

EMOTIONAL EXPRESSION IN PERFORMING ARTS: A PSYCHOLOGICAL AND MUSICIAN ANALYSIS

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SUMMARY. Emotional expressiveness in musical performance remains a key, but insufficiently researched component of professional training of musicians, because it is it that determines the artistic persuasiveness of interpretation and the depth of communication between the performer and the listener. The relevance of the topic is due to the need for modern music pedagogy in methods that combine the technical, psychological and artistic components of the performance process. The aim of the study is to identify the internal techniques of student performers and to clarify their influence on the formation of emotional expressiveness in the process of preparing a musical work. The methodology is based on qualitative empirical approaches: semi-structured interviews, diary entries, in-depth interviews and content analysis with elements of quantitative generalization. The study showed that internal techniques form a complex system, which includes visualization, metaphorical, associative, bodily-motor and concentration practices, which provide the performer with the ability to form an emotionally holistic and artistically convincing image of the work. It was found that students use various interpretive strategies - figurative-visual, structural-logical, technical-analytical and combined, which determine the individual style of working with musical material. The results showed that emotional expressiveness

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arises as an integrative product of the interaction of emotional, cognitive and motor processes, and various internal techniques play the role of “mediators” between intention and sound. The practical significance lies in the possibility of using the obtained conclusions to build modern pedagogical models aimed at developing emotional interpretation, improving performing skills and expanding individual creative strategies of students. The study creates a basis for further interdisciplinary studies aimed at combining psychological mechanisms, musicological analysis and digital methods for assessing performing expression.

Keywords: emotional expressiveness; musical performance; interpretive strategies; internal techniques; bodily-motor mechanisms; musical expression; musical pedagogy, psychology of performance, interpretative strategy, performative expression, artistic embodiment, musical semantics, emotional dramaturgy, communicative function, affective dynamics, semiotics of expressiveness

Introduction

Emotional expressiveness in performing arts remains one of the most complex, multidimensional and at the same time the least formalized categories of musical pedagogy and music psychology. Despite the considerable interest in the phenomenon of musical emotionality, the questions of how exactly the performer forms the emotional image of a work, what mechanisms underlie interpretative decisions and why different musicians realize the emotional potential of the same composition in different ways still remain open. Modern music education is faced with the problem of the gap between technical training and the development of artistic and emotional interpretation. Students often master the instrument well, but experience difficulties in forming their own expressive manner, which complicates their development as creative, convincing performers. That is why the study of internal techniques, mechanisms of interpretative strategies and factors that determine emotional expression acquires particular relevance and practical significance. A review of scientific sources shows that the issue of emotional expressiveness is studied at the intersection of several scientific directions. In the psychology of music, attention is focused on the nature of musical emotions, their perceptual mechanisms and multilevel models of emotional experience^{6, 7}.

⁶ Juslin, Patrik, “Major theories of emotion causation and their applicability to music: The case for multi-level approaches”, *Music Perception*, vol. 42, no. 5, 2025, pp. 421–466.
<https://doi.org/10.1525/mp.2025.2396878>

⁷ Singh, Manvir, and Samuel Mehr, “Universality, domain-specificity and development of psychological responses to music”, *Nature Reviews Psychology*, vol. 2, 2023, pp. 333–346.
<https://doi.org/10.1038/s44159-023-00182-z>

Musicological studies analyze the structural parameters of music - tempo, dynamics, timbre, articulation and intonational logic as means of forming emotional content^{8, 9}. At the same time, interdisciplinary works consider the influence of motor skills, corporeality and gestural plasticity on the perception and reproduction of emotions in music^{10, 11}. A separate direction is formed by modern digital studios, which analyze algorithmic recognition of musical emotions, parametric modeling of expressiveness, and automated tools for evaluating expression^{12, 13, 14, 15}. Such a wide scientific palette testifies to a deep interest in the phenomenon of musical expression, but at the same time reveals a number of unresolved contradictions and gaps.

Despite a significant number of works, the issue of individual internal techniques of performers - those invisible mental, imaginative and emotional-regulatory mechanisms that determine the nature of interpretation and distinguish one performer from another - remains insufficiently researched. Existing studies mostly focus on the structure of the musical text or on objectively measured performance parameters, while the internal processes of the performer - his visualization, metaphorical thinking, bodily sensations, individual emotional logic - remain fragmentarily described. In addition, there is a noticeable lack of

⁸ Frank, Joshua, Peter M. C. Harrison, Barry Ross and Carina Venter, "Exploring the variability of musical-emotional expression over historical time", *Empirical Musicology Review*, vol. 18, no. 2, 2024, pp. 117–132. <https://doi.org/10.18061/emr.v18i2.8711>

⁹ Anderson, Cameron, Jamie Ling and Michael Schutz, "Beyond the notes: Clarifying the role of expressivity in conveying musical emotion", *Quarterly Journal of Experimental Psychology*, vol. 0, no. 0, 2025. <https://doi.org/10.1177/17470218251372335>

¹⁰ Di Stefano, Nicola, Daniela Lo Presti, Luigi Raiano, Carlo Massaroni, Chiara Romano, Emiliano Schena, Marc Leman and Domenico Formica, "Expressivity attributed to music affects the smoothness of bowing movements in violinists", *Scientific Reports*, vol. 14, 2024, 22267. <https://doi.org/10.1038/s41598-024-73593-4>

¹¹ Turner, Craig, Robin Mailly, Fabien Dal Maso and Felipe Verdugo, "Impact of expressive intentions on upper-body kinematics in two expert pianists", *Frontiers in Psychology*, vol. 15, 2025, 1504456. <https://doi.org/10.3389/fpsyg.2024.1504456>

¹² Chowdhury, Shreyan, and Gerhard Widmer, "On perceived emotion in expressive piano performance: Further experimental evidence for the relevance of mid-level perceptual features", *arXiv:2107.13231*, 2021. <https://doi.org/10.48550/arXiv.2107.13231>

¹³ Chowdhury, Shreyan, and Gerhard Widmer, "Decoding and visualising intended emotion in an expressive piano performance", *arXiv:2303.01875*, 2023. <https://doi.org/10.48550/arXiv.2303.01875>

¹⁴ Chowdhury, Shreyan, and Gerhard Widmer, "Expressivity-aware music performance retrieval using mid-level perceptual features and emotion word embeddings", In *FIRE '23: Proceedings of the 15th Annual Meeting of the Forum for Information Retrieval Evaluation*, 2024, pp. 73–77. <https://doi.org/10.1145/3632754.3632761>

¹⁵ Bontempi, Pierluigi, Sergio Canazza and Antonio Rodà, "Research in Computational Expressive Music Performance and Popular Music Production: A Potential Field of Application?", *Multimodal Technologies and Interaction*, vol. 7, no. 2, 2023, p. 15. <https://doi.org/10.3390/mti7020015>

research that comprehensively describes the interaction of emotional, cognitive and technical-motor components in student performers, especially in the process of real preparation of a musical work. It is this “blank spot” that has led to the need for a purposeful empirical study of internal performance techniques and interpretative strategies.

