addressed at an institutional level rather than being left to individual initiative (Onuray-Eğilmez, 2022).

Finally, the observed contribution of the exercises to the learning process and professional sustainability corresponds with literature that highlights the need for vocational resilience and proactive vocal health strategies in voice education (Kooijman et al., 2006; Heeg & Lüke, 2025). For example, the fact that one participant (K9) mentioned applying these exercises with their own students demonstrates the pedagogical transferability and value of these practices in teacher training contexts.

These findings suggest that fascial and breath-focused exercises offer significant contributions to voice pedagogy at theoretical, pedagogical, and practical levels. Theoretically, the study fills a gap in the literature by introducing a new conceptual framework for understanding the role of fascia in voice production. Pedagogically, it highlights the importance of integrating body-based and breath-centered holistic approaches into voice training. Practically, the findings demonstrate the exercises' tangible benefits for performance quality, vocal health, and career sustainability.

This study underlines the importance of addressing the interconnection between the body, breath, and voice through a multidimensional lens and presents a unique contribution to the voice pedagogy literature.

This study aimed to explore the effects of fascia-focused exercises implemented during the voice training process on students' experiences. Based on the findings, the sub-questions of the research were first addressed, and subsequently, the main research question was answered accordingly.

How do students experience the effects of fascia-based exercises on their vocal production?

The findings revealed that fascia-based exercises had a positive impact on students' vocal production processes. Students reported that their voices became clearer, more natural, more relaxed, and better supported. They noted increased awareness of muscular tension and described learning how to release

it. These results align with theoretical perspectives that emphasize voice production as the result of whole-body integration, rather than solely the function of the laryngeal structures (Titze, 2008; Sataloff, 1998; Callaghan, 2000). Statements about improved breath support, enhanced vocal stamina, and greater control with less physical effort underscore the importance of holistic approaches in promoting vocal health (Thurman & Welch, 2000; LeBorgne & Rosenberg, 2014).

In what ways do these exercises influence students' awareness of their bodies and breath/voice control?

Students expressed that the exercises helped them identify previously unnoticed muscular tensions, improve posture, and engage more consciously with diaphragmatic breathing. Improvements in breath capacity, extended breath duration, and conscious breath control were observed. Additionally, students reported perceptible changes in their voices, which in turn increased their overall awareness. These findings align with the literature that highlights the critical role of breath control and posture in voice training (Sundberg, 1987; Miller, 1996; McCoy, 2019). Furthermore, the perception of breath not only as a technical support but also as a means of emotional balance and mental calm reflects the integration of mindfulness and somatic awareness practices into voice education (Cohen et al., 2021; Czajkowski & Greasley, 2015; Balban et al., 2023).

How do students evaluate the exercises within the voice training process?

Students regarded the exercises as part of a holistic approach to voice education. They described the exercises as contributing not only technically but also psychophysiologically, helping reduce performance anxiety, increase self-confidence, and manage performance-related stress. These findings are consistent with studies examining the relationship between performance anxiety and body awareness in voice training (Kenny, 2011; Wells et al., 2012; Zarate, 2013). Some participants also stated that they had begun applying these exercises with their own students, highlighting their pedagogical value and transferability (Heeg & Lüke 2025; Kooijman et al., 2006).

In light of these findings, the main research question "How do fascia-focused exercises implemented during the voice training process affect students' bodily and vocal awareness, perceptions of vocal production, and overall learning experiences?" can be answered as follows:

Fascia-focused exercises enhance students' bodily and vocal awareness, facilitate more conscious, supported, and natural vocal use in production processes, and offer integrated contributions to their learning experiences across technical, pedagogical, and psychophysiological dimensions.

This study provides a unique contribution to the voice education literature by addressing a relatively underexplored area: fascia-focused exercises. By approaching the relationship between body, breath, and voice through the lens of the fascial system, the study proposes a conceptual framework that fills a gap in current scholarship (Schleip et al., 2012; Stecco, 2015). Additionally, it offers practical

contributions by demonstrating the pedagogical transferability of these exercises, particularly in the context of teacher training and vocal health (Conable, 2000; Linklater, 2006).

