

Safe Space for Musical Performance:

A Case Study on Promoting Health and Wellbeing in Instrumental Teaching in Brazil

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Abstract

This article describes the methodology used to develop the Safe Space for Musical Performance (SSMP), an approach created during the course "Studies on Psychophysical Integration in Musical Performance," offered to students in the Graduate Program in Music at the Federal University of Paraíba (UFPB). The course aimed to promote health and well-being in musical practice by integrating psychophysical aspects with theoretical knowledge of musician physiology. Thirteen students participated in 15 synchronous online sessions, which included warm-up exercises, discussions, musical practice, and relaxation activities. The results indicated that the SSMP fostered greater cohesion in musical practices and created a collaborative, safe environment for sharing experiences. It is concluded that establishing the SSMP can serve as a guideline for promoting healthier musical practices in Brazilian educational institutions.

Keywords: safe space for musical performance, musician health, performance pedagogy, psychophysical integration, embodied metacognition.

Espaço Seguro para Performance Musical: estudo de Caso sobre a Promoção da Saúde e Bem-estar no Ensino Instrumental no Brasil

Resumo:

Este artigo descreve a metodologia utilizada para o desenvolvimento do Espaço Seguro para Performance Musical (ESPM), uma abordagem criada durante o curso "Estudos sobre Integração Psicofísica na Performance Musical" oferecido aos alunos do Programa de Pós-Graduação em Música da Universidade Federal da Paraíba (UFPB). O objetivo foi promover a saúde e o bem-estar nas práticas musicais por meio da integração de aspectos psicofísicos e teóricos sobre a fisiologia do músico. A pesquisa contou com 13 alunos que participaram de 15 aulas síncronas, organizadas em sessões de aquecimento, discussões, práticas musicais e relaxamento. Os resultados indicaram que o ESPM proporcionou maior coesão nas práticas musicais, além de fomentar um ambiente colaborativo e seguro para a troca de experiências. Conclui-se que a criação do ESPM pode ser uma diretriz para o desenvolvimento de práticas musicais mais saudáveis nas instituições de ensino brasileiras.

Palavras-chave: espaço seguro para performance musical, saúde do músico, pedagogia da performance, integração psicofísica, ensino de música.

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Introduction

Learning to play a musical instrument is a demanding endeavor that requires high levels of dedication, persistence, and resilience. This process involves not only acquiring technical skills but also developing a complex set of cognitive and metacognitive competencies essential for effective, self-sustaining musical practice. Teachers play a central role in this development, guiding students to master musical expression while fostering critical reflection and self-management skills, contributing to making learners more autonomous and aware of their practices (López-Íñiguez et al., 2022; Araújo et al., 2024). In this context, music schools serve not only as spaces for technical learning but also as centers for cultivating healthy behaviors, encouraging values, beliefs, and collective actions focused on the physical and mental well-being of musicians (Chesky et al., 2006). However, promoting a culture of health extends beyond formal health education; it requires creating supportive environments and institutional policies that holistically support healthy practices and address the specific needs of the musical community (Matei & Phillips, 2023).

Instrumental training, particularly within the conservatory model, is characterized by an intense pursuit of technical perfection and an almost exclusive focus on performance excellence. This approach, widely adopted by higher education institutions in Brazil and other countries, places disproportionate emphasis on the final product of performance, often at the expense of the learning process. According to Williamon and Thompson (2006), this teaching model tends to overlook students' health and well-being, who face intense physical and psychological demands. Excessive practice and a lack of preventive guidance create an educational environment where feelings of insecurity and performance anxiety are common, affecting students' self-confidence and compromising their artistic and personal development.

The pressure to meet strict technical standards and rigorous evaluation can lead to a range of physical and psycho-emotional consequences, especially among music students (Rosset et al., 2022; Spahn et al., 2002). Common symptoms include headaches, digestive issues, excessive sweating, changes in blood pressure, heart and respiratory rates, muscle tension, fatigue, and gastrointestinal disturbances. These physical symptoms are often accompanied by psychological issues, such as loss of concentration, depression, anxiety, insecurity, panic, and memory loss (Araújo et al., 2017; Robson & Kenny, 2017; Vaag et al., 2021). Studies indicate that these symptoms tend to be more severe among music students compared to students in other academic fields (Ginsborg et al., 2009; Panebianco-Warrens et al., 2015; Spahn et al.,



2004), often exceeding levels observed in professional musicians (Costa, 2015; Silva & Farias, 2019; Lima, 2017; Santos, 2022).

Perfectionism, often mistaken for a healthy pursuit of excellence, is, in reality, a dysfunctional pattern that results in a cycle of dissatisfaction and constant comparisons. Bluestein (2015) describes perfectionism as a "psychological wound" that traps individuals in "all-ornothing" thinking, stifling growth and creativity due to a fear of making mistakes. This trait is particularly harmful in the musical context, where perfectionism exacerbates stress and anxiety, negatively impacting students' learning and autonomy (Kareem, 2011).

Similar phenomena have been widely studied in other high-performance areas, such as sports. Jowett et al. (2023) and Schellenberg et al. (2024) examined the impact of perfectionism on athletes and observed that it leads to hypersensitivity to failure, generating insecurity and a tendency toward excessive self-criticism. These elements, also present in music, indicate that perfectionism not only limits technical development but also aggravates symptoms of anxiety and insecurity.

For over four decades, studies have consistently documented the association between musical practice and the prevalence of psychophysical disorders among musicians (Harman, 1982; Hochberg et al., 1983; Fishbein et al., 1988; Trelha et al., 2004; Costa, 2005; Oliveira & Vezzá, 2010; Kenny et al., 2014; Vaag et al., 2015; Araújo et al., 2017; Pouryaghoub et al., 2017; Cruder et al., 2020; Kegelaers et al., 2021; Vermeersch et al., 2023). As early as 1994, Zaza presented recommendations for preventing these issues, emphasizing educational strategies and modifying both practical and non-musical behaviors. However, despite these guidelines and the growing body of evidence, changes in music education have been limited, reflecting structural resistance to pedagogical adaptations that could mitigate health risks for musicians.

Although various conservatories and higher education music programs in the United Kingdom, Europe, Australia, Canada, Brazil, and the United States have begun to incorporate health courses, both integrated and external to the curriculum (Barton & Feinberg, 2008; Zander, Voltmer & Spahn, 2010; Árnason, Briem & Árnason, 2018; Matei et al., 2024; Matei & Ginsborg, 2022; Araújo & Spahn, 2022; Domingues & Noda, 2021; Tinoco et al., 2024), health education for musicians remains below its potential after four decades of systematic research. The recent European Commission report on the health and well-being of musicians and music creators highlights the ongoing exposure of these professionals to risk factors, underscoring the urgent need for broader and more effective educational, preventive, and treatment actions (Vermeersch et al., 2023).



In Brazil, the Musical Performance Improvement and Training Project and the course on Psychophysical Integration Studies in Musical Performance, both implemented at the Federal University of Paraíba (UFPB), exemplify initiatives that aim to integrate well-being practices into music education. The concept of the Safe Space for Musical Performance (SSMP), developed during the course, is an innovative example of a learning environment that provides students with a safe, non-judgmental space, fostering both technical and emotional development.

The primary objective of this study is to describe the methodology used in developing the Safe Space for Musical Performance (SSMP) as a tool to promote health and well-being in musical practice contexts in Brazil. Through a critical analysis of the strategies employed, we aim to contribute to advancing discussions on building a more holistic pedagogy of instrumental performance education, integrating physical, emotional, and cognitive dimensions, thereby enriching the technical and artistic development of Brazilian musicians.

The influence of insecurity on well-being, academic, and professional performance

Insecurity can be defined as a lack of protection and stability, creating a constant perception of threat that directly affects individuals' well-being and performance (Onifode, Imhonopl, and Uorim, 2013). In educational settings, safety is fundamental to students' full development, influencing their sense of comfort, learning, and academic outcomes (Maslow, 1971). According to these authors, a sense of insecurity can alter an individual's worldview, rendering it a hostile and threatening place, generating tension, internal conflicts, and even self-centered behaviors, which deeply impact students' cognitive and emotional development.