In view of the above, the purpose of this work is to identify the structure and features of the internal techniques of student performers, characterize their influence on the formation of emotional expressiveness and clarify the patterns of individual interpretive strategies in the process of preparing a musical work. To achieve the goal, the following tasks were defined: to describe existing approaches to the study of emotional expression in modern research; to identify key types of internal techniques based on empirical data; to analyze the interpretive strategies of students of various instrumental specialties; to summarize the results obtained in the context of modern musicological and psychological concepts and to determine the prospects for further scientific studies.

Literature review

Modern scientific approaches to the study of emotional expressiveness in the performing arts are based on an interdisciplinary combination of music psychology, neuroscience, musicology, movement ergonomics, and digital analytics. A number of works reveal the multilevel nature of emotions manifested in performance: the theory of multilevel models^{16, 17}, composer-performer mechanisms of emotional transfer¹⁸, and universal patterns of musical sensuality^{19, 20}. Considerable attention has been paid to musicological parameters that shape the emotional drama of a work: structural-semiotic models²¹, the role of timbre and atmosphere²², as well as specific means of

¹⁶ Juslin, Patrik, 2025.

¹⁷ Singh, Manvir, and Samuel Mehr, 2023.

¹⁸ Varga, Peter, and Brian Parkinson, “Mechanisms of musical emotion transfer: Insights from 22 composers and the musicological and psychological literature”, *Journal of New Music Research*, vol. 53, no. 5, 2025, pp. 383–398.
<https://doi.org/10.1080/09298215.2025.2481852>

¹⁹ Wiafe, Abigail, Sami Sieranoja, Abedin Bhuiyan and Pasi Fränti, “Emotional response to music: The Emotify+ dataset”, *EURASIP Journal on Audio, Speech, and Music Processing*, vol. 2025, no. 31, 2025. <https://doi.org/10.1186/s13636-025-00419-0>

²⁰ Wu, Hongwei, Danni Wang and Linshu Zhou, “Tunes that move us: The impact of music-induced emotions on prosocial decision-making”, *Frontiers in Psychology*, vol. 15, 2025, 1453808. <https://doi.org/10.3389/fpsyg.2024.1453808>

²¹ Frank, Joshua, Peter M. C. Harrison, Barry Ross and Carina Venter, 2024.

²² Di Stefano, Nicola, Daniela Lo Presti, Luigi Raiano, Carlo Massaroni, Chiara Romano, Emiliano Schena, Marc Leman and Domenico Formica, 2024.

musical expression - dynamics, tempo, agogy, and articulation^{23, 24}. Wheeler et al.²⁵ emphasize that the level of DNA methylation is associated with structural changes in the brain.

Research confirms that emotional expressiveness is the result of a combination of cognitive analysis, internal interpretive techniques, and motor plasticity of the performer; in particular, work with kinematic monitoring shows the relationship between emotional attitudes and the fluidity of performing movements^{26, 27}. In parallel, there is growing interest in digital and experimental methods of performance analysis - algorithmic detection of emotions^{28, 29, 30}, computational models of expression^{31, 32}, visualization of emotional characteristics of music and behavioral responses of listeners^{33, 34}. Another body of research emphasizes the bodily-motor nature of musical experience and the multimodality of musical communication^{35, 36, 37}, as well

²³ Anderson, Cameron, Jamie Ling and Michael Schutz, 2025.

²⁴ Kawamura, S., Z. Liu, T. Murakami, K. I. Watanabe, M. Hasegawa, K. Ushiwata, and H. Yoshida, "Deep neural network simulates tempos estimated by five wind instrumentalists from playing sheet music", *Transactions of the Japanese Society of Kansei Engineering*, vol. 23, no. 2, 2024, pp. 141–151. <https://doi.org/10.5057/jjske.TJSKE-D-23-00042>

²⁵ Wheeler, Emily, David Q. Stoye, Simon R. Cox, Joanna M. Wardlaw, Amanda J. Drake, Mark E. Bastin and James P. Boardman, "DNA methylation and brain structure and function across the life course: A systematic review", *Neuroscience & Biobehavioral Reviews*, vol. 113, 2020, pp. 133–156. <https://doi.org/10.1016/j.neubiorev.2020.03.007>

²⁶ Di Stefano, Nicola, Daniela Lo Presti, Luigi Raiano, Carlo Massaroni, Chiara Romano, Emiliano Schena, Marc Leman and Domenico Formica, 2024.

²⁷ Turner, Craig, Robin Mailly, Fabien Dal Maso and Felipe Verdugo, 2025.

²⁸ Chowdhury, Shreyan, and Gerhard Widmer, 2021.

²⁹ Chowdhury, Shreyan, and Gerhard Widmer, 2023.

³⁰ Chowdhury, Shreyan, and Gerhard Widmer, 2024.

³¹ Bontempi, Pierluigi, Sergio Canazza and Antonio Rodà, 2023.

³² Ma, Jiajia, "Emotional expression and analysis in music performance based on edge computing", *Mobile Information Systems*, vol. 2022, 2022, 4856977. <https://doi.org/10.1155/2022/4856977>

³³ Kim, Aimee Jeehae, "Differential Effects of Musical Expression of Emotions and Psychological Distress on Subjective Appraisals and Emotional Responses to Music", *Behavioral Sciences*, vol. 13, no. 6, 2023, p. 491. <https://doi.org/10.3390/bs13060491>

³⁴ Izbecki, Paul, Cathleen Delaney, Emily Gettes, Emily Gustafson, Arianna Meyer, Madison Norman, and Elizabeth L. Stegemöller, "Preferred music listening does not affect cognitive inhibition in young and older adults", *Psychomusicology: Music, Mind, and Brain*, vol. 33, no. (1-4), 2023, pp. 48–56.

³⁵ Kosma, Maria, Nick Erickson and Ashlynn Gremillion, "The embodied nature of physical theater: artistic expression, emotions, interactions", *Research in Dance Education*, 2024, pp. 1–26. <https://doi.org/10.1080/14647893.2024.2331128>

³⁶ Kosma, Maria, Nick Erickson and Ashlynn Gremillion, 2024.

³⁷ Mitchell, Helen, Diana Blom and Peter Long, "We hear with our eyes!" Unlocking tacit knowledge about multisensory music performing", *International Journal of Music Education*, vol. 0, no. 0, 2024. <https://doi.org/10.1177/02557614241264900>

as methods for teaching students emotionally expressive interpretation^{38, 39}. Taken together, these works demonstrate that emotional expressiveness in music appears as a complex integrative system in which psychological, motor, structural, and technological factors interact to determine the individual nature of performance and to create space for further research in the field of musical expression.

