

Katarina Habe

HOW TO SHINE ON STAGE

*Factors of Successful
Musical Performance*





Photo: Šimen Zupančič

Katarina Habe is an Associate Professor of Psychology at the Academy of Music, University of Ljubljana. Her area of expertise is the psychology of music, where she successfully combines the analytical approach of a psychologist and the intuitive holistic mind of a musician. Her scientific publications are recognized at home and abroad, and her professional contributions in various public media resonate in Slovenia. Her research work is currently focused on studying the effects of music on the psycho-physical well-being of individuals and on developing strategies to promote holistic well-being in musicians. She sees herself as an ambassador of music, as she wants to encourage the general public to recognize and use the healing effects of music, and to encourage musicians to recognize their own potential and become aware of the beauty and responsibility of the musical mission. As a musician, she wants to spread a positive message through her music that touches the souls of her listeners.

How to Shine on Stage

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2025

**How to Shine on Stage:
Factors of Successful Musical Performance**
Katarina Habe

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*I dedicate this
book to my dear friend
Manca Košir, who shone
on the stage of life
in the most authentic,
heartfelt, inspiring colours.*

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Being a good musician does not equal being successful on stage, as there are many musicians who manage to play/sing wonderfully when they are alone or in relatively informal performance environments, while once on stage, they cannot display all that they are capable of. In fact, it is their biggest frustration: feeling both a strong desire to demonstrate their excellence on stage, and at the same time a great fear that they may not be good enough, that they would not be able to demonstrate their best on stage. The reality is that there are few musicians who express true satisfaction with their performance after leaving the stage; they always find something that could have been better.

Being a soloist is therefore far from the idealised image of someone who appears on stage, performs a great musical programme and receives a round of applause at the end. Most music performers have extremely strict criteria for themselves and are not easily pleased with their performance, since they always find some aspect of it that could have been even better. The delivery always has to be perfect, anything less is unacceptable. They can achieve great success by the standards of the public and even their fellow musicians, and still not be satisfied with themselves. Many musicians, even the most accomplished, experience performance anxiety on stage, which can affect the quality of their performance and, primarily, causes them to feel discomfort when performing.

Being a musician is both a blessing and a curse; there is nothing more beautiful than feeling your mission in creating and interpreting something as beautiful and inspiring as music, but there is also nothing crueller than the strivings to comply with the daily pressure to achieve perfection, where mistakes are not allowed. The musician's path requires constant personal growth towards liberation from constraints and achievement of true communion with oneself. And in this unburdened deep contact with one's genuine nature, with one's authenticity, there can be a surge of flow, a state of complete immersion in an activity infused with feelings of internal satisfaction which, consequently, is self-re-

warding. The key question on the road to music performance excellence is how to channel the pre-performance excitement towards achieving a state of flow instead of performance anxiety.

Classical music performers face the highest demands for excellence in musical performance, followed by jazz musicians and then entertainment music performers. The primary focus of the monograph is on classical musicians, since they face the greatest challenges and represent the majority in the Slovenian music-education context. Musicians playing all kinds of music genres, as well as other performers (athletes, speakers, actors, etc.), can benefit from the useful information contained herein, which can guide them towards their own optimal performances.

What makes a musician shine on stage, then? The search for answers to this question has been my main motivator in academic psychology, and my interest was shaped by my experiences on stage. I enjoy performing, but despite my basic hedonistic attitude toward it, I realized at a young age that the degree of my enjoyment varied between instruments (violin, piano, transverse flute, classical solo singing), and that in certain performance situations I experienced a higher degree of pre-performance excitement. I also realized that the boundaries of Western classical music were too rigid for me, and that I felt much more at home in entertainment music. Although I focused on solo singing for some time and had sung in choirs since childhood, what I enjoy most is the vocal interplay in small vocal ensembles, where each singer still has room for their own individuality, but also the opportunity to co-create on stage. Diverse performance situations enabled me to grow experientially, which was akin to my growth and development as a researcher of the psychology of musical performance. I feel a strong calling to encourage and inspire younger generations of musicians to find their own authentic musical expression, to realize their potential, and to build their musical path on it, while encouraging them to master psychological skills such as concentration through mindfulness, achievement of optimal energy levels by managing pre-performance excitement, openness, agility, mental strength, flow, etc.

The monograph is divided into several sections according to the addressed topics. In the first section, I define success, specifically, success in music, and musical performance/delivery in terms of several psychological theories. In the second section, I address the indirect factors which influence the success of musical performance. These are, among others, musical abilities and their above-average expression in the form of giftedness/talent, personality traits with an emphasis on perfectionism, and

concepts of self-evaluation focusing predominantly on self-image and its action-oriented “sister” by the name of self-efficacy, and the socially embedded concept of identity. I continue with the main driving force for the achievement of success, namely motivation. This is followed by a chapter on self-regulation which includes both cognitive and emotional motivational factors. In this chapter, I concentrate on music practice in all its forms. As the last indirect factor of the success of musical performance, I highlight the role of parents and teachers, without whose support it is difficult to imagine a successful musical path. Whereas the indirect factors of musical performance regard longer periods of music education, the direct factors that I put into focus are those with a concrete impact on musical performance. I organize them into the physiological, emotional, and mental realms, and stress the importance of regulation at all three levels, which function interdependently. The main emphasis is placed on two key psychological phenomena relating to performance that directly affect the success of musical performance: performance anxiety and performance flow. In the last section, I present the path a pupil/student/professional musician has to take if they want to manage their performance stress and work on their overall well-being.

In some chapters, this scientific monograph extends beyond the realm of psychology and enters that of music professions. I justify this by the fact that the monograph is intended for a wide scope of practising musicians and therefore also includes current approaches that may not yet be fully scientifically supported, but are widely implemented in practice. The practical orientation is particularly evident in the chapter where I list various direct factors of musical performance success and highlight strategies that enable musical performers to regulate signs of pre-performance excitement at the physical, emotional, and mental levels. I find it important for musicians to have a comprehensive set of strategies employed by performers readily available in a single resource.

I am delighted to be able to invite you on a journey that has always stirred questions within me and ignited my search for answers and practical solutions to the challenges relating to shining on stage for oneself and for others while making music. I was inspired above all by the aim of guiding young musicians toward optimizing their own psychological capacities in order to experience flow and achieve musical excellence.

Successful Musical Performance

1.1 Psychological Definition of Success

The Dictionary of Standard Slovenian Language defines success as a notion of someone achieving what they want or expect through their work and efforts, and also as a positive result of some kind of work or effort (IS-JFR ZRC SAZU, s.a.). The definition of the English word “success” in the online Merriam-Webster dictionary reveals with even greater clarity the duality between objective and subjective criteria of success; the definition of success as the achievement of something one has aspired to is grounded primarily in subjective perception, while the definition of success as the attainment of wealth, favour, or eminence is more reflective of the objective, measurable side of success (Merriam-Webster, n.d.). Success is therefore largely based on the individual perception of each person.

It is important to consider the psychological definition of success before entering the territory of musical performance success.

In psychology, success is addressed in the framework of the psychology of motivation. The need for success is often listed among psychogenic needs (Murray, 1938, in Ryan, 2019) and is linked to goal attainment. It was already Lewin (1958, in Ryan, 2019) who pointed out in his paper on the psychology of success and failure that a sense of success occurs when we achieve or overachieve a goal, whereas McClelland et al. (1976, in Ryan, 2019) noted that the achievement mindset is a relatively permanent personality trait. In this respect, a distinction was made between positive and negative motivation; when an individual is motivated in their work by a desire for achievement and success, we speak of positive achievement motivation, whereas when they perform an activity only to avoid punishment, unpleasant consequences, or failure, we speak of negative achievement motivation.

Weiner’s attribution theory (1986, in Ryan, 2019) also addresses the experience of success, namely by examining the factors to which individuals attribute causes of their success or failure. The most important division of attributions distinguishes between external and internal factors.

External factors can be, for example, coincidence, the difficulty of the task, the teacher's positive or negative attitude, etc., while internal factors include primarily individual abilities and diligence.

Currently, the definition of success is influenced by the positive psychology trends and leans towards the views of the humanist psychologists, who define success as an individual's pursuit of self-actualization. Rogers speaks of growth aspiration and Maslow of self-actualization (Ryan, 2019).

If we define success by both internal and external performance criteria, the external criterion would be the fulfilment of a need for acclaim (winning prizes in competitions), and the internal criterion would be self-actualization (a sense of personal satisfaction).

Musek (1993; Kobal Grum & Musek, 2009) defines performance as the result of ability, motivation, and knowledge. Our achievements depend on the intensity of our efforts, on what we want, on what we know how to do, and on what we can do. Skills define the limit and range of our achievements; they represent the capacity for achievement.

In the psychology literature, the term efficacy is often used as a synonym for success. One of the key concerns regarding efficacy is its criteria, which depend on the objectives which the individual is trying to achieve.

1.2 Performance Delivery Success

Performance delivery success is a pertinent topic in today's society. Nowadays, successful performance skills are a necessity in a wide range of occupations, such as in business, education, health, and art. Anyone who wants to present a particular matter successfully has to be convincing, express enthusiasm, provide relevant information, and establish a relationship with the people to whom they are presenting the matter.

The question "How to perform successfully?" is particularly relevant in the performing arts and is posed sooner or later to every performer. Even a child just starting out to play an instrument encounters performing. Are there any formulas to achieve success? Certainly, every culture has implicit ideas on the criteria for successful performance. To what extent the personality of a successful performer is intrinsic to the musician, and to what extent the skills of successful performance can be learned, are still pertinent questions in discussing performance success.

Research on academic and sporting performance suggests that personality has an important role to play in this. In education, it has been

found that academically successful individuals have more pronounced personality traits of emotional stability and diligence (Stajković et al., 2018). Diligence is believed to be the greatest indicator of academic success (Rimfeld et al., 2016). When comparing athletes, the most successful tend to be those who exhibit higher levels of openness, diligence, and emotional stability in their personality structure (Steca et al., 2018). In music, interestingly, research examining the predictive value of personal characteristics in musical performance is scarce. Ksenija Mirković Radoš et al. (2003) found that musical success in younger schoolchildren depended on discipline, emotional stability, independence, and self-trust. Jasmina Pekić (2008) concluded from the results obtained that the success of musically talented secondary school students was associated with a high level of acceptance, diligence, and openness. Marija Janković and Bogaerts (2021) found that performance success in musicians and ballet dancers depended on low levels of neurosis, on perceptual abilities, general intelligence, and diligence. Here, we have briefly considered the personal characteristics of successful performers in general. We will address the personal characteristics of musicians in continuation.

Sport psychology boasts a considerable amount of research on performance success, and musical performance psychology looks to it for reference.

Matej and Maks Tušak (2003) state that an essential factor for a successful performance is to develop and maintain a stable internal well-being (psychological consistency). Mental fortitude is a learned skill. The process of learning mental fortitude is similar to learning any other physical skill. There is a high level of performance consistency among the top performers. The level at which performers will be able to use their abilities depends largely on the practice and maintenance of a specific type of inner mental state. Excluding the influence of physical factors, the level of one's performance is influenced by the reflection of one's inner well-being. There is an ideal inner state for every performer. The individual perceives their optimal performance state with specific sensations. The most important mental skills in performing are those related to creating and maintaining the optimal performance state. Mental fortitude requires a high level of control of the ideal inner state.

While the optimal performance state has received a great deal of attention in sport psychology, it is only in the last 10 years that advances have been made in the musical performance psychology, both from a research perspective and an applied perspective. It has been found that athletes, when performing well, report complete relaxation, optimal levels of energy, freedom from anxiety and fear, and a sense of well-being. They feel

peaceful and calm. It all seems to them to be happening automatically. Time moves slowly. They feel like they can do anything. Their sensations and experience are positive. Focusing on the performance is easy. Self-trust is high (Tušak & Tušak, 2003).

1.3 Musical Performance Success

What success in music means depends on each individual's aspirations. The goals and expectations of professional musicians are different from those of amateur musicians; a performer at the beginning of their career has different goals from those with many years of experience; different profiles of musicians, again, have very different goals: a composer's goal can be, for example, a high-quality orchestral performance of their composition, a performer's goal can be a successful performance with the orchestra at a renowned concert venue, and a teacher's goal can be their student's good ranking in a competition. Here, we aim to highlight primarily the musical performance success, which is the central concern of the present monograph.

Jane W. Davidson and Stephanie MacArthur (2021) point out that satisfaction and high levels of achievement are not necessarily linked, as some individuals demonstrate minimal musical competence, yet find satisfaction in the pleasure of making music. Conversely, a person can have high musical achievements but not feel any inner satisfaction. This frequent discrepancy will also be addressed in the chapter on internal and external performance criteria.

Gertraud Reinhard (1981, in de la Motte-Haber, 1990) relied on Weiner's attributional model of expectation of success or failure to succeed to conduct a study among 9- to 14-year-old pupils attending primary music school. She found that motivation to succeed in music is strongly related to overall motivation to succeed in school. Such students attribute their success mainly to their own effort and are also willing to further increase their effort. Asmus (1986) related performance motivation to the height of aspirations (the height of set goals). He conducted a research study among music students and found that those motivated to succeed had high self-esteem, attributed success to themselves and their abilities, and set themselves moderately difficult goals which they could reach. Those who were motivated to fail attributed it to their own incompetence and set themselves very difficult or very easy goals.

In terms of music success, we can speak of a motivational orientation, which focuses on the setting of performance goals (Elliott et al., 1999). In general, two goal orientations have been identified: mastery goals, which

concern the process, and performance goals, which concern the result (Miksza, 2011). The mastery goals approach focuses on the development of competences and on progress (Ranellucci et al., 2013). This orientation can generate greater musical creativity (Schatt, 2011), as the goal is related to an internal interest, a strategic approach, and persistence and effort in problem solving (Janssen & van Yperen, 2004). Performance orientation, by contrast, focuses on the demonstration of normative competences and is motivated by external factors, such as competitions or the receipt of incentives from the environment (Ranellucci et al., 2013). The latter is more often about short-term achievements (Schatt, 2011). Numerous studies have established that achievement motivation, guided by performance excellence goals, is an important predictor of success in music performance delivery (Diaz, 2010; Miksza, 2009; Schmidt, 2005).