Insecurity within the school context is often associated with factors that render the environment hostile, such as violence, bullying, drug use, and criminal activities. This perception, as discussed by Ojukwu and Nwanma (2017), not only affects students' motivation but also significantly hinders their academic performance. For students and teachers alike, environments lacking protection and support act as barriers to achieving educational goals.

Various types of insecurity can be observed, each with distinct characteristics and impacts on students' development:

• **Physical insecurity:** Exposure to violence and bullying impacts students' physical vulnerability, leading to assaults and intimidation that impair academic performance (Schwartz and Gorman, 2003).



- Emotional insecurity: Emotional instability, associated with a lack of psychological support, leads to issues such as anxiety and low self-esteem. Duta et al. (2015) and Yu et al. (2021) demonstrate that this emotional insecurity is linked to disorders affecting academic performance.
- **Social insecurity:** The perception of injustice and discrimination in interpersonal interactions may limit students' collaborative capacity (Greenen et al., 1980; Wentzel et al., 2021).
- Psychological insecurity: Issues like anxiety and self-deprecation impact students' concentration and motivation (Babu & Suneela, 2019; Khesht-Masjedi et al., 2019).
- Economic insecurity: Lack of financial resources compromises students' ability to learn (Reid, 2000; Jyoti et al., 2005; Mishra & Ramakrishna, 2023).
- Environmental insecurity: External factors, such as natural disasters, affect students' well-being and emotional stability, thereby influencing academic performance (Rubens et al., 2018; Onigbinde, 2018).

These various forms of insecurity interrelate, creating a cumulative impact on students' academic performance. Thus, safe educational environments are essential for the holistic development of students, especially in contexts of musical performance.

Cognitive and academic impact of insecurity

Insecurity directly affects cognitive development, particularly in unstable environments that hinder concentration and information processing. Onifode, Imhonopl, and Uorim (2013) and Maslow (1971) emphasize that students exposed to insecure conditions face significant barriers, such as memory difficulties and challenges in logical organization of ideas, compromising the efficiency of learning and the practical application of acquired knowledge.

Students in insecure school environments also suffer from a lack of emotional support from the institution, which compromises their well-being and performance (Abubakar et al., 2022). These conditions result in poorer academic performance, evidenced by low grades, frequent absenteeism, and even school dropout, consequences attributed to the stress and emotional barriers resulting from insecurity.

Insecurity in the professional context

In professional settings, job insecurity substantially affects workers' commitment and satisfaction, leading to decreased productivity (Muñoz Medina et al., 2023). Studies categorize job insecurity into:



- Quantitative insecurity: Relates to the possibility of job loss.
- Qualitative insecurity: Involves uncertainties about changes in working conditions, including responsibilities and status (Cuyper et al., 2021).

These categories of insecurity create a vicious cycle, where occupational stress reduces engagement and participation in development activities, intensifying feelings of vulnerability.

Insecurity in teaching and musical performance

Various forms of insecurity can foster performance anxiety, undermining confidence and the quality of musical performances (Berg et al., 2022; Kegelaers et al., 2020). In highly competitive environments, musicians are particularly vulnerable to self-criticism and negative self-assessment, which create a cycle of insecurity that impedes both psychological and professional development. Financial insecurity adds an additional layer of stress, especially for freelance musicians who face financial instability and the constant need to maintain a positive reputation (Dobson, 2010; Berg et al., 2022; Kegelaers et al., 2022).

Studies on the "hidden curriculum" in music conservatories indicate that the psychological pressures of continuous comparison and the expectation of perfection increase self-criticism and insecurity among students, fostering an environment that challenges healthy development (Dobson, 2010; Kegelaers et al., 2020; Kegelaers et al., 2021). Additionally, the lack of financial support exacerbates musicians' vulnerability, heightening their reliance on networking and live performances—factors that further amplify feelings of insecurity (Berg et al., 2022).

Insecurity is a multifaceted phenomenon with significant impacts on the well-being and performance of both students and professionals. The various dimensions of insecurity—physical, emotional, social, psychological, economic, and environmental—interfere with cognitive development as well as academic and professional achievement. In the musical context, insecurity compounded by economic, social, and reputational factors presents a continuous challenge to musicians' mental health and performance. Institutional approaches to mitigating these effects are essential to creating safer environments that support holistic development.

Methodology

This study employs a qualitative exploratory approach to investigate the development and impacts of the Safe Space for Musical Performance (SSMP), an emerging concept that surfaced during the course



Studies on Psychophysical Integration in Musical Performance, offered to graduate music students at the Federal University of Paraíba (UFPB). The objective was to analyze the impact of this approach on musical practices and the physical and emotional well-being of musicians.

Context and participants

The SSMP was spontaneously developed over the course of fifteen synchronous online classes, offered to students in UFPB's Graduate Program in Music between August and November 2021. Without prior planning, the concept of SSMP gradually emerged from the interactions and shared needs between students and instructors during the course. The course included 13 participants (5 women, 8 men), among master's and doctoral students from diverse fields such as performance practices, music education, musicology, and ethnomusicology. The participants' average age was 29 years (ranging from 24 to 52, SD = 8.3), with an average regular musical practice time of 15.3 years (ranging from 10 to 35 years, SD = 7.7). Their instruments included guitar, oboe, violin, cello, trumpet, and piano.

Emergent nature of the SSMP

The concept of the Safe Space for Musical Performance was not planned as a formal research intervention. It emerged spontaneously over the course as psychophysical practices were integrated into the curriculum. Participants reported an increase in emotional, physical, and mental safety, which fostered their performance development within a supportive environment. This evolution process was documented throughout the course through reflective journals and semi-structured feedback, providing an empirical basis for this study.

Data collection

Data was collected longitudinally over the 16 weeks of the course using the following qualitative tools:

- Reflective journals: Participants were encouraged to record their perceptions of the impact of the course's practices and discussions on their performances and physical and emotional well-being. These journals allowed for capturing personal experiences and provided rich data on participants' self-awareness and self-knowledge development.
- **Semi-structured feedback:** Weekly discussions were held where participants shared their impressions of the classes and



psychophysical practices, focusing on the evolution of their performances and the creation of a safe environment for artistic development.

- **Performance videos:** Students recorded videos of their performances at the beginning and end of the course, which were used to assess technical progress and the integration of psychophysical practices. Feedback on these videos was provided by both instructors and students, promoting a collaborative analysis of each participant's development.
- Participant observation: Throughout the course, instructors observed students' interactions and progress, documenting how the discussed concepts were incorporated into musical practice and interpersonal interactions.

Data analysis

Data was analyzed using thematic analysis (Braun & Clarke, 2006), a widely used technique in qualitative studies that enables the identification and interpretation of recurring patterns in participants' reports. The following steps were taken:

- **Familiarization with the data:** Careful reading of reflective journals and feedback session transcripts.
- **Initial coding:** Identification of relevant codes in the data, related to themes such as emotional safety, body awareness, self-confidence, and the influence of psychophysical practices on performances.
- Theme identification: Grouping of codes into broader themes, such as "impact of self-awareness," "nonviolent communication," and "technical and emotional evolution."
- Theme review and definition: Refinement of identified themes to ensure they adequately represented the data and study objectives.

The course on Psychophysical Integration in Musical Performance

After three iterations of PROCAPEMUS and the transformations brought about by the COVID-19 pandemic, efforts were made to systematize aspects of this project into a dedicated course for graduate music students at UFPB. The course, titled Studies on Psychophysical Integration in Musical Performance, was designed based on the premise that an individual's role in the world is shaped by their physical and psychological interactions with their environment. Its aim was to facilitate students' exploration and critical reflection on concepts such as musician physiology, learning methodologies, and re-



search approaches in music. The curriculum incorporated elements of psychology, body awareness, study strategies, and performance practices, providing a holistic framework for understanding and enhancing the musician's experience.