An important direction of modern science focuses on comparing productive and perceptual mechanisms of emotional expressiveness. The works of Micallef Grimaud and Eerola⁴⁰ show differences between how performers encode emotional meanings into musical parameters and how listeners recognize them, emphasizing the ambiguity of emotional semantics. Based on such a point of view, the association between neural activities and behavioral patterns during the process of listening to music has been explored⁴¹, which demonstrates that cognitive, emotional, and motor systems interact in a complex manner. The other body of works is technological in nature: emotion recognition algorithms in sound, models of the tempo and dynamics of instrumental performance, intelligent performing expression analysis^{42, 43, 44}. The studies point to the necessity to develop the correct mathematical models that would be able to trace minute changes in the performance style that have not been observed by the conventional musicological technique in the past.

Researchers also pay attention to the impact of musical aesthetic experience on the psychological state of the performer and the listener. The results show that music is able to change inhibitory reactions⁴⁵, to evoke different levels of emotional response depending on individual sensitivity and

³⁸ Piličiauskaitė, Lolita Jolanta, and Giedrė Gabnytė Bizevičienė, "Learning creative interpretation in the music classroom: The possibilities of the emotional expression method", *Creativity Studies*, vol. 18, no. 2, 2025, pp. 635–649. <https://doi.org/10.3846/cs.2025.22736>

³⁹ Li, Hanxi, "Musical expression in music performance and its enhancement pathway", *Frontiers in Art Research*, vol. 5, no. 13, 2023, pp. 87–92. <https://doi.org/10.25236/FAR.2023.051316>

⁴⁰ Micallef Grimaud, Annaliese, and Tuomas Eerola, "Emotional expression through musical cues: A comparison of production and perception approaches", *PLOS ONE*, vol. 17, no. 12, 2022, e0279605. <https://doi.org/10.1371/journal.pone.0279605>

⁴¹ Salvo, Joseph, Ania Holubecki and Rodrigo M Braga, "Correspondence between functional connectivity and task-related activity patterns within the individual", *Current Opinion in Behavioral Sciences*, vol. 40, 2021, pp. 178–188. <https://doi.org/10.1016/j.cobeha.2021.05.003>

⁴² Chowdhury, Shreyan, and Gerhard Widmer, 2023.

⁴³ Chowdhury, Shreyan, and Gerhard Widmer, 2024.

⁴⁴ Kawamura, S., Z. Liu, T. Murakami, K. I. Watanabe, M. Hasegawa, K. Ushiwata, and H. Yoshida, 2024.

⁴⁵ Izicki, Paul, Cathleen Delaney, Emily Gettes, Emily Gustafson, Arianna Meyer, Madison Norman, and Elizabeth L. Stegemöller,

previous experience⁴⁶, and to influence socio-behavioral decisions⁴⁷. In the context of performance education, scholars emphasize methods for forming creative interpretation and developing emotional expression in students, emphasizing the importance of emotional techniques in the educational process^{48, 49}. Works in the field of stage corporeality and multimodal expression^{50, 51} demonstrate that visual, kinetic and spatial aspects of performance play no less a role than purely aural characteristics. Given the general trend towards digitalization, the authors also observe the active development of computational methods for describing performing expression, particularly in the field of popular music, where expressiveness modeling is becoming an applied issue⁵².

Summarizing the analyzed works, it can be noted that modern research covers a wide range of issues: from neurophysiological reactions and machine learning algorithms to musicological analysis and the psychology of creative interpretation. At the same time, two key aspects remain insufficiently revealed in previous studies: the systematicity of performers' internal techniques as a factor of emotional expression and the relationship between students' individual interpretive strategies and the structural elements of a musical work. These gaps determine the need for more in-depth empirical research aimed at integrating psychological, technical, and musicological parameters of the performance process.

Methods

The study of emotional expressiveness in performing activities was conducted at the P. I. Tchaikovsky National Music Academy of Ukraine and included student performers of various instrumental specialties (violin, flute, trombone, piano, cello, bassoon). To obtain reliable data, qualitative empirical methods were used, in particular semi-structured interviews, diary entries and in-depth interviews, which allowed recording interpretive decisions, internal techniques, emotional states and thinking strategies of participants in the process of preparing a musical work. The main materials of the study were individual performing diaries, which were filled out over a period of 14 days, and interview transcripts, on the basis of which further analysis was carried out. The content analysis method was used to classify and generalize

⁴⁶ Kim, Aimee Jeehae, 2023.

⁴⁷ Wu, Hongwei, Danni Wang and Linshu Zhou, 2025.

⁴⁸ Piličiauskaitė, Lolita Jolanta, and Giedrė Gabnytė Bizevičienė, 2025.

⁴⁹ Li, Hanxi, 2023.

⁵⁰ Kosma, Maria, Nick Erickson and Ashlynn Gremillion, 2024.

⁵¹ Mitchell, Helen, Diana Blom and Peter Long, 2024.

⁵² Bontempi, Pierluigi, Sergio Canazza and Antonio Rodà, 2023.

the data, which made it possible to identify typical groups of internal techniques and determine the patterns of interpretive strategies. To quantify the internal techniques, an item-by-item count of 26 individual instances of their use recorded in the participants' diaries over a 14-day period was performed. Each technique description was considered as a unit of analysis, after which all instances were grouped into four main categories: visualization, metaphorical and associative, bodily-motor, and concentration. The full set of primary data is presented in Appendix A, and the final distribution of techniques is presented in Appendix B. These data formed the basis for constructing Figure 2, which shows the proportional contribution of each category of internal techniques. Elements of comparative analysis were used to compare the approaches of performers of different instrumental groups, and quantitative generalization (in the form of counting the frequency of application of techniques) provided structuring of the material and identification of the most common performing practices. Such a combination of qualitative and quantitative approaches allowed for a comprehensive characterization of the mechanisms of formation of emotional expression and individual interpretative strategies of student performers.

Results

The theoretical foundations of emotional expressiveness in performing arts are formed at the intersection of two scientific planes - psychological and musicological, each of which offers its own vision of the nature of emotions in the process of performing and perceiving music. In the psychological tradition, emotional expressiveness is considered as a multilevel phenomenon, including cognitive, affective and regulatory mechanisms through which the performer interprets musical material and transforms the internal state into an artistically significant result. Modern research emphasizes the importance of multilevel models of emotions, because the reaction to music is realized not at one, but at several interconnected levels - from physiological changes to reflective comprehension⁵³. This is why expressiveness of emotions in performance seems to be the product of the intricate combination of experiences, interpretative choice and motivational variables which condition the selection of performance strategies.