Based on the findings of this study, future research could investigate the impact of similar practices with larger and more diverse participant groups. The long-term effects of fascia-based exercises on vocal health and professional sustainability could be explored using quantitative methodologies. Comparative experimental studies examining the impact of fascial work across different vocal styles, musical genres, and performance settings would further enrich the field. Additionally, integrating these exercises into teacher training programs and evaluating their contribution to vocational resilience in music education could form distinct areas of inquiry (Heeg & Lüke, 2025; Kooijman et al., 2006; Kenny, 2011).

Policy Implications

The findings of this study have important implications for educational policy in the field of voice training and music education more broadly. The demonstrated contributions of fascia-focused and breath-centered exercises to students' technical development, psychophysiological well-being, and professional sustainability suggest that current voice education policies may benefit from a more holistic and body-oriented framework. In many higher education institutions, voice training curricula remain predominantly technique-centered, focusing primarily on laryngeal function, respiratory control, and repertoire acquisition. However, the present findings indicate that such approaches may overlook critical dimensions related to bodily awareness, self-regulation, and long-term vocal health.

From a policy perspective, the integration of somatic and fascia-based practices into formal voice training curricula could support the development of more sustainable pedagogical models. Educational policies that encourage the inclusion of body-based awareness, preventive vocal health strategies, and experiential learning components may contribute to reducing the prevalence of voice-related disorders among students and future professionals. Given that several participants reported transferring these exercises into their own teaching practices, the findings also highlight the importance of incorporating somatic education into teacher training programs. This suggests a need for policies that promote continuity between undergraduate training and professional practice, particularly in conservatories and music education departments.

Furthermore, the emphasis on psychophysiological relaxation and emotional regulation aligns with contemporary educational policy trends that prioritize student well-being, resilience, and mental health. In line with the broader goals of international education frameworks, the results support policy initiatives that recognize learning as a multidimensional process involving cognitive, physical, and emotional domains. Encouraging voice education policies that integrate mindfulness, bodily awareness, and preventive health strategies may foster vocational resilience and reduce performance-related anxiety, thereby supporting students' long-term engagement with their profession.

This study contributes to policy-oriented discussions by offering empirical support for innovative pedagogical approaches in voice education. Policymakers, curriculum developers, and institutional leaders may consider these findings when revising voice training standards, accreditation criteria, and professional development requirements, with the aim of promoting holistic, sustainable, and health-oriented voice pedagogy.

Conflict of Interest

The authors declare that there is no conflict of interest.

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Ethical Statement

Ethical approval for this study was obtained from the Dokuz Eylül University Ethics Committee (Approval No: E-10042736-204.01.07-1535335). All participants were informed about the purpose, procedures, and voluntary nature of the study, and written informed consent was obtained prior to participation. No invasive or harmful procedures were conducted. All ethical responsibilities, including confidentiality and the protection of participant rights and welfare, were strictly observed.

Credit Author Statement

Author 1: Conceptualization: Formulation of research aims; Data Curation: Organization and preservation of data; Formal Analysis; Visualization: Preparation of tables, and data presentation; Writing – Original Draft: Preparation of the initial draft; Writing – Review & Editing: Revision and critical evaluation.

Joint contributions of Author 1 and Author 2: Investigation: Experiments and data collection; Methodology: Method development and model design; Project Administration: Management of the research process; Resources: Provision of materials or analytical tools; Supervision: Oversight of the research process; Validation of results.

References

Balban, M. Y., Neri, E. N., Kogon, M. M., Weed, L., Nouriani, B., Jo, B., Holl, G., Zeitzer, J. M., Spiegel, D., & Huberman, A. D. (2023). Brief structured respiration practices enhance mood and reduce physiological arousal. *Cell Reports Medicine, 3*(12), 100895. https://doi.org/10.1016/j.xcrm.2022.100895

Bentley, T. G. K., Chapman, R., & Wells, R. (2023). Breathing practices for stress and anxiety reduction: A systematic review and conceptual framework. *Brain Sciences, 13*(12), 1612. https://doi.org/10.3390/brainsci13121612

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Bunch, M. (2018). *Dynamics of the singing voice* (5th ed.). Springer.

Callaghan, J. (2000). *Singing and voice science*. Singular Publishing Group.