In pursuit of a more critical and reflective approach to instrumental education that promotes deep, integrative learning, the concepts of embodied cognition and embodied metacognition emerged as central. Embodied cognition posits that cognitive processes are not confined to the brain but are influenced by interactions with the body and environment (Risko & Dunn, 2015). Similarly, embodied metacognition suggests that bodily activities shape metacognitive processes, with sensorimotor experiences playing a significant role in shaping neural networks and cognitive development. This is particularly relevant in musical settings, where insecurity and lack of body awareness can hinder these processes.

Research by Hallam (2001) and Concina (2019) demonstrates that professional musicians exhibit advanced metacognitive skills essential for effective practice, including time management, planning, and performance evaluation. Araújo et al. (2024) further reinforce that, while professional musicians possess refined metacognitive abilities, beginners face greater challenges in these areas. Integrating metacognitive training into music education can thus foster more conscious and self-regulated learning, directly impacting the quality of musical practice.

The theory of embodied metacognition further complements this perspective by showing that physical processes and interactions influence one's ability to monitor and control cognition. Studies by Alonso (2015) and Haba-Osca et al. (2019) underscore the importance of these interactions within educational contexts, advocating for deep, situated learning that takes into account social and cultural contexts as well as asymmetric power dynamics. Riva and Mantovani (2012) highlight how technologies, such as virtual environments, can support embodied metacognition by simulating complex physical and social interactions, thereby promoting more authentic learning experiences.

Drawing on these approaches, the course aimed to foster the technical and artistic development of participants through critical reflection on factors influencing musical performance, with a strong emphasis on the physical and psychological dimensions that shape interpretation and creativity. The methodology sought to promote a holistic approach to music education, prioritizing not only technical and artistic proficiency but also self-awareness and a deeper psychophysical understanding.

Although musical performance was not the primary focus of all participants' academic research, they engaged in the course with the



goal of improving their interpretative practices. Initial classes focused on discussing short-, medium-, and long-term goals to tailor content to the individual needs of each student. The course was structured into six components: warm-up, experience sharing, content presentation and discussion, musical practice, and relaxation. This structure integrated theoretical and practical content on musician physiology, psychophysical practices, and performance.

The inclusion of warm-up and relaxation routines was grounded in studies demonstrating their importance in preventing musculoskeletal disorders (Foxman & Burgel, 2006; Rousseau et al., 2021; Zaza, 1994). Warm-up exercises increase body metabolism and activate the central nervous system, enhancing attention and technical learning, while relaxation routines help prevent improper postural habits and promote recovery after intensive practice (Van Hooren & Peake, 2018).

Due to the dynamic nature of the course, content was continuously adjusted to meet participants' expectations. However, the core topics can be summarized into four main areas:

- **1. Music, Health, and Well-being:** Discussions on the benefits of music for human development (Peretz, 2018; Thompson & Olsen, 2021) and the psychophysical pathologies associated with musical practice (Watson, 2009; Zaza, 1998).
- **2. Body Mapping and Postural Integration:** Body mapping strategies (Holt, 2016) to increase physical awareness and prevent injuries.
- **3. Musical Expertise Development:** Neurocognitive processes related to musical memory and performance (Thompson & Olsen, 2021), along with emotional management strategies (Lehrer, 1987; Zhukov, 2019).
- **4. Psychophysical Integration:** Methods to harmonize mind and body in musical performance, aiming for greater expressiveness and efficiency (Nelson & Blades, 2005; Schlinger, 2006).

The course involved three main activities: (1) presentations on students' research and its relevance to the course content; (2) two recorded musical performances, one at the beginning and one at the end of the course, to assess progress; and (3) a report or reflective journal detailing the course's contributions to their research and performance. Presentation formats were flexible, with options such as podcasts and videos.

This pedagogical approach, by integrating physical, cognitive, and emotional dimensions into musical training, provided participants with tools to support their artistic development while prioritizing health and well-being—essential elements for sustainable musical practice.



Building the Safe Space for Musical Performance (SSMP)

Incorporating knowledge of musician physiology into musical performance education has been shown to positively impact both performance and health, providing essential tools for injury prevention and improvement in instrumental execution (Zaza, 1998; Foxman & Burgel, 2006). Awareness of physiology and ergonomics as applied to instrumental performance enables safer and more effective practice, promoting well-being and contributing to musicians' professional longevity. In a study involving instrument teachers, Hildebrandt and Nübling (2004) observed that teachers who received advanced training in musician-specific physiological theory and practice developed a heightened sense of responsibility in technical instruction and demonstrated improved precision in guiding performance-related movements. This training not only enhanced pedagogical practices but also led to notable changes reported by students, particularly in the clarity of verbal instructions and postural guidance. These findings highlight the positive impact of continuous teacher training on instructional quality and student safety in musical practice.

Based on principles of physical and emotional safety, the Studies on Psychophysical Integration in Musical Performance course culminated in the creation of the Safe Space for Musical Performance (SSMP), a structured environment designed to support students' artistic development in a judgment-free, pressure-free setting. The SSMP was conceptualized as a physical, mental, and emotional space where musicians can confidently engage in musical practice, honing their skills within a collaborative context that encourages continuous learning. In the SSMP, "safety" is understood comprehensively, extending beyond the absence of physical risk. To feel safe means experiencing a sense of welcome and protection, which directly influences musicians' well-being and quality of life. As discussed by Maslow (1971), safety is a fundamental need for the full development of human potential, allowing musicians to focus on self-actualization. This sense of safety reduces stress and anxiety, which often hinder creative expression and performance quality (Kenny, 2011).

Research suggests that environments promoting physical and emotional safety foster engagement and motivation, contributing to more effective academic performance and improved mental health (Wlodkowski & Ginsberg, 2017; Perry et al., 2006). For musicians, a safe practice environment not only provides protection against injuries but also offers a space where artistic expression is valued and encouraged without judgment. Such an environment is essential for developing self-confidence and authenticity in performance. The SSMP approaches musical practice not only as a technical exercise but as a relational and integrative experience between students and in-



structors. This safe environment supports a practice that prioritizes well-being and quality of life, facilitating cognitive and metacognitive processes essential for musical learning. The mutual trust cultivated in this context is crucial for continuous improvement and for fostering a positive relationship with instrumental practice.

A core aspect of the SSMP is fostering a sense of community among participants. According to Cacciamani et al. (2019), a sense of community is sustained by three main elements: participation, fostering a sense of belonging to the group; meeting needs and achieving common goals; and mutual influence between individuals and the group. These elements are essential for creating a welcoming and supportive environment where participants can share their experiences and cultivate a culture of cooperation and respect. To consolidate these principles, four foundational concepts were integrated into the SSMP: selfawareness, belonging, authenticity, and nonviolent communication. These concepts form the basis of a learning environment where students can develop their musical abilities in an authentic and secure manner, promoting more meaningful and integrative learning. Therefore, the SSMP seeks not only to prevent injuries and enhance technical performance but also to cultivate confident, resilient musicians capable of expressing their artistic intentions within a supportive and collaborative setting.

Self-awareness as a tool for sustainable musical practice

Building a Safe Space for Musical Performance (SSMP) begins with the cultivation of self-awareness and self-knowledge. These concepts are essential for sustainable musical practice, as they enable musicians to understand their body and mind as an integrated system, aligning their actions and intentions with internal perceptions and motivations.

Self-awareness, as discussed by scholars such as Alicke et al. (2020), refers to the ability to perceive one's own existence and internal states, representing a crucial aspect of human cognition. This process of perception is immediate and direct, linked to what Giananti et al. (2024) describe as a first-person perspective. Self-awareness allows us not only to recognize our feelings and reactions but also serves as a foundational step toward self-knowledge, which goes beyond immediate perception to encompass a deeper understanding of actions and intentions.

Self-knowledge is thus a multifaceted process involving a stable self-view and an understanding of contextual influences, as highlighted by Cherrier et al. (2020). This concept of the "self" is seen as a powerful tool for enhancing a sense of self-efficacy, a fundamental



component for educational success and sustainable skill development, as demonstrated in studies such as Deci and Ryan's (2013) research on intrinsic motivation and self-determination.