Musical performance delivery is one of the most demanding forms of professional performance delivery, requiring high levels of musical ability, skills, and competence, and involving motor functions and physiological responses, cognition, and emotion. Music performers thus need to master a wide range of motor, cognitive, and musical skills, as well as possessing emotional and social competences (Habe et al., 2019).

In discussing musical performance success, we most often encounter terms such as performance excellence, expert performance delivery, peak performance delivery, optimal performance delivery, or performance expertise (Berkopce, 2016). Peak performance delivery is defined as a quantitatively and/or qualitatively absolutely outstanding result, achieved in normal circumstances. It means operating at the threshold of one's limits and requires complete dedication in the area of expertise (Nitsch & Hackfort, 2016).

Performance excellence is the result of the subtle interplay between a musical piece (composition), the performer(s), the performance environment, and the audience (Waddell et al., 2018). Of course, the path to its achievement is long, based on developing the mastery of musical abilities and skills, which enables the development of musical giftedness (innate musical potential) into musical talent (development of musical potential by means of deliberate and systematic efforts). Musical talent is built on the solid foundations of musical abilities, with the help of adequate motivation from within the individual (interest, curiosity, personal satisfaction) and social encouragement (the role of parents and teachers). Above-average musical abilities are not the only abilities required to succeed in music. A musician needs adequate motor predispositions to play a particular instrument or to sing, and in the cognitive domain they need to be able to form and process complex mental struc-

tures, to activate optimal attention and concentration, as well as to train their memory. They need to be in possession of emotional and social competences (Hallam, 2012). It is therefore not surprising that active engagement in music has numerous and manifold impacts on an individual's overall development, as the transferential aspects of playing an instrument/singing are translated into physical, emotional, mental, and social development (Habe, 2020). The crucial processes in the formation of musical talent are the those of self-regulation at the mental and motivational level, which accompany the musician primarily during practice, but also in performance. This provides the grounds on which young musicians form their own musical self-image, an integral part of which is their performance self-image. An individual's experience of their own musical performance success is based on multiple aspects of self-evaluation: how they evaluate themselves in terms of their motor skills (e.g. how good their vocal abilities are), their self-image in terms of regulating their emotions in performance (e.g. are they capable of expressing a variety of emotions in performance, are they able to relax on stage, are they able to activate an optimal level of energy on stage), and their self-image in the social domain (e.g. how well they connect with other musicians on stage, how well they are able to connect with the audience). These three aspects are also complemented by self-image, which relates directly to the evaluation of one's own musical abilities in a learning/professional environment.

Musical success is therefore, as previously noted, determined not only by technical and musical excellence, but perhaps more importantly by a variety of environmental and psychosocial factors (Subotnik, 2004; Subotnik et al., 2016; MacNamara et al., 2008; MacNamara et al., 2014; MacNamara & Collins, 2009; Subotnik & Knotek, 2009). We can speak of the psychological characteristics of developing mastery (MacNamara et al., 2010), which include mental imagery, focus and distractor control, and objective performance evaluation, as well as attributional appropriateness, commitment, planning and organization, goal-setting, self-strengthening, practice quality, resilience, self-regulation, and the formation and use of a supportive social network. Additional characteristics reported in musicians are creativity, spontaneity, and flexibility (Talbot-Honeck & Orlick, 1998).

For many decades, the literature on achieving optimal musical performance focused mainly on the problematic aspects of performance. Positive psychology, which builds on the humanist principles in order to optimize an individual's potentials on the path to self-actualization, has emphasized for 30 years that optimal functioning cannot only be

achieved through absence of pathology (e.g. performance anxiety), but also by shaping positive aspects of one's own potentials (Cohen & Bodner, 2019).

Martin Seligman, the founder of positive psychology, stresses that optimal functioning in any area requires the development of methods and skills for optimal functioning (Seligman, 2008; 2011). Thus it is also in musical performance that we can observe a shift from focusing on the pathological aspect of musical performance, with studies concentrating mainly on performance anxiety (for a review, see Kenny, 2011), to the study of facilitators of optimal musical performance, especially flow, with its first attempts emerging in 2005 (Bakker, 2005; Smolej Fritz & Avsec, 2007) and a surge of research since 2012 (Fullagar et al., 2012, 2013; Iușcă, 2015; Kirchner et al., 2008; Lamont, 2012; Wrigley & Emmerson, 2013).

Before going into more detail on the factors of successful musical performance, it is necessary to address the definition of musical performance, since musical performance contains many elements which are not present or are far less pronounced in other types of performances.

1.3.1 Exploration of Musical Performance Through Time

The first psychological research studies on musical performance can be traced back to the late 1930s. Most of the studies were initially of a qualitative character, consisting of interviews and case studies, but gradually the need for more systematic data collection became apparent. The psychology of musical performance has undergone a more noticeable development in the last 30 years, which probably reflects the perfectionist tendencies of today's society, which are also evident in music: it's no longer enough to be good, one has to be the best. The consequences of this societal trend are also reflected in the fact that the age at which people start to learn instruments is decreasing and that there appears to be a need to acquire the skills of efficient instrument learning and efficient performance.

The musical performance psychology is application-oriented. Unlike music psychology, which is primarily a theoretical psychological discipline, it also explores issues that are relevant to music practice. It builds on music pedagogy and music didactics. In recent years it has also begun to increasingly rely on the findings of neuroscience.

The study of musical performance can be approached in various ways. Most of the research to date has been performed on examples of artificial Western tonal music, which is a definite barrier to generalizing the findings of the performed research.

In broad terms, two types of research can be distinguished (Mirković Radoš, 2010): holistic (integrative) and elementalist (focused on particular aspects of performance). Research studies with a holistic orientation address larger themes in the context of musical performance and are usually based on a sociopsychological paradigm (e.g. the influence of social factors on musical performance, performance anxiety, successful performance skills). Meanwhile, the elementalist research studies investigate the performance of individual notes, intervals, chords, etc., and are strongly influenced by cognitive science.

Some of the music psychology books include questions concerning musical performance. Gabrielsson (1999, in Parncutt & McPherson, 2002) lists some of the major authors who have explored musical performance; from the early 1940s onwards, Mursell (1937, in Parncutt & McPherson, 2002) was researching the comparison of vocal and instrumental performance, focusing on issues relating to interpretation and technique. In the same period, Seashore (1938, in Parncutt & McPherson, 2002) produced a meta-analysis of all then existing studies on musical performance (including philosophical writings). Schoen (1940, in Parncutt & McPherson, 2002) dedicated himself to research on solo singing. Lundin (1958, in Parncutt & McPherson, 2002) addressed music learning and memorization from a behaviourist perspective. In contrast, Sloboda (1982; 1985, in Parncutt & McPherson, 2002) investigated performance planning, notation reading, rehearsal, and peak performance from a cognitive perspective.

One of the leading contemporary researchers in music performance psychology is Aaron Williamon with his research team at the Centre for Performance Science at the Royal College of Music in London. In 2004 he published a high-profile book, *Musical Excellence: Strategies and Techniques to Enhance Performance*. Two years earlier, Richard Parncutt and Gary McPherson's *The Science and Psychology of Music Performance: Creative Strategies for Teaching and Learning* had also been published. It addresses performance from the perspective of music pedagogy practice. This topic was also comprehensively covered in 2002 by John Rink in his book *Musical Performance: A Guide to Understanding*. The most recent book to be published on the subject is *The Oxford Handbook of Music Performance*, Volumes 1 and 2 (2022a; 2022b), edited by Gary McPherson.

In the past few years, a number of websites have been available on the topic of successful musical performance skills. For example, the most comprehensive and detailed account can be found on the Sybelius Academy website under the title *From Potential to Performance*.¹

1 <http://web.uniarts.fi/practicingtipsformusicians/index.html>

Useful information on the skills needed to achieve optimal musical performance is presented in a simplified manner on the Peak Performance for Musicians website.²

In Slovenia, experts specializing in psychological preparation for musical performance are psychologist and NLP (neuro-linguistic programming) instructor Aleš Pogačnik,³ academic pianist and practitioner of the BMC (*Body-Mind Centering*) method Assist. Prof. Dr. Ilonka Pucihar,⁴ academic flautist Alenka Zupan,⁵ and academic saxophonist and practitioner of Chen Taijiquan Špela Kolenc.⁶ The Alexander Technique is taught by singer and the Alexander Technique teacher, Nina Rotner.⁷

One of the first Slovenians to address this topic was Damjana Zupan, an academic pianist and sound therapist.⁸ Marina Horak, who introduced the course on the dimensions of performance at the Academy of Music of the University of Ljubljana, was also among the first to focus on the skills of successful psychological preparation for performance, with Nejc Lavrenčič following in her footsteps.⁹

If musicians need psychotherapeutic counselling, they can contact Dr Milena Lipovšek.¹⁰ We also successfully collaborate with a team of sports psychologists.¹¹

1.3.2 Elements of Musical Performance

Performing music is a complex creative activity requiring, in addition to professional skills, imagination, aesthetic sense, cognitive investment, intellectual curiosity, perceptual sensitivity, and mental agility, as well as discipline, motor precision and speed, sustained attention, emotional expression, and communication (Gjermunds et al., 2020). Musical performance requires auditory and visual perception abilities, attention, precise timing, extended movement control, learning, memory, and emotion (Kanduri et al., 2015). Many of these characteristics are also re-

2 <http://www.musicpeakperformance.com/what-mental-skills-do-performers-need/>

3 <http://www.glasbeninastop.si/>

4 <https://bmcassociation.org/locate/professional/IlonkaPucihar>

5 <https://www.alenkazupan.com/en/home>

6 <https://www.yinyang-taiji.si/spela-kolenc>

7 <https://www.ninarotner.com/individualne-ure-alexander-tehnike/>

8 <https://www.obrazislovenskihpokrajn.si/oseba/zupan-damjana>

9 <https://nejclavrencic.si/>

10 <http://www.psihoterapija-lipovsek.si/>

11 <https://sprememba.com/>

flected in personality traits such as openness, extroversion, acceptance, and, to some extent, neuroticism (Zhao & Seibert, 2006).

Developing expertise in instrumental/vocal performance is a complex, long-term process demanding auditory, cognitive, technical, musical, communication, and performance skills (Hallam, 2006).

Despite major advances in neuroscience research, the biological foundations of this complex cognitive function of the human brain are still not fully understood (Kanduri et al., 2015).

Musical performance delivery includes both a technical and an interpretive element. This means that we are interested in how we technically performed the piece and how we were able to interpretively convey the emotional messages to the audience. In music psychology, musical performance delivery is examined by the cognitive branch of the psychology of musical performance. The main research topics are musical performance planning, specific musical performance delivery with an emphasis on a vista notation reading, improvisation, performance feedback, motor processes, and performance evaluation (Gabrielsson, 1999, in Parncutt & McPherson, 2002).

The social moment of musical performance contains norms and rules regarding the circumstances of musical performance, various performance situations, and the influence of the audience (Davidson, 1997, in Parncutt & McPherson, 2002). The norms and rules associated with performance constitute some of the characteristics of social behaviour that are either written or agreed. When a soloist walks on stage, they bow, and the audience applauds. The audience also applauds when the orchestra members walk on stage, and when the conductor does. There is no clapping between the movements of musical pieces. At the end of the performed composition, the soloist and the conductor, facing the audience, bow, the conductor congratulates the soloist and the first violinist, and the soloist congratulates the first violinist. In classical music, performance has many rules, as it has a considerably longer tradition; thus, some behavioural “etiquettes” have been observed throughout the history of musical performance, although some have changed in the process (Davidson, 1997, in Parncutt & McPherson, 2002).

In jazz, there are additional specific, unwritten rules; each of the performers must have the opportunity for solo improvisation. The agreement on the course of the performance is mainly done by means of non-verbal communication. Each musical genre has specific rules and norms in addition to the general ones.

As already mentioned, there are several distinct musical performance situations (Davidson, 1997). A distinction can be made between formal and informal performances, performances in groups of various sizes, performing in audition, competition, as an exam, and in concert. The situational structure is what defines formal and informal performances. Formal performances follow more specific rules and norms, while informal performances are freer and more spontaneous, and usually occur in a relatively small circle of familiar people. Formal performances often arouse performance anxiety, due to an intense pressure on the performer by the audience.

An individual can perform in groups of various sizes. The most demanding performance is certainly the solo performance, where the performer is fully exposed to the audience's response, which makes it the most stressful form of performance for most musicians. It is easier to perform in a chamber ensemble and even easier in an orchestra. The level of performance anxiety decreases with the increase in the number of performers (Habe & Kržič, 2017).

The social moment is very much about the impact of the audience. The performer fears it, but at the same time the interaction with the audience's response is what allows the performer to get the most out of the performance. At times, the audience has a facilitating influence on the performance (Castiglione et al., 2018). However, it is often difficult for a performer to face the audience, knowing it expects the best from the performer, thus fearing disappointing them, as well as their own self. The expectations of one's social environment cause a conflict between the fear of failure and the desire to succeed (Nagel, 1993).

I have noticed in my work with musicians that they often forget about the importance of considering the social moment in musical performance and about the importance of facing and tackling this aspect of performance. They focus their attention almost exclusively on musical performance delivery, which demands a lot of preparation. They never regret investing time in technical, interpretive, and memorization practice, but they invest far too little time in mental preparation for the performance. A top performer efficiently faces the various predictable and unpredictable factors accompanying a performance and responds to them, in addition to being optimally technically prepared.

It is with delight that I have been observing an increase in interest in the skills of psychological preparation for musical performance in recent years. This increase is reflected in the topics covered in various workshops and seminars and in the strong interest of students at the Academy of Music of the University of Ljubljana in courses addressing this subject

(dimensions of performance, the Alexander Technique, skills for successful psychological preparation for performance).