Musicological approaches, on the other hand, focus on those elements of the musical fabric that allow the performer to materialize the emotional content of the work. Expressiveness is interpreted not only as a result of the musician's emotional state, but also as a purposeful use of musical language tools —

⁵³ Juslin, Patrik, 2025.

tempo, dynamics, phrasing, timbre, articulation, agogics — that are capable of creating emotional tensions, contrasts, and drama⁵⁴. In this context, it is important that emotionality is not identified with impulsiveness or spontaneity; on the contrary, numerous works demonstrate that expressiveness is often based on rational decisions by the performer who analyzes the style, genre, semantics, and historical context of the music⁵⁵. Therefore, musicological analysis allows us to consider emotional expressiveness as the result of an intellectual elaboration of the structure of the work, where emotion is a reflection of the logic of the composition and its cultural code.

An important component of modern approaches is the recognition of the role of performing gesture, corporeality and synesthetic perception, which form additional channels of emotional communication. Research proves that expressiveness of movements, motor plasticity and microkinetics of performance significantly affect both the quality of sound production and the perception of artistic content by listeners⁵⁶. In this context, emotional expressiveness is considered as a bodily rooted process, where muscle tension, breathing, balance and micromovements form semantic markers of performance. Such a bodily-kinetic perspective does not contradict psychological models, but deepens them, demonstrating that emotions in performance do not exist separately from the physical process of playing.

The complexity of the phenomenon is also confirmed by empirical studies of expressiveness in real performance. For example, experiments on the analysis of timbre, smoothness of movements and their connection with interpretive intention prove that performers constantly modify their technique according to emotional setting, while such changes can be measured by objective instrumental methods⁵⁷. It means that emotional expressiveness is functional and quantifiable, it is not an absolutely subjective category. It is actualized in certain acoustic and kinematic parameters, therefore interdisciplinary analysis is possible - between psychology and neuroscience and digital acoustics.

Therefore, the theory of emotional expressiveness of performing arts covers a vast scope of methods: on the one hand, there are multilevel psychological models describing the mechanisms of experiencing and managing emotions, and on the other hand, there are musicological theories that understand expressiveness as an organized manner in which musical content is organized. The unity of these methods gives us an opportunity to view

⁵⁴ Anderson, Cameron, Jamie Ling and Michael Schutz, 2025.

⁵⁵ Frank, Joshua, Peter M. C. Harrison, Barry Ross and Carina Venter, 2024.

⁵⁶ Turner, Craig, Robin Mailly, Fabien Dal Maso and Felipe Verdugo, 2025.

⁵⁷ Di Stefano, Nicola, Daniela Lo Presti, Luigi Raiano, Carlo Massaroni, Chiara Romano, Emiliano Schena, Marc Leman and Domenico Formica, 2024.

emotional expressiveness as a system phenomenon that integrates both the inner conditions of the performer, interpretative choices, technical possibilities and artistic outlook of the piece. The integrative viewpoint of this kind creates the opportunities of learning more about the mechanisms of the artistic communication in performing practice and provides the ground to do the experimental and theoretical research further.

The purposeful use of the musical language, or a set of means, which enable the performer to reproduce the text of the piece, yet also to create its interior psychological logic, is the expression of emotional expressiveness in performing arts. Modern scholars have found that tempo, dynamics, articulation, phrasing, timbre, and agogics are not secondary technical parameters: they are the foundation of the level of tension, contrasts, and emotional transitions in the musical narrative between the performer and the listener^{58,59}. These aspects interact with each other to create emotional dramaturgy – the dynamics of developing feelings and significances to maintain the listener in an inner artistic conversation with the composition.

Tempo forms the rhythm of the music in time, affects the impression of either relaxation, tension, energy or meditateness. Dynamics accentuates the differences, creates tension release and climax, articulation provides the musical phrase with rest and emotional coloration of the nature of sound production. Phrasing forms semantic blocks, which the performer puts emphasis on as the most important. Microrhythmic changes, called agogy makes it livelier, breathing of music, which makes it more natural in intonation of speech. The sound color is the Timbre that most of the time becomes the focal point of the emotional image of the work⁶⁰. All these elements do serve different functions alone, yet their combination produces a complete dramatic curve the emotional path of listeners in the process of hearing music.

That is why it is worth trying to investigate the important parameters of musicology in a systematized manner. The information is presented in Table 1 which is a summary of the contribution of each piece in the emotional expressiveness and drama of a piece.

⁵⁸ Frank, Joshua, Peter M. C. Harrison, Barry Ross and Carina Venter, 2024.

⁵⁹ Anderson, Cameron, Jamie Ling and Michael Schutz, 2025.

⁶⁰ Di Stefano, Nicola, Daniela Lo Presti, Luigi Raiano, Carlo Massaroni, Chiara Romano, Emiliano Schena, Marc Leman and Domenico Formica, 2024.

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Table 1

Component	Musicological characteristic	Role in creating emotional drama	Examples of emotional impact
Tempo	The speed of the music; steady or variable tempo	Creates the overall character of the work, affects the level of energy and emotional tension	Slow tempo - calm, longing; fast - anxiety, excitement
Dynamics	Volume change (p–f), dynamic contrasts	Forms climaxes, build-ups, and declines of emotions; creates dramatic peaks	Gradual crescendo - a gradual increase in emotion; decrescendo - a gradual decrease
Phrasing	Logical division of musical material	It highlights semantic blocks, ensures consistency and logic of emotional development	Long phrases - fluency; short ones - restlessness, discontinuity
Agogica	Microtempo changes, rubato, ritardando, accelerando	“Revives” the musical fabric, gives a feeling of naturalness, dynamic emotionality	Rubato - individualization, expressiveness; ritardando - waiting
Timbre	The sound color of an instrument or voice	Creates an emotional image, provides associativity and sensory brightness	Dark timbre - drama; light - lightness, tenderness
Articulation	Character of sound production (legato, staccato, tenuto)	Gives relief, emphasizes emotional accents and the nature of movement	Legato - lyricism; staccato - energy, irony

**Musicological components of emotional expressiveness and
their role in creating emotional drama**

Source: the table was created by the author based on^{61, 62, 63}

The generalization of the most important musicological elements proves the fact that the emotional expressiveness is not a chance or purely intuitive feature of performance. It is founded on the ordered application of the musical language, with each of the parameters constituting a distinct level of emotional influence. Tempo provides the dynamic structure, dynamics the emotional impulses,

⁶¹ Frank, Joshua, Peter M. C. Harrison, Barry Ross and Carina Venter, 2024.

⁶² Anderson, Cameron, Jamie Ling and Michael Schutz, 2025.