In our classes, we emphasize that the body is our primary instrument, underscoring the importance of understanding not only the physiological processes involved in musical activities but also developing a heightened awareness of one's own body. We draw on Watson's (2009) work on musician physiology, which underscores the need to regard body and mind as an integrated unit. This approach allows musicians to make more informed decisions aligned with their physical and mental conditions, fostering a healthier and more sustainable practice.

Moreover, questions such as "Why do I make music?" and "What is my role as a musician?" encourage exploration of intrinsic motivation, aligning students' personal goals with their musical practice. Deci and Ryan's (2013) research on self-determination reinforces the importance of nurturing autonomy and self-knowledge, guiding students to engage with music in an authentic and meaningful way.

Through the development of self-awareness and self-knowledge, it becomes possible to create a safe and sustainable space for musical practice, where musicians gain a deeper understanding of their capacities and limitations. Their practice is guided not only by the demands of learning and performance contexts but also by a profound understanding of their own "self," allowing them to align internal intentions and motivations with actions and goals. This holistic approach fosters a healthier, more autonomous relationship with music, empowering musicians to face career challenges in a balanced and self-sustaining manner.

Seeking balance between belonging and authenticity

Belonging and authenticity are fundamental concepts for human and psychological development, with significant implications in artistic and educational contexts. Epistemologically, belonging refers to the intrinsic need for connection and acceptance within groups or communities, a drive essential for individuals' emotional and psychological well-being. According to Baumeister and Leary (1995), belonging is a basic human motivation that encourages the formation of deep social bonds supporting mental health. Similarly, Gabor Maté (2022) highlights that the absence of belonging can lead to isolation and social disconnection, negatively impacting mental and physical health. Thus, belonging is not merely a personal preference but a fundamental need for social cohesion and emotional support.



Authenticity, in turn, can be understood as the ability to remain true to oneself, maintaining coherence between beliefs, values, and actions. Kernis and Goldman (2006) define authenticity as a continuous process of self-understanding and self-acceptance, allowing individuals to act according to their true essence rather than conforming to external expectations. For Maté (2022), living inauthentically creates internal discomfort and can harm psycho-emotional health, as individuals experience a constant conflict between their true identity and socially imposed norms.

In the context of the Safe Space for Musical Performance (SSMP), balancing belonging and authenticity is essential. The SSMP aims to provide an environment where musicians can express their individuality authentically while finding support and validation within the group. This balance is crucial for psychological safety, a concept explored by Edmondson (1999), who describes psychological safety as essential for organizational innovation and effectiveness. In a psychologically safe environment, individuals feel free to be authentic, reducing the fear of judgment and allowing them to explore their creative potential more fully.

Brown (2017) also examines the relationship between belonging and authenticity, emphasizing that authentic belonging requires vulnerability, an essential aspect for strengthening psycho-emotional health. According to Brown, vulnerability enables the formation of genuine connections, as only by allowing others to see us as we truly are can we establish authentic relationships that promote mental health and emotional well-being.

Drawing from the neuroscience of integration, Siegel (2020) argues that the absence of belonging and authenticity disrupts mental and physical health, leading to stress and cognitive disorientation. Thus, spaces like the SSMP become essential by offering a safe, integrative environment that promotes holistic health for musicians by encouraging both belonging and authenticity.

In educational settings, the sense of belonging plays a central role in developing self-confidence and cognitive resilience. Through his Theory of Self-Efficacy, Bandura (1997) demonstrates that a feeling of belonging strengthens self-confidence and positively impacts learning. Bandura argues that students who feel accepted and secure in a supportive environment tend to develop greater self-confidence, a critical factor for effective learning. Complementing this, Dweck (2006), in her growth mindset theory, emphasizes that an educational environment that allows students to be authentic facilitates intellectual and emotional development, creating a solid foundation for cognitive growth and resilience.



In professional contexts, psychological safety, as discussed by Edmondson (1999), is a key factor for innovation and effective collaboration. Environments that promote psychological safety and authentic belonging enhance organizational effectiveness, enabling individuals to express their ideas and contribute fully to collective performance. Moreover, Maslow (1971), in his hierarchy of needs, positions belonging as a fundamental need, whose satisfaction enables individuals to reach higher levels of personal and professional achievement. This concept has direct applicability in both educational and professional settings, as it creates a foundation that facilitates development and productivity.

In the SSMP, creating a safe environment allows musicians to balance belonging and authenticity, fostering fuller artistic development and contributing to healthier and more sustainable musical performance. In the *Studies on Psychophysical Integration in Musical Performance* course, these concepts were integrated into reflective practices encouraging students to identify and explore their intrinsic and extrinsic motivations for musical practice, promoting self-awareness and meaningful learning.

The role of the educator in this process is essential, as by facilitating students' self-perception, they encourage independence and autonomy in both academic and personal pursuits. This approach fosters the development of authenticity, contrasting with traditional teaching models that often encourage conformity to pre-established norms. When belonging is rigidly imposed, it can hinder students' identity formation and limit their creative potential.

Bandura (1997) provides a robust theoretical foundation for understanding how belonging can both empower and constrain students. He suggests that while belonging offers emotional support and facilitates collaborative learning, its rigid imposition can inhibit individuality and creativity. Therefore, educators should promote a balanced approach, where belonging reinforces rather than suppresses students' autonomy.

To achieve this balance, educational strategies that foster support groups and an inclusive culture are fundamental. Baumeister and Leary (1995) emphasize that the feeling of belonging is directly related to motivation and performance. By creating environments where students can safely express their individuality, educators encourage a healthy sense of belonging that nurtures authenticity and personal growth. Consequently, education becomes a dynamic process that prioritizes the development of identity and self-efficacy, contributing to balanced and sustainable musical practice.



Nonviolent Communication: empathy and self-Knowledge in interpersonal and intrapersonal relationships

Nonviolent Communication (NVC), developed by Rosenberg (2003), is an approach grounded in humanistic psychology that promotes empathy, understanding, and cooperation in social interactions. Based on the pillars of observation, feeling, need, and request, NVC aims to transform communication into a process of relationship-building and peaceful conflict resolution, fostering authentic connections between interlocutors (Batūraitė et al., 2024). In educational and professional settings, NVC has demonstrated its potential to create more collaborative communication spaces that value individuality and promote a culture of mutual respect.

In educational contexts, practicing NVC is a valuable tool for creating more empathetic and collaborative learning environments. Batūraitė et al. (2024) observe that by integrating NVC into the classroom, teachers can establish deeper relationships with students, creating a space where they feel heard and valued. In higher education, NVC also reduces conflicts and fosters respectful dialogue, as highlighted by Lauricella (2019) in her analysis of the impact of this approach in undergraduate courses.

NVC has significant applications in professional settings as well. Studies such as those by Korlipara and Shah (2024) show that NVC training programs bring about substantial changes in employees' perspectives and behaviors, resulting in increased empathy and a more collaborative organizational culture. These programs benefit not only the organizational environment but also contribute to employees' individual well-being.

NVC emphasizes the importance of reflecting on how we communicate, encouraging a language that not only expresses ideas but also shapes expectations and helps address challenging situations without judgment. In the context of musical performance, this translates into a stance of acceptance and ease regarding others' perceptions. Practicing nonviolent communication with oneself before, during, and after study or performance can contribute to a more balanced and satisfying musical experience, providing support for handling stress with greater compassion.

Continuous practice of NVC enhances self-awareness, allowing individuals to observe their own reactions and emotions more deeply. This process fosters patience, reminding us of the importance of respecting individual learning and development paces—an essential factor for sustainable progress in musical performance. According to Korlipara and Shah (2024), this principle reinforces the notion that focus should be not only on what is learned but also on how it is learned, encouraging flexibility and empathy toward oneself and others.



A central pillar of NVC is the cultivation of empathy, both toward others and oneself. Practices such as self-reflection and meditation can strengthen this empathy, aiding in understanding one's own needs and limits and facilitating communication in tense situations. Rather than attempting to eliminate "flaws," NVC promotes a constructive approach where challenging characteristics are accepted and leveraged in a balanced and positive way (Rosenberg, 2003).