1.3.3 Requirements for Successful Musical Performance

Onstage success is the result of optimal technical and interpretive preparation as well as emotional and social competence, key predictors of a masterful performance. Success in music performance, as elsewhere, is a process. Not only does an individual gradually learn what influences the success of their performance, but they also learn to experience and evaluate success. They progressively develop performance monitoring mechanisms.

It matters how the individual arrives on stage, how they make contact with the audience, how they interact with the audience during the performance, how they manage the excitement on stage, and how they compose themselves moments before they begin to play.

Kohut (1992) identifies the following conditions for successful musical performance:

1. It requires a sufficient amount of quality practice to be fully prepared to perform and to be confident in one's abilities.
2. It is beneficial to perform often, since experience is the only real teacher.
3. If you make a mistake, don't regard it as a catastrophe and don't panic. If you feel your performance delivery is better than you expected, do not let that feeling sway you. In both cases, your emotional reactions can affect your attention. That is usually when noticeable flaws occur.
4. Always give your all. Your goal should be the optimal performance of the music piece.
5. If your performance was not a success, recognize that this is unrelated to your value as a human being.
6. Do not expect too much too soon.
7. Avoid excessive pressure, which causes high levels of anxiety, as this can cause lasting consequences in terms of negative self-image and low self-esteem.
8. Focus on your own performance and do not compare yourself to others.
9. Act in accordance with the belief that every performance is an opportunity to train and improve your performance skills.

Kohut (1992) writes that an individual needs to set reasonable performance standards for themselves prior to performing. These should be consistent with their current level of ability and motivation. The ultimate factor in progression and achievement is the level of internal motivation. It is therefore the educator's primary task to find efficient ways to motivate individuals who are lacking in this respect.

Outi Immonen et al. (2012) define successful musical performance as a combination of:

1. optimal cognitive readiness
2. optimal emotional readiness
3. optimal technical skills and abilities

The foundations of all three types of readiness are built on optimal physiological readiness and on optimal mental structures.

Sarah Sinnamon (2020) lists the ten steps that are crucial to achieving a top-quality musical performance:

1. accepting the challenge
2. automation of skills and of memorization
3. mental training
4. imagery and visualization techniques
5. positive self-talk
6. dedicated focus and absorption
7. developing a pre-performance routine
8. experiencing positive and negative emotions
9. internal motivation
10. capacity to risk and let go

Hoffding (2015) takes a step further and links expert performance to the level of consciousness. He states that optimal performance, which enables the individual to experience an optimal performance state that both generates inner enjoyment and results in external success, occurs in a state of higher consciousness. This idea of his is further developed by Gallagher (2020) in the concept of mindfulness in performance as a key predictor of successful musical performance.

1.3.4 Musical Performance Success Criteria

Success criteria can be divided into external and internal (Kohut, 1992). External criteria include various competition awards, good exam marks,

positive critical acclaim, and successful auditions. The main internal criteria are personal satisfaction and the conviction of good performance.

The musical performance external success criteria can be divided into four categories (Williamon, 2004):

1. technique
2. interpretation
3. expression
4. communication

Technique comprises physiological, physical, and instrumental features. Physiological features are breathing, body posture, tension in the body, balance, and coordination. Physical features are the production and sustaining of the vocal/instrument sound, as are the range, intonation, physical control (e.g. stamina), and body coordination. Instrumental features include sensitivity regarding one's own intonation and the group's intonation, tempo of performance, accuracy, ease and reliability of rhythm, articulation, dynamics, etc. (Williamon, 2004).

Interpretation includes authenticity, accuracy of performance, and musical coherence. Authenticity here refers to an understanding of the style/genre of the piece. Accuracy of performance refers to the precision of performance in keeping with the composer's intention. Musical coherence entails appropriate choice of tempo, phrasing, nuancing of dynamics, and understanding of the overall musical structure (Williamon, 2004).

Expression refers to the understanding of the emotional quality of the piece, to the projection of the mood and character of the piece, to the correct use of tone and timbre, and to the ability to construct the dramatic structure of the piece (Williamon, 2004).

Communication involves communication between the performers, between the performers and the conductor, and between the performer and the audience. This includes performance confidence, which translates into convincing communication.

It is noticeable in practice that in performing musicians, external and internal criteria are often inconsistent. An individual can achieve and even exceed external performance criteria, while remaining dissatisfied with themselves and unsure of their performance success (Salmon & Meyer, 1998).

The reasons for this discrepancy can be found in the orientation of contemporary society, which prioritizes external performance criteria (Kohut, 1992). Thus, children entering primary school are immedi-

ately confronted with the fact that their achievement takes precedence over their playful music making. This is a considerable problem for children, as they are fundamentally inclined to enter the world of music with a spirit of curiosity, playfulness, and exploration. Also, the social aspect is of importance here, namely the bonding in music with others. It is very often the case that children abandon their musical education early and, sadly, lose their joy for music for a significant amount of time. This happens because the emotional and social aspects, which should be central to music, are too often overshadowed by the intellectual aspect.

The achievement aspect of performance in the music education system has for many years been supplanting the internal satisfaction of performing music (Whitaker & Tanner, 1987). In terms of Maslow's hierarchy of needs, most musicians who choose formal music education prioritize the motive of acclaim over the motive of self-actualization. It is a common perception that the current society is very achievement-oriented, so it is not surprising that the achievement motive is also over-emphasized in music. Under the parental and teachers' pressure, children are forced to meet strict performance criteria and prove their worth as early as in primary music school, while the integrated approach, where music education is seen as a way of "nourishing" the body, the emotions, the mind, and the soul, is neglected.

The emergence of positive psychology has impacted the music profession, as it has many others, by encouraging reflection on the well-being of its practitioners. Simultaneously, the concept of flow as the optimal musical performance state revived the hedonic approach, where internal satisfaction, i.e. internal performance criteria, is of importance. This has led to a shift in focus from external to internal performance success criteria in recent years, which is reflected both in scientific research and in performance practice.

1.3.5 Musical Performance Evaluation

The external music performance success criteria are examined through evaluation and assessment. Evaluation is the everyday work of music critics, music educators, and performing musicians. Despite many efforts to objectify music assessment, the subjective element has a significant impact on the assessment of musical performance.

A distinction can be made between an overall evaluation and an evaluation of specific performance aspects (Gabrielsson, 2012). Examples of the latter are the assessments of intonation, tone quality, rhythm, dynamics,

articulation, phrasing, and breathing. As to the overall evaluation, it can be perceived as a weighted assessment function of individual aspects of the performance; it is an assessment of the overall impression of the performance. The weighting of individual aspects may vary among assessors; hence, the weight of each aspect is not evident from the global assessment. Cirila Peklaj and Barbara Smolej Fritz (2006) found in Slovenian music students that an analytical approach to assessing specific aspects of musical performance led to higher reliability and validity of the assessments compared to an overall assessment. They also highlighted the observation that experts in a particular area tend to assess less rigorously than the less competent assessors, as experts recognize the difficulty of achieving excellence at various performance levels.

Diana Deutsch (2012) lists several performance assessment methods, e.g. the Watkins-Farnum Performance Scale for wind and percussion players, and the Farnum String Scale, both of which require an a vista performance of prescribed exercises that are tiered in terms of difficulty. She also presents research by Boyle (1992), Boyle and Radocy (1987) and Zdzinski (1991) which also addressed the issue of the use of psychometric techniques for performance assessment (Likert scales, ranking, pair comparison, successive intervals method, semantic differential, significance assessment). She then refers to research based on the construction of an assessment scale by means of factor analysis;

Abeles (1973) used this method to develop an assessment scale for clarinetists' performance. He collected many statements on various clarinet performances and transformed them into claims that were used to evaluate 100 performance recordings. Fifty music educators assessed the performances with respect to each of the 94 items. The factor analysis of the results demonstrated the existence of six factors, interpreted as intonation, rhythmic continuity, tempo, articulation, tone quality, and interpretation. Thirty items with high factor saturation were then selected for the construction of the assessment scale for clarinetists' performance. This scale was later also used to assess performance with other instruments, but each time the factor analysis was repeated to analyse the stability of the factor structure.

Elliott (1987) adopted a less formal approach. In his research, three professional assessors assessed six solo performances and rated them among themselves. The performers themselves also assessed their own performance. The final assessment was determined by the individual self-assessment and the rating by the three assessors. They proved to be very consistent in their assessment.

Namba et al. (1991) conducted a research study where assessors were asked to assess the performance of “Pictures at an Exhibition” (Mussorgsky) in real time. In a preliminary study, 15 adjectives were selected to describe the composition. The assessors had to listen to the composition and choose the adjectives that best expressed the current events in the composition. At the end, the frequencies of the occurrence of each adjective were calculated, indicating how individuals assessed the composition.

Diana Deutsch (2012) also mentions Bergee’s (1993) research on the reliability of performance assessors, which revealed a high degree of consistency between the assessment of teachers and that of performers’ musical peers, while hardly any overlap with performers’ self-assessment.

Listeners’ expectations can influence the assessment of the performance delivery. Duerksen (1972, in Gabrielsson, 2012) found that students rated the technical and musical qualities of a recorded piano performance less favourably when previously told that the performer was a student than when told that the performer was a top-class pianist.

The visual impression of the performer can also be a relevant factor (Boyle and Radocy, 1987, in Gabrielsson, 2012). Liszt’s remarkable posture at the piano and Paganini’s demonic appearance are certainly historical evidence of this (Sachs, 1982, in Gabrielsson, 2012).

Campbell (1971, in Deutsch, 2012) explored the possibility of using objective measures of each tone in singing (pitch, intensity, duration of the tone, duration of the pause or glissando) as predictors of quality performance. Seven competent assessors gave assessments on intonation, vibrato, rhythm, dynamics, and overall performance as criteria. The research concept was that acoustic data could simulate listener assessment.

Factors Influencing the Success of Musical Performance

What are the factors that lead to a successful musical performance? To answer this question, we need to consider the temporal perspective, since the development of performance expertise is a process which depends on the level of musical ability and thus musical talent: from personal qualities and motivation, and self-regulation (reflected mainly in the practice) to more advanced cognitive abilities, such as mental imagery, attention and concentration, and memory. Additionally, social factors such as parents and teachers have an important role in an individual's musical trajectory. All of this indirectly influences musical performance, as it is a part of the process leading to musical success.

On the flip side, there are factors that influence musical performance success directly, such as technical, interpretive, expressive, and psychological readiness. While major emphasis is placed on the first three forms of readiness, mental readiness in music performance has only begun to be discussed to some degree in the last ten years. And it is the mental preparation that paves the way for a superb musical performance.

A perusal of the review papers on successful musical performance skills (e.g. Green & Gallwey, 1986; Greene, 2002; Kohut, 1992; Hargreaves & North, 1997; McPherson, 2022a; 2022b; Parncutt & McPherson, 2002; Rink, 2002; Salmon & Meyer, 1998; Williamon, 2004) reveals that very few individuals are born performers. The majority acquire these skills to some degree by learning. In acquiring the skills of successful performance, however, one must be patient and persistent to achieve the desired results.

I have chosen to address musical success in terms of indirect factors, which concern the long-term process of music education leading to musical performance expertise, and in terms of direct factors, which have a concrete impact on the success of a specific musical performance. In addressing the indirect factors that contribute to the success of musical performance, I will stress as the foundations of the path from musical beginnings to musical performance expertise musical abilities and, in relation to them, musical giftedness and musical talent. Additionally, I will

stress the ability to generate mental structures and imagery, the personality characteristics, self-esteem/self-efficacy, motivation, and self-regulation, while emphasizing practice. As to the indirect factors, I will focus on the significance of parents and teachers, who are the key supporters of music education and without whom the achievement of performance success is unlikely. In addressing the direct factors that influence musical performance success, I will concentrate on the physical, emotional, and mental aspects, and the regulation of each of them. I will primarily address two of the most researched (and most referenced in practice) psychological factors that directly influence the musical performance: anxiety and flow.

The introduction to indirect factors of musical performance will mostly be grounded in theory, while the introduction to direct factors will focus more on the practical aspects.

2.1 Indirect Factors of Musical Performance Success

2.1.1 Abilities

Although the chapter on abilities is built on musical abilities and their development from giftedness to talent with the aid of social incentives, musical abilities alone do not suffice for a successful musical performance. Abilities regarding mental imagery play an important role, so I will address both musical abilities and mental imagery abilities in this chapter.

2.1.1.1 Musical Abilities

Musical abilities are a prerequisite for a successful performance. They are covered by a broad body of research conducted ever since the very beginnings of the music psychology. In Slovenia, the research on musical abilities has been most thoroughly conducted by Barbara Smolej Fritz (1999) in her master's thesis. Before her, a considerable amount of research attention had been directed to this topic by the music educator Albinca Pesek (1997).

The notion of musical abilities depends on social and cultural perspectives and on the mastery of music-specific skills (Küpers et al., 2014). A large body of research indicates that in non-Western cultural contexts, where daily life involves many musical activities, individuals demonstrate high levels of musical abilities, skills, and proficiency throughout their lives (Nettl & Bohlman, 1991, in Davidson & MacArthur, 2021). Messenger (1958, in Gardner, 1983) found in a longitudinal study of musical abilities among the Anang Ibibio that there was no

one among the tribe who did not display musical abilities. The low level of development of musical abilities is therefore in closer relation to the fact that these were not sufficiently stimulated during childhood to develop melodic and rhythmic abilities and musical memory (Davidson, 2011). Modern neuroscientific research confirms the universality of musical abilities, which are believed to be embedded into the human genome (Mehr et al., 2019).

Yet, musical abilities should not be associated only with a high technical skills proficiency, but also with expressive and communicative components of musical experiences, which help to advance musical behaviour, revealing the capacity of music to regulate personal, emotional, and social experiences (Davidson & MacArthur, 2021). McPherson et al. (2012) suggest that the expressive potential of music is what makes it meaningful to the listener at any level of musical experience and achievement. If we want individuals to develop their musical abilities, we need to acknowledge the impact of musical experiences that are meaningful to them and develop them in a context of skills that enable them to play an instrument/sing or listen to music in a critical way. Moreover, since high-quality musical performance depends on expressive and communication skills, affective experience always needs to be balanced with the development of technical skills and prowess (Davidson & MacArthur, 2021).