⁶³ Di Stefano, Nicola, Daniela Lo Presti, Luigi Raiano, Carlo Massaroni, Chiara Romano, Emiliano Schena, Marc Leman and Domenico Formica, 2024.

articulation and phrasing provide the musical text with content, agogics imparts life to it and timbre provides the last sensual dimension. These elements form a whole dramaturgy when interacting, and it is this, which forms the foundation of profound artistic communication between the performer and the listener.

The inner mechanism of emotional expressiveness is psychological, and it is the inner mechanism of the music performer, with the help of which the music becomes an individual, with its emotional power and persuasiveness of art. Scientific research of recent years shows that the emotionality of performance is not limited to feeling or intuition: it is the result of a complex internal interaction of cognitive interpretations, technical-operational decisions and emotional-regulatory processes^{64, 65}. The performer creates an emotional image of the work not only by reproducing the musical text, but also through deep mental processing of musical information, through bodily-motor actions and through reflective work with their own emotions. It is important to emphasize that these components operate in constant interaction, forming a psychological model that largely determines the artistry of the performance.

The cognitive component encompasses the processes of musical perception, analysis of the structure of the work, style, genre expectations, and semantics. This is what allows the performer to understand the logic of emotional drama and build an interpretation based on knowledge, not just intuition. The operational component is associated with the technical implementation of the idea - the ability to transform emotional intentions into specific means of performance: changing dynamics, nuance, choosing articulation, controlling agogics. The emotional-regulatory component provides control over one's own emotional state, the ability to enter the emotional image of the work, maintain stability, or, conversely, allow emotions to influence the interpretation. Such mechanisms become the basis for creating a deep performing contact with music, and therefore - for artistic persuasiveness.

The interaction of the three components that form the psychological model of emotional expressiveness is presented in Figure 1. The SmartArt structure reflects the movement of information and emotions in the performance process: from intellectual analysis to technical implementation, and from there to emotional authenticity.

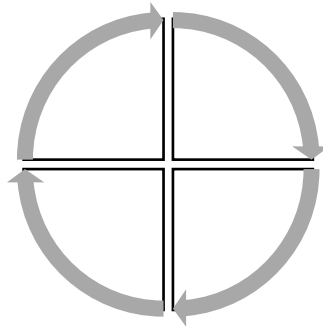
The analysis of the three main psychological components shows that emotional expressiveness is a complex system, where each element performs a separate but indispensable function. The cognitive component gives us intellectual perception of music and its logic of emotion; the operational component gives us the opportunity to put our thoughts into music, the emotional-regulatory

⁶⁴ Juslin, Patrik, 2025.

⁶⁵ Singh, Manvir, and Samuel Mehr, 2023.

component provides a vital relationship between the performer and the piece and gives its genuineness and artistic conviction. The performance of emotionality on a whole forms a holistic model in interaction where the quality of interpretation, the level of perception of music among the listeners is established.

Figure 1



Psychological components of emotional expressiveness in interaction

Source: the figure was created by the author based on^{66, 67, 68}

Emotional reaction of a performer to a musical piece and structural characteristics on such a piece can never be separated. Scientific studies confirm that the musical elements - melodic lines, harmonic patterns, rhythmic impulses, colors of the timbre and opposing dynamic positions may produce certain emotional states in the performer, which, in turn, affect the interpretation of the work^{69, 70}. It is a one-way affair: the performer not simply reacts to the musical framework, but also triggers his own emotional sensation to support or re-conceptualize the purpose of the composer. In such a way the interpretative approach turns out to be a communication between the text and the inner world of the musician.

It should be taken into account that the structural characteristics of music have the ability to stimulate varying degrees of emotional activation. To illustrate, a sudden harmonious contrast, or increase in density of the texture, tend to arouse more emotionality on the other hand the monotonous or minimalist music material also helps to stabilize emotions or even detach oneself. However, the emotions experienced by the performer do not always coincide with the emotional semantics of the work. In such situations, the musician is forced to either adjust

⁶⁶ Juslin, Patrik, 2025.

⁶⁷ Singh, Manvir, and Samuel Mehr, 2023.

⁶⁸ Anderson, Cameron, Jamie Ling and Michael Schutz, 2025.

⁶⁹ Singh, Manvir, and Samuel Mehr, 2023.

⁷⁰ Micallef Grimaud, Annaliese, and Tuomas Eerola, 2022.

his state to the composition or adapt the interpretation in such a way as to avoid emotional dissonance. That is why studying the relationship between the emotional experience of the performer and the musical structure is key to understanding the mechanisms of creating an artistically convincing performance.

Table 2 summarizes the main types of musical structures, typical emotional responses of performers, and the ways in which these emotions influence interpretive strategy.

Table 2

Structural element of the work	Typical emotional reactions of the performer	Possible interpretive influence	An example of emotional-performance adaptation
Melodic development (rise, fall, climax)	Inspiration, tension, anticipation, excitement	Formation of culminating accents, expansion of phrases, increased expressiveness	Strengthening the timbre color in the climax zone
Harmonic changes (modulations, dissonances, resolutions)	Anxiety, anticipation, excitement, relief	Accentuating dramatic moments, changing dynamics, agogics	Ritardando before harmonic resolution
Rhythmic organization (syncopé, pulsation, irregularity)	Excitement, mobility, internal tension	Distinctive changes in articulation, contrast in the movement of phrases	Energetic staccato on syncopated sections
Timbre color (instrumental colors)	Nostalgia, warmth, drama, a sense of space	Choosing a soft or hard sound extraction style	Using gentle legato in a soft timbre zone
Texture density (density or transparency)	Overload, lightness, inner focus	Dynamics variability, pedal control, tempo change	Easy pedaling in transparent textured episodes
Dynamic contrasts (p–f transitions)	Activation, shock, emotional aggravation	Building a dramatic arc, changing the nature of the movement	A sharp transition to forte to express climactic affect

The relationship of the performer's emotions with musical structure and the impact on the interpretive strategy

Source: the table was created by the author based on^{71, 72, 73, 74}

⁷¹ Singh, Manvir, and Samuel Mehr, 2023.

⁷² Anderson, Cameron, Jamie Ling and Michael Schutz, 2025.

⁷³ Di Stefano, Nicola, Daniela Lo Presti, Luigi Raiano, Carlo Massaroni, Chiara Romano, Emiliano Schena, Marc Leman and Domenico Formica, 2024.

⁷⁴ Micallef Grimaud, Annaliese, and Tuomas Eerola, 2022.