NVC also fosters identity development, encouraging students to explore their own qualities and abilities rather than comparing themselves to external standards. By supporting students' journeys of self-knowledge, NVC promotes a more welcoming and honest learning environment. This process is further enriched when the teacher is also on a continuous path of growth, allowing for a genuine and meaningful exchange of experiences and insights (Korlipara & Shah, 2024).

Practicing NVC helps develop the ability to observe and reflect on needs, both one's own and others'. This may include techniques such as practicing strategic pauses, which not only enhance musical performance but also contribute to a more thoughtful and considerate approach to interaction and communication, bringing a dimension of subtlety and respect to the teaching and learning process.

In the Safe Space for Musical Performance (SSMP), Nonviolent Communication (NVC) is employed as a central tool to cultivate a balanced and compassionate environment. By incorporating NVC practices, both students and teachers are encouraged to adopt empathetic communication rooted in self-awareness and clear, non-judgmental recognition of their own needs. This approach transcends interpersonal communication, encompassing the relationship musicians establish with themselves, particularly in managing self-criticism during study and performance processes.

Thus, when applied in educational and professional contexts, NVC proves to be an effective approach for fostering empathy, self-awareness, and collaboration. In musical settings, it contributes significantly to creating safer performance spaces where individuality and personal growth are encouraged in harmony with the pursuit of technical and artistic excellence, promoting a pedagogy that values comprehensive and humanistic training.

Observational results

Although we did not conduct a formal systematic monitoring of the effects of the SSMP, the combination of performance videos, students' final projects, and feedback collected throughout the course allowed for substantial observation of the outcomes. Students' reflective journals provided profound insights into postural and breathing re-educa-



tion, as well as the identification of movement patterns that hindered performance. This process was reinforced by weekly discussions and semi-structured feedback sessions, where participants reflected on the impact of psychophysical practices and the supportive environment offered by the SSMP on their performance and physical and emotional well-being. Over the 16 weeks, thematic analysis of students' reflections and teachers' observations identified consistent patterns of technical and psycho-emotional development, validating the guiding principles of the SSMP.

Throughout the course, participants demonstrated notable growth in self-awareness. This development was evidenced by improvements in posture and technical precision, resulting from systematic self-observation practices and guided physical exercises. The introduction of warm-up and cooldown routines helped musicians cultivate a heightened awareness of their biomechanics and the relationship between body and instrument, promoting postural adjustments that reduced tension and enhanced motor control. Techniques such as synchronized stretching with breathing and body tapping exercises were cited by students as fundamental for muscle relaxation and physical preparation before musical practice, contributing to smoother performances less susceptible to technical failures caused by bodily tension.

Building a sense of belonging was another essential element observed, promoting engagement and collaboration among participants. Students reported that the welcoming environment and mutual support facilitated the exchange of experiences and the exploration of new musical approaches without fear of judgment. This sense of community, reinforced through shared feedback and collective discussion, fostered interpersonal development and collaborative responsibility, strengthening bonds that extended beyond mere technical support. This inclusive environment allowed students to experience greater emotional security, which, according to reports, significantly reduced emotional barriers that often inhibit learning and genuine artistic expression.

Authenticity in performances was also a notable outcome. Students mentioned that the freedom to explore and express their musical identity resulted in a more connected and expressive practice, integrating personal and technical aspects cohesively. Reflecting on their own limitations and characteristics—rather than concealing them—enabled musicians to embrace a more positive and integrated view of themselves, fostering an artistic expression that resonated more deeply with the audience. Teachers observed that this authenticity enhanced the interpretative quality of performances, strengthening the bond between artist and listener.



Nonviolent Communication (NVC) proved transformative in fostering more empathetic and respectful interactions, both in group discussions and individual feedback. Students reported that practicing NVC helped to soften defensive reactions and integrate constructive criticism productively, cultivating an environment focused on self-development and collaboration. This approach reduced anxiety related to judgment and self-criticism, fostering a learning space where mistakes were viewed as a natural part of the growth process. Additionally, the use of NVC prompted students to communicate more clearly and intentionally, which was especially relevant in group performances and activities, resulting in enhanced cohesion and synchronization among participants.

In terms of technical and interpretative skills, the comparison between students' initial and final performance videos revealed significant improvements in areas such as posture, emotional control, and stage presence. The integration of specific exercises for body stability, such as strengthening foot and pelvic muscles, was frequently mentioned as essential for fostering a greater connection with the instrument and technical control during performances. Students reported that these practices, combined with a focus on body awareness, generated a more balanced and confident interpretative approach, facilitating authentic artistic expression and connection with the audience.

Finally, feedback from students and observations from teachers indicated that the creation of the SSMP fostered a culture of mutual support, enabling musicians to experiment with new practices in an integrated and sustainable manner. This experience transformed musical practice, incorporating a critical relational and human dimension essential for artistic development. In summary, the principles of the SSMP led to tangible improvements in both technique and the physical and emotional well-being of the students, establishing a solid foundation for more holistic and collaborative instrumental teaching practices.

Final considerations

This study does not aim to provide definitive solutions to complex issues often involving social, environmental, and psychophysical components, extending beyond the scope of an instrumental instructor. Instead, it proposes a reflection on the creation of a Safe Space for Musical Performance (SSMP)—a physical, mental, and emotional environment that enables musicians to express their artistic intentions and enhance their skills with confidence, fostering continuous and collaborative development. The SSMP is more than a place for technical instruction; it is an approach that integrates musicians' physical,



psychological, and emotional well-being, aligning instrumental practices with sustainable artistic and personal growth.

The need for a paradigm shift, one that transcends traditional conventions of talent, practice, and success in music education, has been highlighted by authors such as Campbell et al. (2014) and Leech-Wilkinson (2020), who emphasize the prevalence of physical and emotional challenges among musicians. This new model challenges rigid performance norms, such as strict fidelity to the composer, and values a more autonomous and creative approach to music education. Consistent with Cox and Kilshaw (2021), integrating diversity and inclusion, mental health, and critical skills is essential for educators, students, and conductors, promoting healthy and sustainable artistic development. Additionally, there is an urgent need for public policies that expand musicians' access to qualified health professionals and ensure dignified and safe working conditions, providing the necessary support for artists' holistic development.

The development of the SSMP has shown promise in promoting health and well-being in educational and professional contexts. This safe and collaborative environment allowed participants to express their artistic intentions authentically, minimizing fear of judgment and providing a space for personal and artistic growth. By fostering an atmosphere of self-awareness, belonging, authenticity, and nonviolent communication, the SSMP enabled musicians to cultivate greater self-awareness and identify ineffective movement patterns and emotional behaviors, enhancing their emotional management skills during performances.

Self-awareness was encouraged to help students increase their perception of the physical and emotional aspects of their musical practices, promoting a critical analysis of their motivations and goals. This process led them to explore intrinsic and extrinsic goals in music more deeply, fostering a more connected and reflective practice. The sense of belonging, essential for creating a welcoming environment as discussed by Maté (2022), was also central to the SSMP, as it fostered a supportive and collaborative atmosphere where students experienced reduced anxiety and engaged more actively in learning.

Authenticity was another essential pillar of the SSMP, allowing participants to express their individuality genuinely. By encouraging authenticity, the SSMP created a space where students could explore their artistic identities without pressure to conform to external expectations. As a result, creative freedom expanded, and confidence in each musician's artistic abilities was strengthened. Nonviolent Communication (NVC), based on the principles of Rosenberg (2003), played a crucial role by promoting empathetic dialogue, strengthening interpersonal relationships in the musical practice environment.



NVC enabled students to express their needs and emotions clearly and respectfully, fostering a safe and collaborative space for artistic growth.

These four concepts worked synergistically, providing an educational environment that promoted not only technical development but also the physical and emotional well-being of the musicians involved. The SSMP thus emerged as a holistic space, integrating the human and artistic dimensions of the participants and promoting deeper, more meaningful learning.