It should be noted that the terms relating to musical abilities (giftedness, talent, abilities, musicality, musical intelligence, etc.) are often used with different meanings and that there is still a lack of terminological uniformity in this area. There are two dominant strands of research on musical ability: the atomist strand, which views musical ability as a collection of relatively independent skills (advocated by American psychologists), and the unitarist strand, which sees musical ability as a whole made of various factors that are interdependent to varying degrees (advocated by British psychologists).

Seashore (1967, in Mirković Radoš, 2010), a representative of the atomist strand, believes that the basic abilities (sense of pitch, duration, loudness) as well as most of the more complex abilities (sense of rhythm, consonance) are innate. They manifest themselves from early childhood, which is why it is very important to identify them before the age of 10. Although Seashore considers sensory abilities as fundamental, he also places importance on imagery, memory, and musical intelligence.

Schoen (1940, in Mirković Radoš, 2010) is another representative of the atomist strand and sees musicality as a set of specific abilities or-

ganized on three levels: sensorimotor, intellectual, and affective. There are connections between them, defining the overall experience of music.

He distinguishes between primary (sensitivity to pitch, loudness, duration of tones, timbre, and melodic factors, such as perfect and relative pitch, memorization of tones, melody reproduction, melodic discrimination) and secondary factors (intelligence, self-confidence, temperament, perseverance).

One of the first authors to criticize atomist perspectives of musical ability was the Hungarian psychologist Révész (1953, in Mirković Radoš, 2010). He draws a clear distinction between the concepts of musical ability, musicality, and talent. He sees abilities as innate capacities enabling people to develop general and specific forms of behaviour. He underlines that these are latent, potential abilities that find their expression with maturation and with the appropriate incentives from the environment. His definition of musicality is the capacity for aesthetic enjoyment of music, which is innate and represents a universal human trait. Differences between individuals are believed to lie in the intensity of the manifestation of this capacity. The measure of musicality is the ability to understand the structure of a musical composition.

Boyle (1992, in Deutsch, 2012) defines musical ability as a broad spectrum of listening, performing, analysing music, and goal formation.

He calls for the need to separate:

1. musical abilities that are innate (capacity to learn music, especially to develop musical skills).
2. musical achievements which depend on education, external factors, and on interest (in addition to musical abilities).

These two concepts are strongly interrelated and difficult to separate.

Gordon (2015) examined the question of the innate versus acquired nature of musical abilities. He argues that the level of musical giftedness is innate. The latter can be developed up to the age of nine, after which the development of musical abilities stabilizes. Research conducted among infants also points to an inherited capacity for music in humans. Sandra E. Trehub (1993) states that a baby of three months perceives the intonation, melodiousness, and intensity of the mother's song; a baby of four months compares rhythmic structures; that already in babies there is a sensitivity to simple rhythmic patterns, that a baby of seven to ten months discerns semitone changes in simple Western melodies; and, before the age of six months, a baby is already able to imitate the tone's pitches and enjoys doing so. Most children lose these abilities when they

start learning to speak. Rosamunda Shuter-Dyson (1985) argues that we can detect in cases of marked musical giftedness attentive listening to music and to singing even before the development of speech.

More recent research on the innate nature of musical abilities has revealed that the genetic factor significantly affects the level of musical abilities (Tan, 2016). Miriam A. Mosing et al. (2014) found that inherited traits influence even the amount and quality of a person's practice, with the impact ranging from 40% to 71%. This resulted in the conclusion that musical abilities are an example of a multifactorial interaction between genetics and the environment (Mosing et al., 2017; Ullen et al., 2016).

Rosamunda Shuter-Dyson (1985) divides musical abilities into specific (tonal, rhythmic, kinaesthetic, aesthetic, creative) and general (auditory) abilities.

Gordon (2015) refers to general musical abilities as audiation, which he defines as the ability to render heard material meaningful. Audiation is a basic cognitive function enabling an individual to make sense of music while listening to it as well as to organize it and make sense of it while reading a notation or writing a dictation.

Accordingly, Gordon (2015) distinguishes five stages of development:

1. detection of sound
2. making sense of sound through tonal and rhythmic patterns within tonality and metre
3. ability to answer the question "What have I heard?"
4. ability to answer the question "Where have I heard these music patterns and sounds before?"
5. anticipation of what will follow

The first two stages are innate, while the remaining three are acquired.

According to Rosamunda Shuter-Dyson (1985), specific musical abilities are divided into:

1. tonal abilities, which include pitch perception, a sense of tonality, and the perception of harmony and polyphony.
2. rhythmic abilities, which involve the interconnection of rhythmic and melodic aspects; Sloboda (2005) states that the rhythmic and tonal systems are interconnected; in most tonal music, knowledge of tonal structure can help determine rhythmic structure and vice

versa, additionally, Gordon and Martin (1993) write that playing in tempo is the most important aspect of musical performance.

3. kinaesthetic (motor) abilities.
4. aesthetic skills, which are a very important predictor of musical achievement and represent the ability to repeat expressive elements after the teacher.
5. creative abilities, which are divided into convergent (the ability to recognize rhythmic and tonal patterns and musical syntax) and divergent (fluency, flexibility, originality); children who hear the music inside them need less physical presence of sound when composing (audiation is positively related to the development of ideas and to silence).

An interesting educational perspective is Gardner's theory of multiple intelligences (1995), which defines musical intelligence as a distinct, independent ability. Gardner makes a case for the existence of musical intelligence, but is still vague about its structure. His research findings suggest that musical intelligence is also associated with general intelligence, verbal intelligence, spatial intelligence, logical-mathematical intelligence, and emotional intelligence.

The section on musical abilities implies that these form the baseline for successful musical performance. Thus, Boyle (1992) states that musical achievement is the result of musical abilities, external factors, and personal interest. Performance is influenced by primary abilities (sensitivity to pitch, intensity, tone duration) as well as secondary abilities (intelligence, self-beliefs, temperament, persistence) (Schön, 1983). An increasing amount of research is confirming that musical ability is an innate capacity for learning music, specifically for the development of musical skills (Gardner, 1995; Gordon, 1979; Mehr et al., 2013; Shuter-Dyson, 1985; Trehub, 1993), which is also confirmed by neuroscience (Tan et al., 2014). According to Gordon (1990), predictors of children's achievements are their aesthetic abilities, manifested as the ability to reproduce expressive elements after the teacher, which Gordon classifies among the specific musical abilities.

2.1.1.2 From Musical Giftedness to Musical Talent

In Slovenia it is Bojan Kovačič who explores the depth of musical giftedness and musical talent. The latter (2016) defines musical talent as a multidimensional concept including six factors: non-musical characteristics, musical abilities, musical knowledge, musical performance, musical

creativity, and musical activities. Kovačič also calls for the need to overcome the terminological inconsistency regarding the use of the terms musical giftedness and musical talent, arguing that it is more accurate to use the term musical talent, since, unlike musical giftedness, which is based on innate, above-average musical abilities, musical talent is about the nurturing of musical potentials by the social environment, especially by parents and teachers.

The distinction of talent from giftedness has been proposed by Gagnè (1999, in Habe & Bratina, 2021), who suggests that giftedness can be understood as the possession and use of untrained and spontaneously expressed natural potentials, which place the individual in the top 10% of those with above-average expression of potentials (Gagnè, 1999, in Habe & Bratina, 2021). Gagnè reports that sensorimotor abilities are the best predictor of musical potential (1999, in Habe & Bratina, 2021). Talent emerges and develops in direct interaction with the environment (Renzulli, 2005, in Bogunović, 2010), which has been further elaborated in Mönks' multifactor model of giftedness (Mönks, 1992, in Bogunović, 2010) with respect to the role of family, school, and peers. More recent studies on musical giftedness and talent also examine cognitive, metacognitive, neuropsychological, and socio-emotional characteristics in addition to creativity, motivation, and aptitude (Robinson & Clinkenbeard, 2008).

McPherson and Williamson (2006, in Habe & Bratina, 2021) have developed a differentiated model of musical giftedness and talent where they identify at least eight areas of musical talent, namely performance, improvisation, composition, arrangements, musical analysis, assessment, conducting, and music teaching. There are several mediators in the process of shaping musical giftedness into musical talent: interpersonal factors (motivation, volition, self-control, personality and physical characteristics), environmental factors (cultural environment, people, events), and incidental opportunities (McPherson & Williamson, 2006, in Habe & Bratina, 2021).

As far as musical giftedness—i.e. innate musical potential—is concerned, musical giftedness researchers agree that the core of musical potential is audiation, the internal mental auditory perception (Gordon, 1989, in Habe & Bratina, 2021). In contrast, Ellen Winner and Gail Martino (2000) speculated that at the core of musical giftedness lies a sensitivity to music structure—tonality, key, harmony, and rhythm—and the ability to hear the expressive features of music.

Anica Arsić (2016) notes that musical potential does not guarantee that an individual's musical giftedness will develop into musical talent.

Musical achievements are dependent on a number of environmental factors, in which parents and teachers have a key role.

2.1.1.3 Ability to Create Mental Images

Music imagery has been explored quite extensively in experimental psychology and cognitive neuroscience (Schaefer, 2014). Hubbard (2010) has provided us with a detailed review of experimental findings on mental imagery of music. He finds that auditory imagery preserves many structural and temporal features of the stimulus, includes semantically interpreted information and expectations, and is related to musical abilities and experiences. Neuroscience studies confirm the presence of mental imagery of music in distinct and overlapping modalities (visual, auditory, kinaesthetic) (Schaefer, 2014). The manner of forming mental imagery of music depends on the type of music, the instrument played, experience, knowledge, personality, and situational demands (Gabrielsson, 2012).

When studying a new piece of music with which one is unfamiliar, one forms a new mental image. If studying already played or at least audibly known pieces, it is possible to recall or at least modify a mental image which has already been stored. In this context, the characteristics of the piece in terms of general and specific structure hold particular importance. Clarke (1989, in Deutsch, 2012) found that a musical image is most fully formed when playing a piece by heart, and incomplete when playing by notation and in improvising.

Persson et al. (1992) observed that when tasked with presenting an unfamiliar piano piece they have previously listened to, most performers verbally describe the piece as images, things, events, characters, and moods which the piece represents. The results of this research demonstrate the importance of the content of the entire mental image we create in music.

Sarah Schaffer (1992, in Gabrielsson, 2012) questioned the idea of recognizing musical significance through musical structure. According to her, the structure of the music should not in itself elicit a mental image in the listener. The main force in creating the listener's mental image should be the performer as interpreter. It is, after all, the performer who channels the mood and emotions contained in the music. This research confirmed the importance of interpretation in the creation of mental imagery.

Baily (1991, in Deutsch, 2012) addressed in his research the assumption that musical performance involves motor processes. He stressed that motion is also of importance in Western tonal music. Composers consider the instruments' characteristics and the performer's motor skills when

writing a new piece. Practice should always be guided by the appropriate character of motion in the piece. This was later confirmed by numerous studies (Schaefer, 2014).

Accordingly, the concept of embodied music cognition has emerged in recent years (Leman et al., 2018; Schiavio & Menin, 2013). The concept examines the foundations of musical experience, starting from an ecological approach to perception, where the human body, with its need to react and interact with the environment by the use of voice, hands, and the motor system, becomes the primary component of perception and comprehension of music (Leman et al., 2018).

Summarizing the results of the research conducted on mental imagery, we find that the imagery is shaped by interactive factors such as structure, content, expression, imagination, mood, and spatial motor patterns.

2.1.2 Personality Characteristics

Are there personality traits that distinguish musicians from non-musicians, do musicians who play different music genres differ from one another? Do personalities of performers differ from those of composers, conductors, and music educators? Are there differences in personality structure with regard to the chosen instrument? Is the musician's personality to a greater extent innate or learned? Do successful music performers possess certain distinctive personality traits that set them apart from less successful performers?

Musicians are just a part of the entire artistic population, whose personalities are at once quite similar and yet different. It is interesting that there are considerable differences in the personality structure and dynamics among composers, performers, music educators, and conductors. And if we compare the individuals who play instruments to those who sing, we find a fair number of differences. An important group of musicians is that of top performers, where personality parallels could be drawn with top performers in general rather than with the wider population of musicians (Kemp & Mills, 2002).

The study of a musician's personality was highly phenomenological in its beginnings, as will become apparent in the next paragraph. But it was not until Kemp's efforts (1996) that the area of musicians' personality was finally systematized.

The stereotype of artistic rapture refers to the artist's escape from reality, engagement in a subjective world, connected to something divine,

transcendent. The Italian humanists saw the melancholic temperament as the essence of artistic personality, since melancholy was supposed to enable the supersensory imagination necessary for creativity. Philosophers of the 18th century considered depression a condition for a happy artistic experience. Even Freud stated that a happy man does not dream, from which it could be deduced that an artist must be unhappy in order to dream and create (de la Motte-Haber, 1990). From these beliefs, we could conclude that artists need to be melancholic, depressed, in order to create.

The 20th century saw a shift in the study of musicians' personality, namely from temperament to motivational characteristics. The significance of self-actualization in particular came into focus; the artist was believed to have a strong desire for it. Knowing one's own giftedness and having a very positive assessment of one's own spiritual abilities was considered to be the integral part of such personality.

As already stated, most of the research on musicians' personality in the last twenty years has been performed by Anthony Kemp, whose work was consolidated with the publication of his book titled *Musical Temperament* (1996). Kemp (1981; 1982, in Kemp, 1996) observed that the most strongly expressed personality traits in musicians are introversion, sensitivity and imagination, intelligence, and anxiety. However, in a later study (Kemp, 1996), he found that the most strongly expressed personality traits in musicians were:

1. introversion
2. independence
3. sensitivity
4. anxiety

He also observed differences between different profiles of musicians (Kemp, 1982, in Kemp 1996), with violinists being more introverted than pianists and singers, brass players less sensitive than other groups of musicians, and music educators more extroverted than other groups of musicians. Among the musicians, string and brass players are considered to have the most dissimilar personalities (Kemp, 1981, in Butković & Modrusan, 2021). String and woodwind players are considered to be more introverted, while brass players, pianists, and organists are considered to be more extroverted (Kemp, 1996). Singers are more extroverted compared to instrumentalists (Butković & Modrusan, 2021). Cameron et al. (2015) (2015) also confirmed in popular musicians that singers were the most extroverted and also the least emotionally stable. It

is true, however, that differences among musicians are more likely to be driven by the influence of stereotypes than by actual differences in personality (Butković & Modrusan, 2021; Cameron et al., 2015).