The presented analysis demonstrates that the emotional reactions of the performer and the musical structure of the work are in constant interaction. Performing emotions can enhance the composer's dramaturgy, or, conversely, enter into contradiction with it, which encourages the musician to search for new interpretative solutions. The internal states of the performer are dynamic: they depend on technical training, attention, experience, as well as on the psychological attitude to a particular work. It is this interaction that creates the uniqueness of each performance, because the interpretative strategy becomes the result of a combination of the structure of the work and the subjective emotional position of the performer.

Internal techniques used by musicians during the preparation of a performance are an important psychological mechanism for enhancing emotional expression. They do not only assist the performer in getting adjusted to the semantic and emotional image of the music, but provide a distinctive interpretative approach that defines artistic uniqueness of an artist. On the basis of diaries and in-depth interviews, it was discovered that musicians take an active part in visualization, metaphorization, body-motor strategies, concentration environments as well as emotional provocation means. These methods are a form of in-house self-control because the performer is able to stabilize the emotional state, display the drama of the work as well as enhance personal engagement with the music. Such methods were confirmed by modern studies as ones that can be useful in enhancing performance expressiveness, since internal techniques allow the musician to leave behind the mechanical reproduction of musical text to conscious, emotionally colored performance that the audience can relate to^{75, 76}. Study members were observed to find internal methods serving as a mediator between emotional intention and technical execution, which enabled them to gain a better insight into their intention and develop an attitude-specific execution plan.

The data for this study were collected as part of an empirical project conducted at the Tchaikovsky National Academy of Music of Ukraine. The study covered one educational institution, but included several different instrumental departments: strings, winds, piano performance, and chamber music. A total of 8 participants were involved – student performers, represented by different instrumental specialties: violin, flute, trombone, piano, cello, bassoon. Thus, the data provided a variety of performance approaches and emotional and technical strategies.

Data collection was carried out in three stages. *Initial semi-structured interview*. It was conducted to determine the participants' preliminary understanding of the concepts of "performance expression", "emotional dramaturgy", "interpretation".

⁷⁵ Juslin, Patrik, 2025.

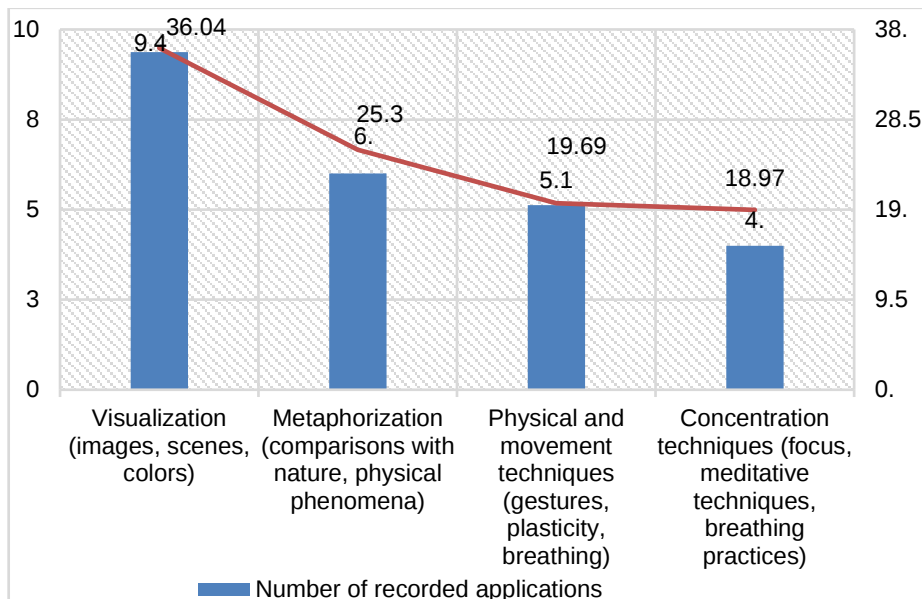
⁷⁶ Turner, Craig, Robin Mailly, Fabien Dal Maso and Felipe Verdugo, 2025.

At this stage, personal ideas and expectations were recorded. *Individual performer's diary*, which was filled out over 14 days. In the diary, participants described technical difficulties, their own emotions, the emotion of the work, internal techniques that they used to achieve the desired emotional expressiveness and interpretative decisions. The diaries became the main source of data on internal techniques. *In-depth interview*, conducted on the basis of the diary. Its purpose was to clarify the meaning of the described techniques, assess their effectiveness, and determine the logic of choice.

As a result, four main groups of internal techniques were identified: visualization, metaphorical and associative, bodily-kinesthetic, concentration, and regulatory. For further quantitative generalization, a sample of 26 recorded *individual techniques* was created, which were classified by frequency of use.

Figure 2 shows the distribution of the techniques used, presented as numerical data for further graphical analysis. The numerical values for constructing the diagram were obtained by classifying and counting 26 empirical units recorded in the performers' diaries. Detailed primary records are given in Appendix A, and a generalized frequency table is given in Appendix B. It is these data that were used to form the percentage values and absolute frequencies presented in Figure 2.

Figure 2



Frequency of use of internal techniques by performers (empirical data)

Source: the figure was created by the author

The presented data show that most often performers resort to visualization techniques (36.04%), which indicates their effectiveness in forming a holistic emotional image of the work and enhancing interpretative depth. The use of metaphorization and body-movements has an average frequency of use (25.30% and 19.69, respectively) which may be confirmed by the fact that these two techniques are auxiliary as they are used to tune the performer to proper emotion state. The minimum percentage of concentration techniques is explained (18.97), although stable usage underlines the necessity of the performers to the psycho-emotional regulation and concentration in the process of interpreting the complicated works.

It has been analyzed that the internal methods of performers create a multi-level system that is actively involved in the creation of emotional manifestation. The most widespread are the visualization practices that enable the establishment of a whole emotional field of the work and get immersed in the artistic image. Metaphorization gives music additional semantic depth, allowing the performer to tie it to their own experience. Bodily-motor techniques contribute to the naturalness of performance and the regulation of physical tension, which affects the quality of sound. Concentration methods provide psycho-emotional stability and concentration necessary for the implementation of complex works. The combination of these techniques creates a unique interpretative field for each performer. That is why internal techniques can be considered a key resource for the formation of performing identity and emotional communication with the listener.

Individual interpretive strategies of student performers are formed at the intersection of their technical level, professional experience, emotional sensitivity and personal style of working with a musical work. The process of preparation for performance involves the selection of semantic accents, means of emotional expressiveness and internal techniques that allow the musician to create his own artistic vision of the composition. Analysis of performers' diaries and interviews shows that students' interpretive decisions are systemic, although very individual: some musicians focus on the structural logic of the work, others on their own experiences or technical effects that form the desired emotional result^{77, 78}. That is why the study of interpretive strategies allows us to understand how students interpret a musical text, how they adapt it to their own performing style and what psychological and technical mechanisms they activate in this process.