The impact of the SSMP extends beyond technical development. Students gained confidence, developed self-awareness, and acquired tools to perform their activities effectively and with balance. This process was marked by a balance between belonging—a sense of acceptance and inclusion within the group—and authenticity, referring to the genuine expression of one's essence and individuality. The integration of psychophysical practices and theories of applied musician physiology resulted in a more cohesive and mindful approach, promoting sustainable and balanced learning and musical practice.

This experience highlights the SSMP as a valuable guideline for developing healthier instrumental teaching practices in Brazilian music institutions. The integrated approach of the SSMP facilitates sustainable and balanced musical practices that promote not only technical and artistic development but also the physical and emotional well-being of musicians. However, these practices must respect the unique characteristics of each educational, cultural, and social context, ensuring that the safe space is built organically and aligned with musicians' needs.

The limitations of this study include the qualitative nature of the reported improvements, based on participants' self-assessments, and the challenge of generalizing these interventions to other contexts without appropriate cultural and pedagogical adaptations. To validate the effectiveness of these strategies, future studies should systematically evaluate the impacts of psychophysical practices and the SSMP across various educational contexts. Robust evaluation protocols will be essential for precisely measuring the benefits of the SSMP, based on assessment models proposed by Matei and Ginsborg (2022) and Matei and Phillips (2023a, 2023b), which may provide a solid foundation for adapting these strategies to the Brazilian context.

The concept of the SSMP represents an innovation in instrumental teaching, proposing a deep integration of technical development, psychophysical well-being, and artistic growth. By providing an environment that values authenticity, belonging, and empathetic communication, the SSMP transcends conventional musical practice, transforming it into a journey of self-knowledge and emotional re-



silience. This holistic approach not only strengthens the health and sustainability of musical practice but also prepares musicians to face the challenges and demands of an artistic career.

The observations of this study suggest that the SSMP can contribute to transforming pedagogical guidelines for instrumental education, creating more human-centered and collaborative educational spaces where technique and artistic expression coexist harmoniously and balanced. As further research is conducted, implementing the SSMP may significantly contribute to a future where musicians' development is guided by care, respect for cultural specificities, and a commitment to the artists' holistic well-being.

References

- Abubakar, F. L., Otakey, H. A., Umar, S. A., Fulani, S. M., & Isah, A. (2022). The impact of insecurity on secondary schools in Northern Nigeria. Arts and Social Science Research, 12(2), 19-19.
- Alicke, M., Zhang, Y., & Stephenson, N. (2020). Self-awareness and self-knowledge. In Oxford Research Encyclopedia of Psychology.
- Alonso, M. A. P. (2015). Metacognition and sensorimotor components underlying the process of handwriting and keyboarding and their impact on learning. Procedia Social and Behavioral Sciences, 176, 263-269. https://doi.org/10.1016/j.sbspro.2015.01.470
- Araújo, R. C. de, Ferronato, R. S., & Veloso, F. D. D. (2024). Metacognition in musical practices: Two studies with beginner and expert Brazilian musicians. Frontiers in Psychology, 15. https://doi.org/10.3389/fpsyg.2024.1331988
- Araújo, L. S., & Spahn, C. (2022). Promoting health-related lifestyle. In G. E. McPherson (Ed.), The Oxford Handbook of Music Performance, Volume 2 (online edn, Oxford Academic, 18 Mar. 2022). https://doi.org/10.1093/oxfordhb/9780190058869.013.14
- Araújo, L. S., Wasley, D., Perkins, R., Atkins, L., Redding, E., Ginsborg, J., & Williamon, A. (2017). Fit to perform: An investigation of higher education music students' perceptions, attitudes, and behaviors toward health. Frontiers in Psychology, 8, 1558.
- Árnason, K., Briem, K., & Árnason, Á. (2018). Effects of an education and prevention course for university music students on their body awareness and attitude toward health and prevention. Medical Problems of Performing Artists, 33(2), 131-136.
- Babu, A. L., & Suneela, M. E. (2019). Level of insecurity and the relation of different components of insecurity to the academic performance of intermediate students. International Journal of Research in Humanities, Arts and Literature (IJRHAL, 7(4), 871-876.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York: W.H. Freeman and Company.
- Barton, R., & Feinberg, J. R. (2008). Effectiveness of an educational program in health promotion and injury prevention for freshman music majors. Medical Problems of Performing Artists, 23(2), 47-53.



- Batūraitė-Bunka, A., Jurevičienė, M., & Skoczowsky-Danielsen, G. (2024). Unveiling the effects of nonviolent communication training on youth empathy. Social Welfare: Interdisciplinary Approach, 14, 70–87. https://doi.org/10.15388/SW.2024.14.5
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. Psychological Bulletin, 117(3), 497-529. https://doi.org/10.1037/0033-2909.117.3.497
- Berg, L., King, B., Koenig, J., & McRoberts, R. L. (2022). Musician occupational and financial stress and mental health burden. Psychology of Music, 50(6), 1801-1815.
- Brown, B. (2017). Braving the wilderness: The quest for true belonging and the courage to stand alone. Random House.
- Bluestein, J. (2015). The perfection deception: Why trying to be perfect is sabotaging your relationships, making you sick, and holding your happiness hostage. Health Communications, Inc.
- Cacciamani, S., Cesareni, D., Perrucci, V., Balboni, G., & Khanlari, A. (2019). Effects of a social tutor on participation, sense of community and learning in online university courses. British Journal of Educational Technology, 50(4), 1771-1784.
- Campbell, P. S., Myers, D. E., & Sarath, E. W. (2016). Transforming music study from its foundations: A manifesto for progressive change in the undergraduate preparation of music majors. In Redefining music studies in an age of change (pp. 59-99). Routledge.
- Cherrier, S., Le Roux, P. Y., Gerard, F. M., Wattelez, G., & Galy, O. (2020). Impact of a neuroscience intervention (NeuroStratE) on the school performance of high school students: Academic achievement, self-knowledge and autonomy through a metacognitive approach. Trends in Neuroscience and Education, 18, 100125.
- Chesky, K., Dawson, W., & Manchester, R. (2006). Health promotion in schools of music: Initial recommendations for schools of music. Medical Problems of Performing Artists. Disponível em: https://www.semanticscholar.org/paper/Health-Promotion-in-Schools-of-Music%3A-Initial-for-Chesky-Dawson/77f6a0528d7a163e96de5eb82e23b80a2789f428
- Concina, E. (2019). The role of metacognitive skills in music learning and performing. Journal of Music Education, 25(3), 215-230.
- Costa, C. P. (2015). Saúde do músico: percursos e contribuições ao tema no Brasil. OPUS, 21(3), 183–208. https://doi.org/10.20504/opus2015c2106
- Costa, C. P. (2005). Contribuições da ergonomia à saúde do músico: considerações sobre a dimensão física do fazer musical. Música Hodie, 5(2). https://doi.org/10.5216/mh.v5i2.2474
- Cox, T., & Kilshaw, H. (2021). Creating a more inclusive classical music: A study of the English orchestral workforce and the current routes to joining it (Executive Summary). Arts Council England. https://www.artscouncil.org.uk/sites/default/files/download-file/Executive_Summary.pdf