Many older studies have revealed that musicians often experience neuroticism or emotional lability (Miranda, 2020) which includes anxiety, vulnerability, and insecurity. Neuroticism is especially pronounced in popular musicians. Rock and country musicians are more neurotic and more extroverted (Dyce & O'Connor, 1994). Neuroticism is not a major trait in contemporary research on the personalities of classical musicians (Gjermunds et al., 2020).

In musicians, stereotypical gender roles are not very prominent; rather, there is a stronger occurrence of androgyny (the representation of both masculine and feminine personality traits) (Kemp, 1982; 1985, in Kemp, 1996). This is expressed both psychologically and physically (testosterone levels).

Other personality traits that emerged in research as strongly expressed in musicians are intuitiveness, dominance of emotion over reason, and perceptiveness (spontaneity, curiosity, acceptance) (Kemp, 1996).

The most frequently used model for studying musicians' personalities over the past few years has been the Big Five model, which measures five personality dimensions: energy, agreeableness, conscientiousness, emotional stability, and openness (Bucik, 2007). Energy describes vigorous and dynamic action, loquacity, flow, and the ability to self-assert. Acceptance represents personality aspects related to the ability to understand and, if necessary, help others, to collaborate effectively with others, and to trust. Conscientiousness comprises the personality aspects related to reliability, orderliness, precision, and perseverance. Emotional stability includes personality aspects related to the ability to control one's own emotions, ability to maintain composure and balance, and the absence of negative emotional states. Finally, openness denotes aspects such as creativity, curiosity, culture, originality, and intelligence (Bucik, 2007).

According to the five-factor Big Five personality model, openness to experience is the personality dimension that most frequently emerges in relation to learning music (Butković et al., 2015; Corrigan et al., 2013; Swaminathan & Schellenberg, 2018; Thomas et al., 2016) and to musical expertise (Greenberg et al., 2015; Thomas et al., 2016). Openness is an indicator of aesthetic sensitivity and intellectual engagement (McCrae & Costa, 1997). As a dimension of personality, it is manifested in openness to new experience, emotions, art, unusual ideas, and in greater imagina-

tion (McCrae & Ingraham, 1987). Ana Butković and Ilijana Modrusan (2021) confirmed the findings of numerous earlier research studies which revealed that personality traits differ among musicians and non-musicians. However, they also found that there are only minor, statistically insignificant differences among the groups of instrumentalists.

Personality characteristics of top musicians coincide with the personality characteristics of top performers in other professions. The latter are often marked by strong personal integrity, introversion as self-sufficiency, independence, sensitivity, and anxiety as creative capacity (Kemp, 1996).

Numerous studies have confirmed ten dominant personality traits in successful musicians: androgyny, originality, independence, self-motivation, persistence, sensitivity, high interpersonal communication capacity, extroversion, need for attention, and anxiety (Iușcă, 2021).

2.1.2.1 Perfectionism

Since perfectionism is so common in musicians, I examine it in a separate section as a distinctive personality trait. It is a personality trait marked by a striving for perfection. Perfectionism is completely ordinary among professional musicians, as the classical music education system instils in them a pursuit of perfection, with an emphasis on error-free performance, from the very beginning of their musical journey.

There are several dimensions of perfectionism (Cleary, 2013; Patston & Osborne, 2016), but most researchers reference two main dimensions: adaptive or positive perfectionism and maladaptive or negative perfectionism (Cleary, 2013; Diaz, 2018; Kobori et al., 2011). Other sub-categories have been developed to provide a broader understanding of adaptive and maladaptive perfectionism. For example, there are three often referenced categories of perfectionism: (1) self-oriented perfectionism, which refers to perfectionist tendencies that stem from self-motivation, (2) other-oriented perfectionism, which refers to expectations of perfectionism in others, and (3) socially prescribed perfectionism, which refers to external motivation stemming from the belief that others expect perfectionism (Hewitt & Flett, 1993; Klibert et al., 2005). Although these categories were initially understood as maladaptive perfectionism, they were connected to a certain extent to both adaptive and maladaptive perfectionism (Klibert et al., 2005).

A substantial amount of research has confirmed that maladaptive perfectionism is associated with stressful goals, rumination on mistakes, and increased performance anxiety in younger musicians (Clark et al., 2014; Diaz, 2018; Dobos et al., 2019; Kobori et al., 2011; Stoeber

& Eismann, 2007), while the associations between delayed perfectionism and anxiety have not been clear-cut (Kobori et al., 2011; Stoeber & Eismann, 2007). Maladaptive perfectionism is associated with maladaptive stress-related coping mechanisms in music, such as practice avoidance, which increases performance anxiety (Diaz, 2018; Kobori et al., 2011; Stoeber & Eismann, 2007; Stoeber & Otto, 2006). Past research has revealed that perfectionist anxieties are significantly correlated with socially prescribed perfectionism and with musicians at the primary and secondary level of music education (Diaz, 2018; Kobori et al., 2011; Stoeber & Eismann, 2007). Maladaptive perfectionism entails intolerance of mistakes, doubts concerning one's own actions and abilities, and strong self-criticism (Diaz, 2018; Kobori et al., 2011; Patston & Osborne, 2016; Stoeber & Otto, 2006).

In contrast, adapted perfectionism correlates with more positive traits and consequences, such as the development of efficient coping mechanisms for performance anxiety, organization and increase of practice time, more rewards, reduced performance anxiety, and better performance (Diaz, 2018; Kobori et al., 2011; Stoeber, 2012; Stoeber & Eismann, 2007; Stoeber & Otto, 2006). Adaptive perfectionism concerns the tendency to form behaviours and cognitions which include setting high personal standards and rigid self-discipline (Diaz, 2018; Kobori et al., 2011; Stoeber, 2012; Stoeber & Eismann, 2007; Stoeber & Otto, 2006). Adaptive perfectionism is thought to be connected to internal motivation and self-directed perfectionism (Kobori et al., 2011; Stoeber & Eismann, 2007).

In relation to musical success, I draw attention to the research by Stoeber and Ulrike Eismann (2007), which concluded that younger musicians' negative attitudes to mistakes as well as negative reactions to them increase their performance anxiety, physical problems, and emotional fatigue. Although frustrated, depressed, angry reactions to mistakes had a significant correlation with distress in young musicians, external pressure towards perfection from parents and teachers did not affect them substantially. This might imply that the internal pressures and the striving for perfection are major factors in the generation of negatively experienced performance states. Yet, it is true that throughout their years of musical training, musicians internalize the external criteria of perfectionism.

2.1.3 Musician's Self-Image and Identity

Self-evaluation is one of the key factors influencing musical success. How they see themselves (self-image), how they experience themselves as a

musician (self-esteem), specifically as a performer, and what they identify with in music significantly impacts the amount of their music success. There is a crucial link between the self-evaluation of the performing musician and their experience of psychological well-being. This is illustrated by the occurrences of performers being very successful according to external benchmarks, which place these performers among the top performers; yet they remain deeply frustrated by the feeling of not being good enough.

Most of the research on self-image and self-esteem has been conducted among the general population (rather than musicians) subjected to musical interventions (singing, playing an instrument) as part of art therapy or music therapy with emphasized group musical activities. Such studies have demonstrated that active engagement in music leads to higher self-esteem and a more positive self-image (Habe & Licardo, 2019).

A significant body of research reports positive effects of active engagement in music on overall self-image (singing in a choir, playing in a band/orchestra, learning an instrument) (Costa-Giomi, 2004; Ritchie & Williamon, 2011a; 2011b). The effects of active engagement in music usually become apparent only after a certain period of such activity (Vitouch et al., 2009, in Degé et al., 2014). Musically active individuals display better discipline, motivation, emotional sensitivity, and capacity for teamwork (Rickard et al., 2012), all of which contribute to a better overall self-image. Learning music can change one's approach to tasks and thus affect learning self-image, especially because the activity resembles school activities.

In the early 21st century, the construct of musical identity emerged in music psychology (MacDonald et al., 2002), which was later followed by the exploration of musical self-image (Spychiger, 2009). Most research on musicians has been conducted in the context of performer self-efficacy (Ritchie & Williamon, 2011a; 2011b; 2012), which is the most concrete and action-oriented concept of self-evaluation, and which I address in a separate section in continuation.

Maria Sychiger (2017) states that musical self-image can be understood as a psychological structure shaping musical experiences into musical identity. Building on Shavelson's model (Shavelson et al., 1976), she defines musical self-image as a multidimensional psychological construct divided into a non-academic and an academic part. In her non-hierarchical and multidimensional model of musical self-image, she highlights the concept's overall connection to general self-im-

age as well as to specific elements of the musical self (Spychiger, 2017). Academic musical self-image is the area of musical self-image that relates to musical abilities, skills, and competences, while non-academic musical self-image encompasses physical, mental, emotional, and spiritual components. Maria Spsychiger et al. (2009) observed that the mental component bears the most significant influence on musical identity in professional musicians, while the spiritual component is more prominent in amateur musicians. A positive musical self-image is an important contributor to motivation for long-term engagement in music (Cogdill, 2015).

Parents and teachers have a major role in the formation of a performer's self-image, as does the individual's performance experience (Habe, 2002).

2.1.4 Self-Efficacy

In a way, self-efficacy also relates to self-evaluation, but should be differentiated from other concepts of self, such as self-image, self-esteem, and identity due to its specificity and content (Schunk & Pajares, 2001). Whereas self-image, self-esteem, and identity are rather static concepts tied to performer's personality traits, self-efficacy is a highly dynamic concept belonging to the scope of motivation and having a significant impact on the quality of achievements (McPherson & McCormick, 2006). While the previously mentioned concepts of self-evaluation involve perceptions of one's personal competences in general or in a specific domain (e.g. motor skills, emotional and social competences), self-efficacy refers to personal beliefs about one's ability to perform a specific task (Schunk & Pajares, 2001). When studying musical performance success, it is therefore more sensible to explore performers' self-efficacy. A performer may have a positive self-image as a musician, but the challenge of performing can often activate in the performer a sense of low self-efficacy (McPherson & McCormick, 2006).

The concept of self-efficacy was introduced by Bandura (2002). Self-efficacy is supposed to be the source of various expectations and has a strong action component. Expectations regarding self-efficacy influence the decision on how to tackle a problem, how long to persevere, and how much effort to invest. Self-efficacy determines the choice of behavioural strategies. Self-efficacy expectations have two main dimensions: degree of difficulty and generality. In some people, performance expectations are limited to the simplest tasks, while in others they include the most

complex tasks; some people feel competent in only a few areas, while others have a fairly generalized sense of competence.

Bandura (1986; 2002) lists four sources of self-efficacy: one's own direct experience, observation and imitation of a model (indirect experience), verbal encouragement from others (social persuasion), and emotional factors (physiological and emotional states). With regard to direct experience, it is success which increases self-efficacy, and repeated failures which decrease it, especially if they occur soon after the beginning of the activity. Once firm feelings of self-efficacy are developed, they are no longer harmed by occasional failures. Rather, these increase the efforts. Together with indirect experience of observing and imitating the model, one can create expectations of their own progress conditioned by sufficient persistence. Models can be persons one observes directly or symbolic role models. As to persuading others by suggestion, it has been demonstrated that the expectations arising as a result of persuasion are usually quite weak, so it is very important to ensure initial instances of success. With regard to emotional factors, high arousal has been found to debilitate performance, so success cannot be expected in such circumstances (Bandura, 2002).

Within the context of musical performance, self-efficacy can be defined as the result of one's awareness of their own musical abilities, skills, and competences, alongside their recognition of their own psychological skills needed to perform. Musical abilities, skills, prowess, and personality traits are of importance in the process of achieving musical success, but it is the sense of performer's self-efficacy which has the most significant influence on their thinking, feeling, and behaviour when performing (Carbonero & Merino, 2008). Obviously, competent functioning requires a systematic balance between actual capacity or effectiveness and the metacognitive processes that underpin one's personal beliefs (Zarza-Alzugaray et al., 2020). It has been found that personal perceptions about one's capacity to perform a musical work in public are more important predictors of musical performance success than the amount of practice (McCormick & McPherson, 2003; McPherson & McCormick, 2006).

Numerous studies have confirmed a positive relationship between self-efficacy and achievement in music (Hendricks, 2009; 2014; McCormick & McPherson, 2003; Miksza, 2015; Nielsen, 2004; Zelenak, 2011). Recent research found that the number of public performances from which a performer gains experience leads to higher performer self-efficacy, but only in girls (Zarza-Alzugaray et al., 2020).

2.1.5 Motivation

Motivation is the driving force enabling individuals to develop their abilities, which are essentially innate capacities. An individual may have great musical potential, but what they get out of it depends on their environment, which can provide external motivation (parents and teachers), and especially on their self-activity, which stems from curiosity, interest, and internal satisfaction (internal motivation). In Slovenia, motivation in music was researched by Branka Rotar Pance, who summarized her findings in her book *Motivacija – ključ h glasbi* (2006).

Motivation is what enables a musician to achieve their goals, be they high or low. The choice of goals depends on the musician's level of aspiration, which is the level of future achievements based on past experience. The level of aspiration is influenced by their individual stability, group, and previous experiences of success or failure (Lamovec, 1986). Of course, we should keep in mind that, despite strong motivation, one cannot become a first-rate musician if one is not sufficiently musically gifted. First-rate musicians have great musical talent, but at the same time the motivation high enough to develop it.