Based on the empirical data obtained, the most characteristic interpretative approaches that students used when working with selected works were summarized. A detailed classification and main patterns are presented in Table 3.

⁷⁷ Anderson, Cameron, Jamie Ling and Michael Schutz, 2025.

⁷⁸ Turner, Craig, Robin Mailly, Fabien Dal Maso and Felipe Verdugo, 2025.

Table 3

Instrument / performer	Basic interpretive strategy	Typical techniques and means	Emotional and artistic accents
Violin (1)	Structurally logical	Accented phrasing, tempo control, and heightened climaxes	Voltage - discharge, a clear contrast
Flute	Figurative-visual	Visualization of "air flow", smooth legato phrases	Lightness, transparency, "breathing music"
Trombone	Physical and motor skills	Use of bodily impulses, rhythmic plasticity	Stability, confidence, clarity of intonation
Piano	Emotional-metaphorical	Metaphors of color and movement, agogica rubato	Fluidity, richness of nuance, drama
Cello (1)	Combined	Searching for timbre depth, changing dynamics	Nostalgia, internal dialogue
Violin (2)	Analytical and technical	Articulation work, accented agogics	Virtuosity, clarity, emotional composure
Bassoon	Associative-metaphorical	Color synesthesia, imaginary dialogue images	Irony, playfulness, intimacy
Cello (2)	Intonation-expressive	Timbre detailing, working with vibrato changes	Flowing emotional waves, lyrics

**Individual interpretive strategies of student performers
and their key characteristics**

Source: the table was created by the author based on^{79, 80, 81, 82}

The analysis of individual interpretive strategies demonstrated that student performers build their own artistic trajectory based on different approaches – structural, emotional, technical, associative and combined. Despite the significant difference between instrumental schools and personal styles, several patterns can be traced: performers give priority to either the emotional image or the technical organization of the work; most students combine several strategies; emotional expression is formed through a combination of internal techniques and musical means; the most successful interpretations are based on the

⁷⁹ Singh, Manvir, and Samuel Mehr, 2023.

⁸⁰ Anderson, Cameron, Jamie Ling and Michael Schutz, 2025.

⁸¹ Turner, Craig, Robin Mailly, Fabien Dal Maso and Felipe Verdugo, 2025.

⁸² Micallef Grimaud, Annaliese, and Tuomas Eerola, 2022.

conscious interaction of the structure of the work and their own emotional experience. This confirms that interpretation is a creative process, where technique and emotion appear as complementary components.

The practical development of emotional expressiveness requires a systematic approach from both performers and teachers, so the key task is to create a learning environment that combines technical accuracy, artistic freedom and psychological support. First of all, performers are encouraged to actively work with internal techniques – visualization, metaphorization, body movements and concentration methods, as they contribute to a deeper understanding of the emotional content of the work and the formation of authentic interpretation. In their turn, teachers are to stimulate the students to consciously manipulate the emotional drama of the work, to invite them to consider the intonation lines, the contours of the musical phrases, dynamic solutions and choices to use, to agogic development, to understand the influence of the structural elements of music on experiences and decisions to make.

It is also important to integrate into the educational process a systematic analysis of one's own emotions during performance, using individual diaries, video recordings or post-session reflection. This allows performers not only to be aware of changes in their own emotional states, but also to correlate them with technical difficulties, the structure of the piece and changes in performance skills. Work with body awareness deserves special attention: controlling breathing, balance, muscle tension and motor freedom contributes to greater confidence and naturalness in interpretation. Teachers are recommended to use physical warm-up practices, conscious movement or short meditative techniques as part of the preparation for classes, as they help performers reach a state of creative concentration more quickly.

No less important is the creation of conditions for the development of the student's individual style. Performers should experiment with musical material - changing tempo, dynamics, agogics, timbre and articulation, in order to find the most accurate embodiment of their own vision of the work. Teachers should support this search by explaining the limits of stylistic freedom and possible historically based interpretation options. This approach forms the performer's ability to make conscious artistic decisions, and not simply reproduce the text by inertia. The guidance is also related to the creation of auditory imagination: it is recommended to listen to various interpretations of the same piece, to compare the performance styles and to compare their own music to have a comprehensive internal picture of music.

Another suggestion is to constantly train psychological resilience and control of emotions. The performers should learn to strike a balance between emotional expressiveness and professionalism since emotional expressiveness may interfere with the technical precision and excessive control stifles the artistic

expression. Mindfulness methods, breathing exercises, and brief reflections can help teachers to become less anxious and more focused. All these practices are aimed at the creation of a fully-grown performing personality, capable of a perfect combination of technical mastery with honest, persuasive emotionality.

Finally, the evolution of the emotional expressiveness and interpretive ability is the elaborate process that demands serious consideration of the emotional, technical and psychological aspects of the performance practice. The combination of internal techniques, an analytical approach to musical structure, purposeful work on bodily freedom and systematic pedagogical support creates optimal conditions for the formation of expressive, emotionally rich and professionally mature musical performance.

Discussion

The obtained results of the study demonstrate that the emotional expressiveness of student performers is formed through a combination of internal techniques, individual interpretive strategies and the structural logic of the musical work, which is consistent with a number of modern concepts, but at the same time reveals certain discrepancies with individual approaches in the scientific literature. In particular, the dominance of visualization techniques recorded in the sample confirms the assumption about the importance of figurative thinking in the process of forming performing expression, which is in line with research on synesthetic and multimodal mechanisms of musical interpretation^{83, 84}. At the same time, such results partially contradict the authors who emphasize primarily structural analytics and cognitive processing of music as the basis of artistry^{85, 86}, because in our study the role of rational analysis was less dominant compared to figurative and bodily practices.

Comparing individual strategies of students with data from other researchers allows us to make an assumption that the balance between cognitive and emotional-intuitive approaches depends on the level of training and psychological sensitivity of the performer. In contrast to studies that emphasize the universality of certain psychological mechanisms of emotional response^{87, 88}, our results indicate significant variability of individual models, which may indicate that universal patterns of emotionality are combined with individual aesthetic and

⁸³ Kosma, Maria, Nick Erickson and Ashlynn Gremillion, 2024.

⁸⁴ Mitchell, Helen, Diana Blom and Peter Long, 2024.

⁸⁵ Frank, Joshua, Peter M. C. Harrison, Barry Ross and Carina Venter, 2024.

⁸⁶ Anderson, Cameron, Jamie Ling and Michael Schutz, 2025.

⁸⁷ Juslin, Patrik, 2025.

⁸⁸ Singh, Manvir, and Samuel Mehr, 2023.

technical preferences of performers. This conclusion resonates with the position of Varga and Parkinson⁸⁹, who argue that the mechanisms of musical emotional influence combine general perceptual patterns and authorial-performative specificity.