- Cruder, C., Barbero, M., Koufaki, P., Soldini, E., & Gleeson, N. (2020). Prevalence and associated factors of playing-related musculoskeletal disorders among music students in Europe: Baseline findings from the Risk of Music Students (RISMUS) longitudinal multicentre study. PLoS One, 15, e0242660.
- Cuyper, N., Smet, K., & De Witte, H. (2022). I should learn to feel secure but I don't because I feel insecure: The relationship between qualitative job insecurity and work-related learning in the public sector. Review of Public Personnel Administration, 42(4), 760-785.
- Deci, E. L., & Ryan, R. M. (2013). Intrinsic motivation and selfdetermination in human behavior. Springer.
- Domingues, R. S. V., & Noda, L. (2021). Aperfeiçoamento e capacitação em performance musical: estratégias de trabalho na pandemia. Revista Música, 21(1). https://doi.org/10.11606/rm.v21i1.186430
- Dutta, J., Chetia, P., & Soni, J. C. (2015). A comparative study on emotional maturity of secondary school students in Lakhimpur and Sonitpur districts of Assam. International Journal of Science and Research, 4(9), 168-176.
- Dweck, C. S. (2006). Mindset: The new psychology of success. Random House.
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. Administrative Science Quarterly, 44(2), 350-383.
- Fishbein, M., Middlestadt, S. E., Ottati, V., Straus, S., & Ellis, A. (1988). Medical problems among ICSOM musicians. Medical Problems of Performing Artists, 3, 1–8.
- Foxman, I., & Burgel, B. J. (2006). Musician health and safety: Preventing playing-related musculoskeletal disorders. AAOHN Journal, 54(7), 309–316. https://doi.org/10.1177/216507990605400703
- Giananti, A., Roessler, J., & Soldati, G. (2024). Perceptual knowledge and self-awareness. Oxford University Press. https://doi.org/10.1093/9780191965210.001.0001
- Ginsborg, J., Kreutz, G., Thomas, M., & Williamon, A. (2009). Healthy behaviours in music and non-music performance students. Health Education, 109(3), 242-258.
- Green, K. D., Forehand, R., Beck, S. J., & Vosk, B. (1980). An assessment of the relationship among measures of children's social competence and children's academic achievement. Child Development, 51(4), 1149-1156.
- Haba-Osca, J., González-Sala, F., & Martínez-Carrasco, R. (2019). Towards critical-reflexive agency: Introducing the 2030 agenda through engaged pedagogy in higher education. In EDULEARN19 Proceedings (pp. 7267-7272).
- Hallam, S. (2001). The development of metacognition in musicians: Implications for education. British Journal of Music Education, 18(1), 27-39.
- Harman, S. E. (1982). Occupational diseases of instrumental musicians, literature review. Maryland State Medical Journal, 31(6), 39-42.



- Hildebrandt, H., & Nübling, M. (2004). Providing further training in musicophysiology to instrumental teachers: Do their professional and preprofessional students derive any benefit? Medical Problems of Performing Artists, 19(2), 62-69.
- Hochberg, F. H., Leffert, R. D., Heller, M. D., & Merriman, L. (1983). Hand difficulties among musicians. JAMA, 249(14), 1869-1872.
- Holt, M. (2016). Applied anatomy in music: Body mapping for trumpeters. UNLV Theses, Dissertations, Professional Papers, and Capstones. https://doi.org/10.34917/9112082
- Jain, K. (2024). Barriers to equity, diversity and inclusion in education. Diversity, Equity & Inclusion, 183.
- Jowett, G. E., Mallinson-Howard, S. H., Hill, A. P., & Madigan, D. J. (2023). An update and extension of the independent effects approach to perfectionism in sport, dance, and exercise. The Psychology of Perfectionism in Sport, Dance, and Exercise, 75-161.
- Jyoti, D. F., Frongillo, E. A., & Jones, S. J. (2005). Food insecurity affects school children's academic performance, weight gain, and social skills. The Journal of Nutrition, 135(12), 2831-2839.
- Kareem, A. O. (2021). Insecurity in teaching and learning in the school environment: Curriculum implications. Editorial Board, 142.
- Kegelaers, J., Schuijer, M., & Oudejans, R. R. (2021). Resilience and mental health issues in classical musicians: A preliminary study. Psychology of Music, 49, 1273–1284.
- Kegelaers, J., Jessen, L., Van Audenaerde, E., & Oudejans, R. R. (2022). Performers of the night: Examining the mental health of electronic music artists. Psychology of Music, 50(1), 69-85.
- Kenny, D., Driscoll, T., & Ackermann, B. (2014). Psychological well-being in professional orchestral musicians in Australia: A descriptive population study. Psychology of Music, 42, 210–232.
- Kenny, D. T. (2011). The psychology of music performance anxiety (1st ed.). Oxford University Press.
- Kernis, M. H., & Goldman, B. M. (2006). A multicomponent conceptualization of authenticity: Theory and research. Advances in Experimental Social Psychology, 38, 283-357.
- Khesht-Masjedi, M. F., Shokrgozar, S., Abdollahi, E., Habibi, B., Asghari, T., Ofoghi, R. S., & Pazhooman, S. (2019). The relationship between gender, age, anxiety, depression, and academic achievement among teenagers. Journal of Family Medicine and Primary Care, 8(3), 799-804.
- Korlipara, M., & Shah, H. (2024). "Power of words": Impact, concerns, and applications of nonviolent communication training. European Journal of Training and Development, 48(1/2), 90-111.
- Lauricella, S. (2019). The practice of nonviolence: Teaching an undergraduate course in nonviolent communication. Journal of Communication Pedagogy, 2, 103-110.
- Leech-Wilkinson, D. (2020). Challenging Performance: Classical Music Performance Norms and How to Escape Them. https://challengingperformance.com/the-book/



- Lehrer, P. M. (1987). A review of the approaches to the management of tension and stage fright in music performance. Journal of Research in Music Education, 35(3), 143–153. https://doi.org/10.2307/3344957
- Lima, A. L. R. de. (2017). Memorização deliberada e dessensibilização sistemática como estratégias auxiliares de controle da ansiedade na performance da Suíte Brasileira No 3 de Lorenzo Fernández. (Dissertação de Mestrado, Universidade Federal da Paraíba). Disponível em https://repositorio.ufpb.br
- López-Íñiguez, G., Pérez Echeverría, M. P., Pozo, J. I., & Torrado, J. A. (2022). Student-centred music education: Principles to improve learning and teaching. In Learning and Teaching in the Music Studio: A Student-Centred Approach (pp. 369-385). Springer Nature Singapore.
- Maslow, A. H. (1971). The farther reaches of human nature. Arkana.
- Maté, G. (2022). The myth of normal: Trauma, illness and healing in a toxic culture. Knopf Canada.
- Matei, R., & Ginsborg, J. (2024). How do European and Western Balkans conservatoires help music students with their health and well-being? Psychological Perspectives on Musical Experiences and Skills, 351.
- Matei, R., & Ginsborg, J. (2022). Evaluating musicians' health interventions: The need for standardized protocols. Journal of Music, Health & Well-being.
- Matei, R., & Phillips, K. (2023a). Critical thinking in musicians' health education: Findings from four workshops with experts (Part I). Health Promotion International, 38(2). https://doi.org/10.1093/heapro/daac187
- Matei, R., & Phillips, K. (2023b). Health education in conservatoires: What should it consist of? Findings from workshops with experts (Part II). Health Promotion International, 38(1). https://doi.org/10.1093/heapro/daac179
- Matei, R., & Ginsborg, J. (2022). Health education for musicians in the UK: A qualitative evaluation. Health Promotion International, 37(2). https://doi.org/10.1093/heapro/daab146
- Mishra, M., & Ramakrishna, P. (2023). Education of socio-economic disadvantaged groups: From marginalisation to inclusion. Routledge. https://doi.org/10.4324/9781003370222
- Muñoz Medina, F., López Bohle, S. A., Van Beurden, J., Chambel, M. J., & Ugarte, S. M. (2023). The relationship between job insecurity and employee performance: A systematic literature review and research agenda. Career Development International, 28(6/7), 589-632. https://doi.org/10.1108/CDI-06-2022-0164
- Nelson, S., & Blades, E. (2005). Singing with your whole self: The Feldenkrais Method and voice. Journal of Singing, 62(2).
- Ojukwu, M. O. (2017). Effect of insecurity of school environment on the academic performance of secondary school students in Imo State. International Journal of Education and Literacy Studies, 5(1), 20-28.
- Oliveira, C. F. C. D., & Vezzá, F. M. G. (2010). A saúde dos músicos: dor na prática profissional de músicos de orquestra no ABCD paulista.