Motivation-related research has been conducted on the impact of individualism (Gaunt & Hallam, 2016), beliefs (Hallam, 2013; O'Neill, 2011), skills, and competences (Levitin, 2012) on learners' motivation.

To be motivated to participate in a musical activity, learners need to have a positive attitude towards it and a belief that they will be successful at it. Expectancy-value theory can explain why some learners begin to learn an instrument/singing and persist, while others do not (O'Neill & McPherson, 2002, in Spychiger, 2021). It enables teachers to predict a student's decision to participate and their interests (Lehmann et al., 2007). Students must truly enjoy the musical activity to persist with it (Wigfield & Eccles, 2000, in Spychiger, 2021).

Researchers have studied numerous individual differences among musicians which affect their motivation. This motivational model contains four components of internal and external motivation, namely that the student will (1) value musical activity success, (2) estimate that the musical activity will be a rewarding and enjoyable experience, (3) anticipate that the musical activity will be useful for future goals, and (4) value the musical activity highly enough to find it worthwhile to spend time and energy on musical practice (Lehmann et al., 2007).

As young musicians develop their skills, they pass through different stages of internal and external motivation. Internal motivation in self-determination theory focuses on the learning conditions necessary to stimulate

and maintain the inclination to learn (Ryan & Deci, 2000). Self-motivation for learning is considered to be driven by three needs: autonomy, competence, and relatedness (Ryan & Deci, 2000). In order to participate in challenging musical activities, students need to feel sufficiently musically competent, they need to feel that they can choose and regulate their musical activity, and, at the same time, musical activity needs to enable them to satisfy their need for belonging and connection in an accepting, supportive social environment (Woody & McPherson, 2010).

Other influences on motivation levels include socio-economic status (McPherson et al., 2015), class curriculum (Winter, 2004), and academic achievements (Johnson & Memmott, 2006). Contemporary researchers of motivation in music have found that self-determination theory (Ryan & Deci, 2000) is still the best theoretical framework to explore it (Evans, 2015). MacIntyre et al. (2012) confirmed that internal motivation is crucial in maintaining a musician's motivational system, while external motivational factors have a minor impact. Internal motivation leads to the development of perceived competence, which is reflected in an increased desire to learn.

Smith and Murphy (1984) found in their research that it is intrinsic and not extrinsic rewards that encourage a musician to persist with the music profession. Moreover, Dews and Martha S. Williams (1989) have observed that the students' strongest reason for choosing a music profession is high internal motivation.

External motivation includes the use of external incentives, usually from parents and teachers, who encourage the student to engage and practice (Kohut, 1992). Here, teachers who are themselves highly motivated are of vital importance. Their motivation is comprised of a fundamental love, interest, and enthusiasm regarding music, music performance, and their students. Such a teacher is trusted and respected by the students. The basic method of external motivation is reward. Since competition is so deeply rooted in our culture, students need to be taught how to put it to constructive use. Concurrently, caution must be exercised so as not to abuse the spirit of competition, as this can cause serious psychological damage to the students. Victory in competitions is not, and should not be, the primary driving force of performance. Students can be guided to achieve a more thorough understanding and assessment of good music and quality performance, which ought to be the primary goal of competing. The question is how. Kohut (1992) suggests that the key to this is playing in small instrumental ensembles, where members learn to collaborate, seek agreement, assume responsibility,

and work as a team. It is pointless to deny the fact that the contemporary society is very competitive; instead, we need to learn healthy ways of functioning within the given confines. It is advisable to regard competition as a process of improving one's own skills (competing with oneself). A good teacher knows what they want, meaning that they have clearly set standards of performance, but complements them with reasonable expectations. Reasonable standards of performance are consistent with a given level of student's abilities and motivation (Kohut, 1992). Teachers with excessively high performance standards often place a lot of pressure on students, which reduces learning outcomes. But perhaps the greatest pressure is that which one puts on their own self by setting very high standards. Perfectionism and competitiveness can both be very damaging, which is why we should learn to properly manage the pressure; it is not healthy to leap to extremes. Persistence, not aggression, is required. Regardless of how respected and admired a teacher is, they can encounter students with inadequate motivation who make only minimal progress. The solution to this problem is not easy, but many educators believe that in such cases a firm but "sensitive" coercion has to be employed. Namely, the teacher needs to insist on the goals set together with the student, and encourage and monitor the student's progress.

Persson et al. (1992) identified a number of motivational elements for musical performance, naming hedonic motives (seeking a positive emotional experience in playing and listening to music), social motives (possessing an identity as a musician, meeting other musicians), and achievement motives. They also found that top young performers feel a strong urge to make music even as children, and this intrinsic motive guides them in developing their own talent. They can hear and feel something in music which cannot be verbally described.

Kohut (1992) states that musicians are motivated to perform by the following factors: the possibility of self-expression; the form of the piece; expressing the composer's intentions; validation by others (peers, parents, teachers); making a good impression with their abilities; earning money; passing an exam, course or graduation; performing a new interpretation of a piece; testing their self-confidence and abilities; enjoyment and pleasure; oblivion, at least momentary, of everyday problems; proving wrong those who thought them incapable of successful performance; and structuring a part of their life.

At the beginning of the introduction, I mentioned Maslow's theory of the hierarchy of needs (Kobal & Musek, 2009), which distinguishes between primary (physiological needs) and secondary (psychological

needs for safety, love, respect, status, and self-actualization. The model assumes that in order to satisfy the needs of the higher order, the needs of the lower order have to be satisfied. This would imply that a musician whose primary motive is acclaim (winning a piano competition) has their physiological needs—the needs for security and love—met. There are many musicians who are trying to satisfy their desire for acclaim through their profession. Their aim is to establish themselves in musical society, to gain recognition in musical competitions and through high-profile performances (Hargreaves, 1997). Beyond this level lies the need for self-actualization, the attainment of which is considered to be progressive. This means that it does not require prior fulfilment of the lower-order needs. It is characteristic of self-actualized people that they accept their impulses, that satisfaction of a need leads to growth, change, that any such satisfaction changes their personality in a fairly permanent way, that goals are individualized, behaviour quite independent of circumstances, that they are inclined to ego-transcendence, and that they perceive other people objectively (Kobal & Musek, 2009). An analysis of artists' biographies demonstrates their innate need for artistic expression, where the actualization of talent stimulates the creative capacities (de la Motte-Haber, 1990).

When it comes to motivation, we tend to emphasize its role in productivity. Motivation means the willingness to persevere in an activity which can produce observable, measurable, and comparable results, and to be committed to it. Atkinson (1976, in de la Motte-Haber, 1990) defines achievement motivation as a situation of conflict, because it arouses both the hope of success and the fear of failure.

McClelland (1953, in de la Motte-Haber, 1990) devised a programme to increase achievement motivation, in which he advocated the need to choose an appropriate manner of practice and performance conditions (positive feedback) and stressed the importance of learning by imitation (the importance to be in contact with people who are motivated by success). He also considered the importance of shaping one's self-image, as one must imagine oneself as successful. He believed that the success motive had to be satisfied in reality and not just in dreams, and that optimal environmental conditions had to be built.

In essence, the success (achievement) motive is one of the major motives for musical performance (Kohut, 1992; Persson et al., 1992). The influence of motivation on musical performance takes as its baseline the level of aspiration, which determines the level of future achievement based on past experience. Internal or external motivation is needed to

succeed in achieving set goals. The choice of music profession is largely driven by internal motivation (Dews & Williams, 1989), which, from a developmental point of view, often originates from external motivation. Music educators significantly contribute to this process by their example and educational approaches (Kohut, 1992). While achievement motivation matters in achieving success according to external criteria, the self-actualization motive, representing the need for a fulfilment of personal potential, should be taken into account in achieving success according to internal criteria (Maslow, 1954, in Kobal & Musek, 2009).

2.1.6 Self-Regulation

Another important factor in the success of musical performance is self-regulation. The latter has a direct as well as an indirect impact on performance. It will become apparent that self-regulation touches on the points already covered. It is primarily associated with motivation and performance self-efficiency. It will also be addressed in the following chapters, in terms of direct regulation at the physical, emotional, and mental levels present before walking on stage.

Self-regulated learning is the main goal of the modern educational process. Essentially, it is about making the student an active participant in learning, so that they regulate the learning. The role of the teacher in this process is to provide the child with some basic knowledge and appropriate learning strategies, and to monitor the child, guide them, and offer them feedback in the later stages of the educational process. This requires a lot of flexibility from both parties.

In music education, especially in the learning of instruments, self-regulated learning has always been the basic mechanism of the educational process. The adequacy of home practice, which is the main part of learning an instrument, depends precisely on the adoption of self-regulation mechanisms. The main determinants of progress in learning any piece are the learner themselves, the methods available to them, and their motivation. The teacher can only direct the student, but cannot undertake the student's work. The learning of instruments is mostly based on independent work, which is why individual self-regulation is so important. Self-regulation in music education is also relevant to the teaching of the music theory, which has been examined by Barbara Smolej Fritz (2007) in her doctoral dissertation.

The change in addressing self-regulation in music education over the last decade is reflected in the increased focus on the role of motivation, whereas previously the attention was concentrated mostly on the

cognitive and metacognitive components. The teacher's task is to teach a student effective practice strategies and to afterwards only regularly correct the student and to introduce them to strategies for solving specific problems in new pieces, while the main actor in the self-regulating process is the student themselves. Until the age of 10, when the abstract thinking capacity develops to enable metacognition, it is the teachers and parents who, by example and encouragement, model effective self-regulation strategies. Their function is also motivational, as they provide a degree of guidance and encouragement to the learner at all times. Gradually, the learners themselves assume more responsibility for strategic learning. It is evident that self-regulation is the foundation of learning a musical instrument and that it has a long tradition in music education, with regard to the examination of musical practice.

There are several definitions of self-regulated learning. I concentrate on the working definition, stating that the self-regulated learner learns primarily for themselves and believes that learning is an activity subject to continuous improvement, requiring self-motivation and goal-oriented behaviour, and that metacognitive activity is also required for learning (Zimmerman, 1986, in Schunk & Zimmerman, 1998). Self-regulated students differ from their peers in that they set goals, closely monitor their progress, and use cognitive and metacognitive strategies (Schunk & Zimmerman, 1994, in Schunk & Zimmerman, 1998). Schunk and Zimmerman (1996, in Schunk & Zimmerman, 1998) argue that there are two fundamental origins of self-regulation, namely the social origin (mainly parents, teachers and peers) and the opportunity for independent practice and development.

After the initial introduction of the concept, I identify such mechanisms in instrument learning using a four-component model of self-regulation (Hofer et al., 1998). The self-regulated learning model assumes an interactive relationship between cognitive and motivational processes. It identifies both knowledge (cognition and metacognition) as well as cognitive and metacognitive strategies as cognitive processes. It considers belief motivation and motivational strategies as motivational processes.

2.1.6.1 Cognition and Metacognition

Cognitive processes can be defined as processes involved in action, verbal or non-verbal activities which indicate the processing of information (Peklaj, 2000). *Cognition* operates between the subject and the information. Cognitive structure includes declarative and procedural knowledge. Declarative knowledge is knowledge of things, it answers the question of "what" and

provides us with right or wrong answers. Procedural knowledge, by contrast, relates to the execution of certain processes and can result in automated activity. Any procedural knowledge has to be declarative first.

It is procedural knowledge that prevails in the learning of instruments. Declarative knowledge, which is the foundation of all procedural knowledge, is acquired in music theory classes. It is common that in the first year of music school, the student is taught only theory, i.e. declarative knowledge, which they begin to combine with procedural knowledge during the instrument lessons in the following years of music training. Declarative knowledge in music training is roughly associated with learning the theoretical material necessary for the practical aspect (learning notation, chords, working on the rhythmic, melodic, and harmonic elements of music). As already stated, the procedural knowledge, which is the knowledge of how to do something, is at the forefront in learning to play instruments. A child usually forms an idea of how to play a piece by observing the teacher playing the piece for them. In this way, they develop a performance image. It is advisable for the student to have a sound recording available, so it can help them gain a sense of how the piece should sound in its entirety, how it should be performed.

The concept of *metacognition* is much more intangible than that of cognition. It occurs between the subject and the thought processes. Plainly put, metacognition is considered to be the thinking about what is going on in our minds. According to most authors, the term includes the following: knowledge about one's own cognition, cognitive and emotional states, ability to consciously and deliberately monitor and regulate one's own knowledge, processes, cognitive and emotional states. Metacognition is engaged in the selection and planning of actions to be taken, the review of actions taken, and their regulation (modification, correction, supplementation) (Peklaj, 2000).

2.1.6.2 Cognitive and Metacognitive Strategies

Cognitive strategies are an important aspect of self-regulation in learning to play instruments. It is the cognitive aspects, including the cognitive and metacognitive strategies in learning an instrument, that constitute the predominant concern of music psychology.

The main cognitive strategies are:

1. repetition strategies
2. elaboration strategies (summarizing the essence, the main idea)
3. organizational strategies (organizing the data into a sensible unit)

Repetition strategies enable students to select relevant information from a complete context and preserve it in their working memory. The use of repetition strategies shapes the mental images which we store in our working memory. When learning an instrument, one selects important information about a music piece by forming a mental image of it and retaining it in one's working memory. That mental image is created mainly by listening, but the visual and kinaesthetic channels are also involved. In instrumentalists who already possess a certain level of knowledge, reading a vista is also a manner of forming a mental image.

The next step in the repetition phase is, for example, to practise each hand individually on the piano. We try to remember the flow of the melody, the finger placement, and the basic phrasing.

Elaboration strategies are used to improve skills that have been roughly acquired through repetition strategies. These strategies allow one to transform information and relations between the parts of the content that one is processing. In piano learning, this translates to practising a piece with both hands, thus establishing a relationship between the content parts, then beginning to add phrasing and dynamics, and emphasizing the main melody (this is particularly evident in Bach).