We should also compare our information on body-motor techniques with the data on works that indicate the importance of motor skills on emotional expressiveness^{90, 91}. Our observations confirm these findings: students who actively worked with body plasticity demonstrated a more expressive and stable interpretive line. However, contrary to the biased assumption that motor skills are a key determinant of expressiveness, in our sample they turned out to be only part of a more complex system in which emotional regulation and image tuning play an equally significant role. This suggests that bodyness is effective only when integrated with cognitive and emotional components, which is consistent with interdisciplinary models of multilevel emotional processes⁹².

Some differences between our study and works devoted to algorithmic analysis of musical expression^{93, 94} are that such studies focus on objectively measured parameters - dynamics, tempo, acoustic characteristics. Instead, our study demonstrates that an important source of emotional expressiveness are subjective internal techniques that are not always amenable to instrumental measurement. Accordingly, the question arises about the limits of automated analysis of musical expression, since algorithmic models cannot yet fully reflect the internal artistic process of the performer.

The interpretation of the obtained results also allows us to point out the limitations of the study: a relatively small sample of participants, limited by the same conditions of the educational environment, as well as the qualitative nature of the data, which does not allow for broad quantitative generalizations. Despite this, the results support the hypothesis that emotional expression is formed as a result of the interaction of internal techniques, the structural logic of the work and the emotional-cognitive mechanisms of the performer. The practical application of the obtained conclusions lies in the possibility of developing pedagogical models that take into account not only technical training, but also the internal psychological work of the performer.

Summarizing the discussion, it can be stated that the results of our study are mostly consistent with modern concepts of multicomponent emotional

⁸⁹ Varga, Peter, and Brian Parkinson, 2025.

⁹⁰ Di Stefano, Nicola, Daniela Lo Presti, Luigi Raiano, Carlo Massaroni, Chiara Romano, Emiliano Schena, Marc Leman and Domenico Formica, 2024.

⁹¹ Turner, Craig, Robin Mailly, Fabien Dal Maso and Felipe Verdugo, 2025.

⁹² Juslin, Patrik, 2025.

⁹³ Chowdhury, Shreyan, and Gerhard Widmer, 2023.

⁹⁴ Bontempi, Pierluigi, Sergio Canazza and Antonio Rodà, 2023.

expressiveness, but at the same time deepen them, emphasizing the role of internal techniques as a little-studied, but key link in the performance process. Further studies are necessary to expand the sample, apply instrumental analysis of movements and acoustic characteristics, as well as to investigate in more depth the interaction between subjective techniques and objective parameters of musical expression.

Conclusion

The conducted research demonstrated that the emotional expressiveness of student performers is formed not only through work with musical text, but primarily through the active involvement of internal techniques that determine the individual trajectory of interpretation and provide a deeper contact with the artistic essence of the work. It was expected that the leading factors of expressiveness would be musical-structural parameters, however, the results showed a greater importance of visualization, metaphorical and bodily-motor mechanisms, which emphasizes the novelty of the obtained data and expands the understanding of the nature of performing interpretation. The practical significance lies in the fact that the systematic use of such techniques can be integrated into the educational process as an effective tool for the development of emotional expressiveness, contributing to the formation of a conscious, stylistically balanced and artistically convincing interpretation. However, the study has certain limitations related to the small sample size, the qualitative nature of the materials, and the homogeneity of the educational environment, which does not allow for broad generalizations to be made about other performing schools. Prospects for further studies lie in expanding the sample, including instrumental methods of movement and sound analysis, as well as in an interdisciplinary comparison of internal techniques with objective indicators of performing expressiveness. In this context, the study of the interaction of subjective emotional strategies with digital technologies of performance analysis is particularly relevant, which can create a basis for innovative methods of training musicians and a deeper understanding of the emotional nature of performing art.

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EMOTIONAL EXPRESSION IN PERFORMING ARTS:
A PSYCHOLOGICAL AND MUSICIAN ANALYSIS

Appendix A

Primary empirical data on the use of internal techniques by performers

No.	Artist code	Tool	Description of the recorded technique	Equipment category
1	V01	Violin	Imaginary visual image of a "scene-landscape" for the climax	Visualization
2	F01	Flute	"Airflow" image, smooth light color	Visualization
3	P01	Piano	Inner image of the color palette of the phrase	Visualization
4	VC01	Cello	Visualization of "internal dialogue" in a slow-motion episode	Visualization
5	TR01	Trombone	The representation of stage space as a form of sound support	Visualization
6	FGT01	Bassoon	The image of "spiral movement" in a quick episode	Visualization
7	V02	Violin	Imaginary image of the road - direction of phrasing	Visualization
8	VC02	Cello	"Fog" visualization for soft timbre coloration	Visualization
9	P01	Piano	Stage visualization of character movement	Visualization
10	F01	Flute	Metaphor "light glass", transparent texture	Metaphorization
11	TR01	Trombone	The metaphor of "heavy bronze" for sound attack	Metaphorization
12	FGT01	Bassoon	Association with a dialogue between two characters	Metaphorization
13	V01	Violin	The metaphor of the movement of a "spring" in a rhythmic episode	Metaphorization
14	P01	Piano	The metaphorical image of "water" changing its timbre	Metaphorization

No.	Artist code	Tool	Description of the recorded technique	Equipment category
15	VC02	Cello	The association of "warm light" in lyrical phrases	Metaphorization
16	TR01	Trombone	Body momentum of parallel body movement	Physical and motor skills
17	V02	Violin	Plastic wrist movements for sound alignment	Physical and motor skills
18	VC01	Cello	Rhythmic micromovements of the body for phrasing	Physical and motor skills
19	F01	Flute	Breathing waves for phrase alignment	Physical and motor skills
20	FGT01	Bassoon	Rhythmic feeling of "step pulse"	Physical and motor skills
21	P01	Piano	Concentration on the focus point before the passage	Concentration
22	VC02	Cello	Micro-meditation before performing a difficult part	Concentration
23	F01	Flute	Conscious breathing to enter the initial image	Concentration
24	TR01	Trombone	Mental fixation of the "reference point" for the sound attack	Concentration
25	VC01	Cello	A short practice of inner calm	Concentration
26	V02	Violin	Focus on internal rhythm before a fast episode	Concentration

Source: Collected from individual performance diaries (14 days) and in-depth interviews with participants (N = 8). Each position in the table reflects a separate recorded case of the use of internal technique during the preparation of a musical work. The total number of units of analysis is 26

Appendix B

Final distribution of internal technicians

Technician category	Number of cases (N)	Share (%)
Visualization	9	36.04%
Metaphorization and associations	6	25.30%
Physical and motor techniques	5	19.69%
Concentration techniques	4	18.97%
Together	26	100%

Source: the table was created by the author