Cardoso, R., da Silva, A. M. A., de Araújo, M. C. C., & Fernandes, A. R. (2023). Myofascial release effects in teachers 'posture, muscular tension and voice quality: A randomized controlled trial. *Journal of Voice, 37*(4), 706–717. https://doi.org/10.1016/j.jvoice.2022.06.008

Cohen, S. E., O'Connor, T., & Barnes, E. H. (2021). Mindfulness for singers: A mixed methods replication study. *Psychology of Music*. https://doi.org/10.1177/20592043211044816

Conable, B. (2000). *What every musician needs to know about the body: The practical application of body mapping to making music*. Andover Press.

Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). SAGE Publications.

Czajkowski, A.-M., & Greasley, A. E. (2015). Mindfulness for singers: The effects of a targeted mindfulness course on learning vocal technique. *British Journal of Music Education, 32*(2), 101–126. https://doi.org/10.1017/S0265051715000145

Heeg, K., & Lüke, C. (2025). Long-term effects of voice prevention: Vocal health of former university students after taking up the teaching profession. *Journal of Voice*. https://doi.org/10.1016/j.jvoice.2025.11.016

Helding, L. (2020). *The musician s mind: Teaching, learning, and performance in the age of brain science*. Rowman & Littlefield.

Kenny, D. (2011). *The psychology of music performance anxiety*. Oxford University Press.

Kooijman, P. G., de Jong, F. I. C. R. S., Thomas, G., Huinck, W., Donders, R., & Graamans, K. (2006). Risk factors for voice problems in teachers. *Folia Phoniatrica et Logopaedica, 58*(3), 159–174. https://doi.org/10.1159/000091557

LeBorgne, W. D., & Rosenberg, M. (2014). *The vocal athlete: Application and technique for the hybrid singer*. Plural Publishing.

Linklater, K. (2006). *Freeing the natural voice* (Rev. ed.). Nick Hern Books.

McCoy, S. J. (2019). *Your voice: An inside view* (3rd ed.). Inside View Press.

Miller, R. (1996). *The structure of singing: System and art in vocal technique*. Schirmer Books.

Morrison, J., Kotzubei, S., & Seiple, T. (2017). Vocal traditions: Fitzmaurice Voicework. *Voice and Speech Review, 11*(3), 339–347. https://doi.org/10.1080/23268263.2017.1397254

Myers, T. W. (2014). *Anatomy trains: Myofascial meridians for manual and movement therapists* (3rd ed.). Elsevier.

Onuray-Egilmez, H. (2022). Covid-19 fears and psychological well-being of pre-service music teachers. *Educational Policy Analysis and Strategic Research, 17*(1), 88–107. https://doi.org/10.29329/epasr.2022.248.5

Sataloff, R. T. (1998). *Professional voice: The science and art of clinical care* (2nd ed.). Raven Press.

Schleip, R., Findley, T. W., Chaitow, L., & Huijing, P. A. (Eds.). (2012). *Fascia: The tensional network of the human body*. Churchill Livingstone.

Sezer, F. (2022). The role of social support and lifestyle in pre-service teachers 'psychological well-being. *Educational Policy Analysis and Strategic Research, 17*(2), 225–245. https://doi.org/10.29329/epasr.2022.442.10

Stark, R. (1999). *Bel canto: A history of vocal pedagogy*. University of Toronto Press.

Stecco, C. (2015). *Functional atlas of the human fascial system*. Churchill Livingstone.

Stecco, C., Macchi, V., Porzionato, A., Duparc, F., & De Caro, R. (2020). Fascial stretching and its role in muscle flexibility and function: A critical overview. *Applied Sciences, 10*(1), 307. https://doi.org/10.3390/app10010307

Sundberg, J. (1987). *The science of the singing voice*. Northern Illinois University Press.

Thurman, L., & Welch, G. (Eds.). (2000). *Bodymind & voice: Foundations of voice education* (Rev. ed.). The VoiceCare Network.

Titze, I. R. (2008). *Principles of voice production* (2nd ed.). National Center for Voice and Speech.

Wells, R., Outhred, T., Heathers, J. A. J., Quintana, D. S., & Kemp, A. H. (2012). Matter over mind: A randomised-controlled trial of single-session biofeedback training on performance anxiety and heart rate variability in musicians. *PLOS ONE, 7*(10), e46597. https://doi.org/10.1371/journal.pone.0046597

Zarate, J. M. (2013). Neuroscience of singing: The integration of mind, body, and emotion. *Annals of the New York Academy of Sciences, 1252*(1), 123–131. https://doi.org/10.1111/nyas.12103