The term organizational strategies describes the structuring of a content into a meaningful whole. Organizational strategies in learning an instrument are linked to knowledge of musical form. One recognizes the basic form of a piece and thus structures it. They are aware of the basic structure of the piece, see where rhythmic or melodic variations occur, and where a theme is repeated in its basic or modulated form. Organizational strategies therefore enable one to structure a piece into smaller logical units which are more suitable for practice.

To practise the piano, it is necessary to break down a piece rhythmically or melodically. The capability of rhythmical organization plays an important role, particularly when we have to combine the rhythm of the left hand with a different rhythm of the right hand. At an early stage of piano learning, the teacher usually introduces the rhythmic structure relationship of the right hand and left hand, and attempts to illustrate it graphically. This is because this relationship-building is often a considerable challenge for children. When learning an instrument, we also encounter melodic organization. This means identifying the main themes and simplifying the practice by acknowledging the relationships between the individual parts, as well as their similarities and differences. In this regard, the transfer capacity is very important.

The strategies of elaboration and organization are complex and intricate cognitive strategies in learning an instrument, and most children in primary music school employ them under the teacher's watchful eye. Teachers use elaboration strategies to aid explanation when identifying melodic or interpretive elements in a piece. Elaboration and organization require a considerable amount of declarative knowledge of harmony and form.

The vast majority of self-regulating strategy models include three main types of *metacognitive strategies*:

1. planning (setting goals, asking questions, enables the activation of prior knowledge)
2. monitoring (checking the understanding of thought processes and detecting errors)
3. regulation (eliminating errors)

Planning strategies include activities designed to help students use cognitive strategies and stimulate important aspects of prior knowledge by organizing the material in a way which is easier to understand. Students who use planning strategies are more successful in achieving academic goals than those who do not use them (Zimmerman, 1989).

The planning in learning an instrument is done by weekly structuring the student's practice routine. The teacher puts down in the student's practice notebook what the student should practise and how to do it (quickly or slowly, by parts or as a whole, perhaps adding technical elements that need to be practised). In this manner, the short-term goals for the student are established. However, since students are required to perform in monthly productions, long-term goals are also established. These include not only the strategies for adequate practice in order to learn the instrument, but also the strategies for successful performance (how to relax before a performance, how to focus on the music and not on the audience, how to convey the message of the music to the audience). At the primary and partly even secondary level of music education, metacognitive planning is mainly guided by the teacher, with the student gradually beginning to internalize these strategies and using them on their own.

In addition to short- and long-term practice planning it is also necessary to plan musical performances. This planning presupposes the mastery of two aspects (Gabrielsson, 2012):

1. understanding the content, structure, and meaning of music
2. complete mastery of the instrumental technique

These two aspects constitute the first requirement to be met before starting to plan a performance. They can be divided into three interactive steps:

1. an appropriate mental image of the music being performed, together with a plan for transforming it into sound
2. practice to a standard that suits the desired goal
3. specific preparation for the performance

As all of these factors have already been addressed in this monograph, I will not elaborate on them here.

The importance of monitoring in the self-regulation process is in its provision of information regarding the adequacy of an activity or its inadequacy and the need to change a behaviour or activity. Claire Weinstein and Mayer (1986) claim that all metacognitive activities are at least partly monitoring.

Monitoring strategies in learning an instrument include directing attention, counting out loud, reading notation aloud orally, practising with a metronome, playing along with one's teacher, and using feedback. These strategies alert the student to possible lapses in attention, to a lack of mastery of the technical and interpretive elements of the piece, which can be remedied by the regulation strategies. The early stages of instrument learning involve plenty of relatively explicit monitoring strategies.

Gradually, the monitoring mechanisms become internalized and to some degree automated. The first condition for monitoring is the ability to concentrate.

An important self-observation strategy is to consider feedback. Feedback provides information on the degree of performance success. It can be subjective or objective; subjective refers, on the one hand, to one's feeling of satisfaction during the performance, to one's own opinion and feelings after the performance, and, on the other hand, to the opinion of the audience, to the opinion of the individuals whose professional opinion is valued, to the applause following the performance. As to the objective feedback, it consists of various audio and video recordings allowing the performer to analyse their performance and get a clearer perception of their own success. Feedback is a very powerful way of examining one's own performance, as it helps to identify the positive features as well as the shortcomings of one's performance. It allows for a systematic monitoring of progress.

We distinguish internal and external feedback. Internal feedback is information which is almost simultaneous with performance and is directly perceived by the performer. External feedback is substantiated

feedback, which is divided into objective and subjective feedback. The most common tools for obtaining objective feedback are a mirror, a metronome, and audio and video technologies. Subjective feedback comes from other people listening to our performance, be it our teachers, other musicians, parents, friends.

I will presently focus on internal feedback, which can be auditory, visual, or proprioceptive (tactile, kinaesthetic) (Todd, 1993). Auditory feedback is the most common type of feedback used among musicians. When a performer plays a piece of music, they simultaneously check their performance against the musical image they previously formed of that piece. This gives them information about the accuracy or inaccuracy of their performance. It bears clarifying that auditory feedback does not only concern the perception of sounds from one's own instrument, but also the perception of sounds produced by others. Visual feedback can provide information about the instrument and the behaviour of the conductor, other performers, and the audience, along with social feedback. Two or more performers who perform together use auditory and visual feedback to coordinate and communicate with each other (Shaffer, 1984). Proprioceptive feedback can be used successfully in performance by musicians who are deaf or hard of hearing (Glennie, 1991). It is also used by musicians who are more sensitive to music or who have acquired this sensitivity through many hours of practice. Proprioceptors are divided into vestibular organs (semicircular canals in the inner ear that are affected by the position of the body) and kinaesthetic organs (muscle spindles in muscles and tendons, affected by muscle tension and limb position). Musicians use their vestibular and kinaesthetic sensations to help them monitor their performance.

In learning an instrument, monitoring one's own thought processes is an important part of metacognitive strategies. As in planning, the teacher plays a major role in monitoring the student's own thought processes, teaching the student to which aspects of performance to be alert. The student's own internal control eventually replaces the external control provided by the music teacher.

As already mentioned, regulation strategies have strong ties with self-observation strategies. They allow one to change an activity in order to improve their performance. Sometimes learning needs to be slowed down, at other times the entire learning material needs to be re-examined, at yet another mistakes need to be corrected. Regulation strategies also include skipping the harder parts of the learning material and approaching them at a later stage of practice.

In learning an instrument, regulation strategies are most evident in the correction of observed mistakes. This is done systematically during practice, little by little. We slow the pace considerably and only gradually approach the one we aimed to achieve.

2.1.6.3 Motivational Beliefs

Although I have already addressed motivation in a separate chapter, I will also present motivational beliefs and strategies in this section, given that it forms an important part of self-regulated learning.

In the context of motivational beliefs, it is particularly important to highlight the importance of self-knowledge, meaning one's knowledge of their own weaknesses and strengths, self-efficacy beliefs regarding the performance of certain academic tasks and disciplines, goal orientation in learning, personal interests, and academic achievement assessment (Garcia & Pintrich, 1994, in Hofer et al., 1998).

Self-knowledge includes one's awareness of their own strategies for learning and motivation, and an awareness of the relative effectiveness of these strategies. From this knowledge about oneself, one can learn to better adapt one's own learning and make appropriate changes in the strategies used (Butler & Winne, 1995, in Hofer et al., 1998). The suitability of strategies to meet personal goals or preferences should also be considered. Once again, this type of knowledge of one's own strategic preferences combined with the knowledge of the relative effectiveness of the strategies used helps one to achieve better adaptability and self-regulation.

Each musician is more or less aware of their strengths and weaknesses in the practice of the instrument. They choose practice strategies accordingly. They practise in longer or shorter intervals, in parts or in full. They try to overcome their deficiencies or compensate for them by means of other mechanisms.

Another important part of the motivational beliefs, in addition to self-knowledge, is the self-efficacy beliefs, which I discussed in the section on self-regulation. They are an individual's judgements about their own abilities to perform a particular academic task (Schunk, 1991, in Hofer et al., 1998). We assume that this belief is quite situation-dependent, which is in line with the self-efficacy theory (Bandura, 1977), yet we consider it in terms of a more general notion of a self-efficacy belief regarding an academic discipline or academic task. In accordance with the socio-cognitive model, a self-efficacy belief is a changeable human characteristic. This means that this belief can be regulated just like other motivational strategies. In this regard, we should also emphasize the realistic per-

ception of one's own abilities, which differs from an underestimation of one's own efficacy, the latter negatively affecting learning achievement, and an unrealistic overestimation of one's own efficacy, the latter leading to disappointment (Pintrich & Schunk, 1996, in Hofer et al., 1998). If one has realistic ideas about their own abilities, they choose appropriate learning strategies, which they are subsequently able to adapt to the desired goals. This emphasis on the real is somewhat at odds with the prevailing programmes for the development of self-esteem, which often focus on highlighting the positive aspects of the personality and lead to illusory perceptions, which in practice causes disappointment. Proper self-perception, combined with a belief in the possibility of change, is a much better predictor of learning success than an overly optimistic self-regard. Mojca Jurišević (1999) introduces the concept of a healthy self-image, one's realistic image of their own self and oriented towards positive changes. Self-efficacy beliefs significantly affect the learning of instruments, especially the aspect of successful performance. This is because our beliefs guide our behaviour. The beliefs must be realistic, i.e. one must be aware of the level of their own ability and at the same time know the extent to which they can improve their performance by additional effort.

As a final aspect of motivational beliefs, I would like to touch on goal setting. We distinguish between excellence-oriented goals (intrinsic goals) and result-oriented goals (extrinsic goals). Excellence-oriented goals inspire a desire for continual progress and self-improvement, while result-oriented goals are usually characterized by a desire for approval, for external reward.

Research generally suggests that learning-oriented goals have better motivational as well as cognitive outcomes, while also having a better impact on overall performance (Ames, 1992; Pintrich & Schunk, 1996). Further, it has been demonstrated that when an individual does not possess internal goals for learning, the adoption of external goals also positively affects the self-regulation mechanisms during learning (Pintrich & Garcia, 1991).

2.1.6.4 Motivational Strategies

Among the motivational strategies Pintrich and Garcia (1994) include:

1. attribution of reasons to internal, unstable, controllable causes (effort, strategies)
2. setting short-term goals
3. rewarding success

The authors particularly stress the importance of attribution. Attributions play an important role in achieving performance success or experiencing failure (Weiner, 1986). It has become evident that the reasons for failure are more often attributed to the invested effort and strategies used than to internal capabilities. This means that if one attributes the cause of failure to insufficient effort or flawed strategies, these attributions are usually perceived as controllable, internal, and unstable, and can therefore change with the next task.

McPherson and McCormick (1999) studied the dimensions of motivation and self-regulated learning in the instrumental music practice. The results of their research revealed that students who report higher levels of cognitive strategy application during practice also report higher levels of intrinsic value for learning their instrument. Not only do such musicians practise more, but their practice is also more efficient. Siw Graabraek Nielsen (2008) explored performance goals, learning strategies, and instrumental performance of music students, as well as students' learning strategies when practising an instrument (Nielsen, 2011).

2.1.7 Practice

Practice is certainly one of the key mechanisms of self-regulation in learning an instrument/singing. It includes all three cognitive strategies of the self-regulation process, namely repetition, elaboration, and organization, but also the metacognitive strategies. It also includes motivational beliefs and strategies.

The practice of instrument/singing at home is crucial for the development and consolidation of skills that a student learns in their instrument/singing lessons. There is a broad terminology available to describe music practice: we can speak of deliberate practice with a focus on achieving specific goals, of formal and informal practice, and of structured and unstructured practice (Zhukov, 2009).

Deliberate, formal, and structured practice is used to master skills, which produces the achievement of performance goals, whereas unstructured practice is claimed to be ineffective in terms of expertise development (Barry & Hallam, 2002). Informal practice is an important contributor to maintaining internal motivation and enjoyment in music making (Zhukov, 2021).

Instrument practice is a psychomotor learning process. It consists of acquiring new kinds of movement and integrating the existing ones into new systems. The results of such learning are motor habits and skills. Psychomotor instrument learning is possible by trial and error, by imi-

tation of a model, and by understanding and insight. Learning by trial and error is about consolidating the correct movements and discarding the unnecessary ones. In learning by imitation, the learner is exposed to a model and the model's behaviour, so that the learner can adopt the model's behavioural patterns. The adoption depends on attention, ability, and other personality traits. Adoption is the final stage of learning by imitation and it requires proper motivation of the learner. Learning by understanding and insight can be described as making quick, sudden connections when faced with a challenging situation. Motor learning also benefits from the understanding of the relationships between movements, which is why it is sometimes introduced by short theoretical lessons.

The two most common strategies for learning an instrument are learning by trial and error and learning by imitation. Initially, the teacher uses the lessons to guide the learner to correct, efficient practice by their own example (learning by imitation). They "equip" the child with some basic practice strategies so that the child can more or less successfully apply them at home (learning by trial and error). The practice of a new piece starts with the cognitive strategy of repetition: an adequate mental image of the piece has to be formed and stored in memory. This is followed by a "rough practice", which helps us to commit to working memory the finger placement and information about the rhythmic, melodic, and harmonic progression of the piece. When we begin to establish relationships between parts of a piece during practice, repetition strategies connect to elaboration strategies. Elaboration in learning the piano also requires simultaneous playing with both hands, as we need to establish a relationship between the rhythmic and melodic elements in the right and left hand. An important aspect of elaboration is the identification of the main theme. This is where the organizational strategies come in. The main theme appears several times in a piece, either in the same form or as a variation. One of the organizational strategies is to mark the more difficult parts, which will require more practice. We begin to use metacognitive strategies when planning our practice. The student thinks about how much time to spend practising the instrument each day, what and how to practise each day (whether to play all the pieces each day or just one in detail each day), whether to practise individually or together, and whether to practise the technique of individual sections of the piece or whether they are ready to focus on consolidating the whole. While the student is practising, they are constantly monitoring their activity. In doing so, they need to be attentive (they use counting, a metronome) and sensitive to internal feedback. They need to employ regulation strategies if they notice inadequacies in their playing. This means that they mark

the critical part, slow down the practice if necessary, and practise the technical problem in various rhythmic patterns.