- Revista Brasileira de Saúde Ocupacional, 35(121), 33–40. https://doi.org/10.1590/S0303-76572010000100005
- Onifode, T., Imhonopl, J., & Uorim, O. (2013). Psychosocial adjustment of integrated secondary schools: Boys and girls Implications for teacher education programmes. Pakistan Journal of Social Sciences, 5(7), 681–685.
- Onigbinde, L. (2018). The impact of natural disasters on education outcomes. University of San Francisco. Retrieved from https://repository.usfca.edu/artsci_stu/2018/posters/12/
- Panebianco-Warrens, C. R., Fletcher, L., & Kreutz, G. (2015). Health-promoting behaviors in South African music students: A replication study. Psychology of Music, 43(6), 779-792.
- Peretz, I. (2018). Apprendre la musique: Nouvelles des neurosciences. Odile Jacob.
- Perry, N. E., Turner, J. C., & Meyer, D. K. (2006). Classrooms as contexts for motivating learning. In Handbook of Educational Psychology (2nd ed., pp. 327-348).
- Pouryaghoub, G., Mehrdad, R., & Pourhosein, S. (2017). Noise-induced hearing loss among professional musicians. Journal of Occupational Health, 59, 33–37. https://doi.org/10.1539/joh.16-0217-AO
- Reid, L. L. (2000). The consequences of food insecurity for child well-being: An analysis of children's school achievement, psychological well-being, and health. Joint Center for Poverty Research Working Paper, 137.
- Risko, E. F., & Dunn, T. L. (2015). Storing information in-the-world: Metacognition and cognitive offloading in a short-term memory task. Consciousness and Cognition, 36, 61-74.
- Riva, G., & Mantovani, F. (2012). Being there: Understanding the feeling of presence in a synthetic environment and its potential for clinical change. Virtual Reality, 16(3), 219-225.
- Robson, K. E., & Kenny, D. T. (2017). Music performance anxiety in ensemble rehearsals and concerts: A comparison of music and non-music major undergraduate musicians. Psychology of Music, 45(6), 868-885.
- Rosenberg, M. B. (2003). Nonviolent communication: A language of life (2nd ed.). PuddleDancer Press.
- Rosset, M., Baumann, E., & Altenmüller, E. (2022). A longitudinal study of physical and mental health and health-related attitudes among music students: Potentials and challenges for university health promotion programs. Frontiers in Psychology, 13, 885739. https://doi.org/10.3389/fpsyg.2022.885739
- Rousseau, C., Barton, G., Garden, P., & Baltzopoulos, V. (2021).

 Development of an injury prevention model for playing-related musculoskeletal disorders in orchestra musicians based on predisposing risk factors. International Journal of Industrial Ergonomics, 81, 103026. https://doi.org/10.1016/j.ergon.2020.103026
- Rubens, S. L., Felix, E. D., & Hambrick, E. P. (2018). A meta-analysis of the impact of natural disasters on internalizing and externalizing



- problems in youth. Journal of Traumatic Stress, 31(3), 332–341. https://doi.org/10.1002/jts.22292
- Santos, D. F. dos. (2022). Ansiedade de performance musical e sintomas depressivos em estudantes de música (Trabalho de Conclusão de Curso, Universidade Federal de Pernambuco). Disponível em https://repositorio.ufpe.br/handle/123456789/51252
- Schellenberg, B. J. I., Gaudreau, P., & Rose, L. (2024). Practically perfect in every way: Perfectionism and evaluations of perfect performances in sport. https://doi.org/10.31234/osf.io/v2nsb
- Schlinger, M. (2006). Feldenkrais method, Alexander technique, and yoga—body awareness therapy in the performing arts. Physical Medicine and Rehabilitation Clinics, 17(4), 865-875.
- Schwartz, D., & Gorman, A. H. (2003). Community violence exposure and children's academic functioning. Journal of Educational Psychology, 95(1), 163.
- Siegel, D. J. (2020). The developing mind: How relationships and the brain interact to shape who we are (3rd ed.). Guilford Press.
- Silva, J. W. F. da, & Farias, R. B. de. (2019). Ansiedade na performance musical: Constatação, sintomas e atividades práticas propostas para seu enfrentamento, no âmbito da Escola de Música da Universidade Federal do Rio Grande do Norte, uma pesquisa em andamento. In Congresso da ANPPOM, 29, Pelotas/RS. Anais [...]. Disponível em https://anppom.org.br/anais/anaiscongresso anppom 2019/5590/public/5590-20721-1-PB.pdf
- Spahn, C., Strukely, S., & Lehmann, A. (2004). Health conditions, attitudes toward study, and attitudes toward health at the beginning of university study: Music students in comparison with other student populations. Medical Problems of Performing Artists, 19(1), 26-33.
- Spahn, C., Richter, B., & Zschocke, I. (2002). Health attitudes, preventive behavior, and playing-related health problems among music students. Medical Problems of Performing Artists, 17(1), 22-28.
- Tinoco, C., Traube, C., & Guptill, C. (2024). Musicians' health and wellness resources in Canadian post-secondary music programs. Revue musicale OICRM, 11(1), 138-154.
- Vaag, J., Bjerkeset, O., & Sivertsen, B. (2021). Anxiety and depression symptom level and psychotherapy use among music and art students compared to the general student population. Frontiers in Psychology, 12, 607927. https://doi.org/10.3389/fpsyg.2021.607927
- Vaag, J., Saksvik-Lehouillier, I., Bjorngaard, J. H., & Bjerkeset, O. (2015). Sleep difficulties and insomnia symptoms in Norwegian musicians compared to the general population and workforce. Behavioral Sleep Medicine, 14, 325–342.
- Vermeersch, L., Van Herreweghe, D., Meeuwssen, M., Van der Jeught, H., Daenen, L., Smeers, E., ... & Ramioul, M. (2023). The health and wellbeing of professional musicians and music creators in the EU-insights from research for policy and practice.
- Van Hooren, B., & Peake, J. M. (2018). Do we need a cool-down after exercise? A narrative review of the psychophysiological effects and



- the effects on performance, injuries and the long-term adaptive response. Sports Medicine, 48(7), 1575-1595.
- Watson, A. H. D. (2009). The biology of musical performance and performance-related injury. Scarecrow Press. Disponível em http://ebookcentral.proquest.com/lib/mcgill/detail.action?docID=467511
- Wentzel, K. R., Jablansky, S., & Scalise, N. R. (2021). Peer social acceptance and academic achievement: A meta-analytic study. Journal of Educational Psychology, 113(1), 157.
- Wlodkowski, R. J., & Ginsberg, M. B. (2017). Enhancing adult motivation to learn: A comprehensive guide for teaching all adults. John Wiley & Sons.
- Thompson, W. F., & Olsen, K. N. (2021). The Science and Psychology of Music: From Beethoven at the Office to Beyoncé at the Gym. Bloomsbury Publishing USA.
- Trelha, C. S., de Carvalho, R. P., Franco, S. S., Nakaoski, T., Broza, T. P., de Lorena Fábio, T., & Abelha, T. Z. (2004). Arte e saúde: frequência de sintomas músculo-esqueléticos em músicos da orquestra sinfônica da Universidade Estadual de Londrina. Semina: Ciências Biológicas e da Saúde, 25(1), 65-72.
- Yu, S., Shi, J., Huang, J., Fan, S., & Xu, W. (2021). Longitudinal relationship between emotional insecurity and adolescent mental health: The mediation of rejection sensitivity and moderation of dispositional mindfulness. Mindfulness, 12(11), 2662-2671.
- Zander, M. F., Voltmer, E., & Spahn, C. (2010). Health promotion and prevention in higher music education: Results of a longitudinal study. Medical Problems of Performing Artists, 25(2), 54-65.
- Zaza, C. (1994). Based prevention for musicians. Medical Problems of Performing Artists, 9(1), 3-6.
- Zaza, C. (1998). Playing-related musculoskeletal disorders in musicians: A systematic review of incidence and prevalence. CMAJ, 158(8), 1019–1025.
- Zhukov, K. (2019). Current approaches for management of music performance anxiety: An introductory overview. Medical Problems of Performing Artists, 34(1), 53–60. https://doi.org/10.21091/mppa.2019.1008