As we can see, cognitive and metacognitive strategies in instrument practice are strongly interrelated and sometimes overlap.

In music practice, we learn some skills that build on the foundation acquired through cultural influences. A child living in a certain culture acquires musical knowledge from their broader and immediate surroundings; they are able to memorize and learn certain songs, distinguish between different types of music, and orient themselves in a piece of music, using key and metre. Through practice, they complement the knowledge they have acquired from their social environment. They develop and consolidate certain skills and competences, such as playing an instrument, singing songs, and auditory analysis.

Anderson (1981; 1982, in Sloboda, 2005) has drawn on information-processing theory to examine the acquisition of some musical skills, arguing that we can see an analogy between information systems and thought processes. In his view, two important elements of practice are the automation of certain activities, with an emphasis on procedural knowledge, and the setting of goals.

2.1.71 Types of Practice

Practice can be roughly divided into physical and mental. Physical practice is a tangible activity, while mental practice is a symbolic or imaginative practice with no visible movement or sound. We can also distinguish between technical, expressive, memory, concentration, mental, and combined practice.

As already mentioned, it has been found that in technical practice both the quantity and the quality of practice matter. The strategies of technical practice vary: they include practising in parts, increasing tempo, lengthening of temporal fragments, tempo alternation, and practice of problematic parts of a piece (Gruson, 1988; McPherson, 2022a; 2022b; Wynn Parry, 2004).

Western culture believes that the technical element can be greatly improved through practice, while the expressive element is supposed to be innate. However, according to research, expressiveness can also be learned, as there exist some general rules (Meissner & Timmers, 2020; Sloboda, 2005). It is true, however, that some individuals are inherently more musically adept, with a greater capacity to convey the emotional messages of music, while, in contrast, some musicians are so psychomotorically adept

that the technical aspects of practice pose hardly any challenge to them. Those musicians who are generally more inclined to emotional responses when listening to music will be able to convey during performance the emotional message of music with greater ease and beauty.

When playing a piece by heart, it is very important to be able to play it in the mind. This means that one either visualizes the keyboard or the notation and is able to perform the entire piece in their mind. This requires a very high level of concentration on their part. It is characteristic of many successful musicians that they can imagine a piece so strongly in their minds that they can practise without actually using their instrument.

Mental motor skill practice refers to the imaginary practice of motor skills without the aid of any muscle movements. It is recommended particularly before beginning to play a piece, as it helps to establish an adequate mental image of it.

Of course, learning to perform music inevitably demands specific physical practice of the instrument. Once one has mastered the basic technical skills, they can begin some form of mental practice, given how beneficial it can be.

German piano teacher Leimer (1932–1972), who taught the famous pianist Gieseking, is often referred to as an advocate of mental practice. Leimer believed that a musician has to know the piece and its individual parts by heart before playing it on their instrument.

Some music educators emphasize cognitive training, others just the specific practice of the instrument, while still others advocate a combination of both. Most mental practice experiments in sport and mental preparation in other motor activities suggest that mental practice is better than no practice, but not as useful as physical practice (Gabrielsson, 2012). However, there has been little such research in music.

There exist some other common types of instrument/singing practice that bear mentioning. These are a vista practice (reading a cluster of notes seen for the first time), practice by heart, and improvisation practice.

2.1.7.1.1 Practice A Vista and the Notation Reading Ability

One of the important aspects of successful practice involves reading notation quickly and efficiently. Viewed from a developmental perspective, it also begs the question of the appropriate time to begin music literacy in the sense of notation. We shall therefore firstly address this and afterwards the ability to read a vista.

Contemporary research studies on when to introduce a learner to music notation confirm the insights advocated by Suzuki, Willems, and Kodaly, namely that it is better to have the child play by ear first, by imitation, and to introduce them to notation later (Mills & McPherson, 2006; Zhukov & Ginsborg, 2021). Early learning of musical notation can cause negative experiences, a lack of understanding of musical concepts, and a decrease in creativity and the ability to memorize music (Zhukov & Ginsborg, 2021). To develop musical notation reading fluency, the eyes, ears, and hands need to be coordinated. Yi Ting Tan et al. (2009) observed that beginners find many basic aspects of musical notation incomprehensible and even confusing. Bonnie S. Jacobi (2012) claims that it is important for children to hear the sound before reading it in form of notation. She suggests various activities that can precede the notation reading, such as singing simple melodies, recognizing high and low tones, using hands to show the melodic contour, and placing individual music-related pictures on the stand before using full notation. McPherson and Gabrielsson (2002) suggest that the students first begin to read the notation of the pieces which they already know by ear. Yi-Ting Kuo and Chuang (2013) developed a colour-based music notation system, where the 12 primary colours represent the 12 pitches, and various shapes are used for the duration of the notes. Colour notation is not new, it has been used in many countries since the 1970s, reaping benefits, including in the teaching of music to children with disabilities (Ruokonen et al., 2012).

Reading a vista involves a combination of reading and motor activity. A good a vista reader is a fast reader and good at translating the patterns read into motor activity. The first condition for a successful a vista reading is definitely the mastery of instrumental technique. This reading is more efficient if we know the piece or if it clearly conforms to a musical style, allowing us to anticipate the succession of musical patterns. It is also very important that the piece is printed clearly.

These facts were demonstrated in research conducted in the late 1930s (Gabrielsson, 2012). To conduct research, Bean (1938) used short tachistoscopic presentations of music which had to be performed afterwards. Professional musicians performed the presented samples most successfully. They managed to perform an average of five notes.

Introspective accounts of good a vista readers indicate that they use a pattern-reading strategy (note grouping) in their reading, and often guess the next steps. Good a vista reading requires rapid eye-hand interaction and a good tactile sense of the instrument. If a performer can

watch the instrument, they make more mistakes. This is particularly noticeable among less proficient readers (Banton, 1995).

Wolf (1976) has found that in a vista reading, expectation prevails over perception. He proved this with an experiment where experienced and less experienced a vista readers were asked to play a piece containing intentionally printed mistakes. Experienced readers did not play the mistakes, because they followed the expectation, while less experienced readers, who were more subject to mere observation, did. McPherson (1994) has found that in younger instrumentalists, mistakes in reading a vista are most often rhythmical. He has reported that competent readers look for essential information (tonality, metre and rhythm, phrasing) by “scanning” musical sections in a piece and by mentally rehearsing the problematic parts before the performance. During the performance itself, they intensely focus on anticipating any difficulties and observing the musical features above and below the melodic line. He also observed a positive correlation between the ability to play by heart and reading a vista.

The ability to read and perform a new piece of music accurately and at a reasonable tempo requires rapid processing of musical notation and an automatic motor response (Jabusch et al., 2009). The latter enables faster learning of repertoire and performance of pieces of greater complexity, and is an important skill for professional musicians. While research in this area has mainly focused on the study of the eye movements in notation reading and on the perceptual, auditory, and memorization skills as predictors of notation reading expertise, instrument/singing teachers and their students are more interested in the answer to the question of how to learn to read notation more efficiently in the music education process (Zhukov & Ginsborg, 2021). It has also been found that regular notation reading practice alone does not lead to an improvement of such abilities. Instead, the issue needs to be addressed in a more deliberate and systematic way (Zhukov, 2017).

Jennifer Mishra (2016) conducted a systematic review of research in notation reading and concluded that counting and rhythmic exercises lead to rhythmic precision and that collaborative playing fosters intonational precision in notation reading.

Katie Zhukov and Jane Ginsborg (2021) list the following strategies to improve notation reading:

1. introducing duet playing as a regular fun activity during lessons
2. introduction of efficient notation reading strategies to students before reading a new piece (e.g. reviewing the whole piece with special attention to difficult parts, understanding the key and time signa-

- tures, focusing on linear movement instead of reading note by note, simultaneous clapping the rhythm and singing the melody)
- 3. expressive playing at the right tempo
- 4. building the students' confidence in their a vista reading skills by using simple notations and gradually increasing the difficulty

2.1.71.2 *Improvisation Practice*

Improvisation is a complex musical activity involving various processes that take place in a performance simultaneously in real time. Improvisation is possible when one internalizes the musical vocabulary and is able to understand and express musical ideas spontaneously during the musical performance. The basic form of this kind of creative ability is thought to be present in all people from an early age (Burnard, 2012). However, it should be acknowledged that, despite its free nature, improvisation is subject to historical and cultural influences, with the underlying intention of transforming traditional elements by adding new ones (Ramshaw, 2010).

The fact that the ability to improvise is a natural and spontaneous human activity, representing the beginnings of musical expression, is evidenced by very young children who playfully and joyfully improvise with their voices as early as at the age of two or three (Pucihar, 2016). The skills that enable us to improvise are often understood as a continuum, yet, it is difficult to discern the achievement of the expert level of improvisation (Biasutti, 2015).

Beaty (2015) states that in improvisation, a musician faces the unique challenges of managing multiple simultaneous processes in real time, such as generating and evaluating melodic and rhythmic sequences, coordinating performance with other musicians in the ensemble, and making elaborate fine motor movements to create aesthetically pleasing music. Many improvisers point out that it is essential for a musician to hear in advance from within them what a piece will sound like before laying the instrument (Odena, 2012). In addition to the internal hearing, improvising requires the development of the ability to internalize the music in the short time of the actual performance of the improvisation, sufficient knowledge of the analysis of musical structures, the ability to control the instrument/voice to achieve the performance intention with fluency and persuasiveness, sufficient knowledge of the improvisation forming strategies and, if necessary, of their modification, and the ability to transform the stylistic conventions into an authentic musical expression (Kratus, 1995, in Pucihar, 2016).

Unfortunately, improvisation is seldom included in music education (Bačlija Sušić et al., 2019; Korošec et al., 2022), with the exception of jazz (Biasutti, 2017). In the 19th century, improvisation was marginalized in formal music education in favour of playing by notation (Sarath, 2013).

Certain skills, such as playing by ear or making music, are still neglected today, as music education guidelines demand clear and measurable outcomes that correspond to a materialistic mental orientation. The product of improvisation cannot be determined in advance and it is therefore difficult to prove the impact of its learning (Higgins & Mantie, 2013; Sarath, 2013). And although there are some trends of re-introduction of improvisation in the curriculum, it is rarely taught in practice, especially in classical music (Biasutti, 2017).

Improvisation enables the achievement of the optimal performance state, namely flow (Biasutti & Frezza, 2009; Biasutti, 2015). It also helps to develop diverse musical skills such as expression and communication, audition and playing by ear (Higgins & Mantie, 2013), it promotes divergent thinking and improves musical performance (Menard, 2013), it increases musical awareness (Kratus, 1991), and often contributes to higher self-confidence and motivation to persevere in musical activity (Gruenhagen, 2017). Similarly, improvisation increases the trust between musicians improvising together (Hart et al., 2014; Monk, 2013), serves as a means of expressing a musician's identity (Smilde, 2016), and facilitates self-actualization in musicians (MacDonald et al., 2006).

In accordance with these transferential benefits of musical improvisation, many researchers highlight the role of improvisation as a process enabling students to be more reflexive about their own musical actions (Biasutti, 2017) and guiding them towards the value of exploring new musical expressions, thus freeing them from the established boundaries of right and wrong (Higgins & Mantie, 2013).

Improvisation skills also have a strong bearing on musical performance success: the listed positive effects shape the performer's positive self-image and offer the performer the pleasure of spontaneous musical (co)creation. Improvisation as a form of practice should therefore be included in the music education system from the very beginning of the learning of an instrument/singing, and it should be encouraged at all levels of music education.

2.1.71.3 *Practicing Playing by Ear and Playing by Heart*

Playing by ear, based on the capacity to “think in sound” and combining eye, ear, and hand coordination, is common in many musically gifted

children (McPherson, 2005). It is unfortunate that, unlike in the educational contexts of jazz and ethno music, playing by ear is sidelined as soon as a child learns musical notation, particularly given the research findings which highlight its great importance at various stages of education and in a number of instruments (Green, 2012; Zhukov & Ginsborg, 2021). Learning by heart is believed to help students learn more and at the same time enable them to include more improvisation. Students are also reported to have found such learning more enjoyable (Green, 2012).

Playing by heart has a long history in Western classical music, but there is low agreement among musicians as to the functioning of the memory with respect to musical performance, and the manner of achieving reliability of such memory (Aiello & Williamon, 2002). Many musicians believe that musical memory varies so much from person to person that it is best for each musician to devise their own memorization methods (Ginsborg, 2002).

One of the most common memory training techniques is to repeat a piece from beginning to end without stopping (Lisboa, 2008; Renwick & McPherson, 2000). Each passage reminds the musician of the upcoming passage in the sense of an associative chain. The latter develop quickly and spontaneously and are extremely accurate (Rubin, 2006). The key drawback of this memorization strategy is that we are only successful in recall if we start playing from the beginning. If a memory block occurs, one has to start playing from the beginning (Chaffin et al., 2009).

Experienced performers rarely stop and start over. They are aware that memory slips are an inevitable part of live performance, so they create a mental map of the piece that enables them to find their way even if a memory slip occurs. This musical map contains points where the performer can continue playing if a mistake occurs (Chaffin et al., 2002). In such cases, the audience often does not even realize that the performer has made a mistake. Access to the necessary musical content is granted by performance cues built into a hierarchical organization based on the musical structure (Chaffin et al., 2002). The cues represent all the thoughts of the performer during the performance, e.g. “with feeling”, “songful”, “softer”, or “repeat the note”. These content cues form a mental map of the music that allows the performer to monitor the performance. Performance cues are deliberately and systematically formed by repeated thinking about certain musical characteristics during practice, and thus eventually become mental automatisms directing the musician’s attention and enabling a conscious guidance of movements which would otherwise be automatic. Content memorizing is significantly more

time-intensive than chain association memorizing (Ericsson & Kintsch, 1995), although it is very effective (Lisboa et al., 2015).

Memorization frees the performer from the constraints of the musical score and enables them to cope more easily with the possible downsides of the pre-performance pressure. It has been found that there are no differences in the effectiveness of mnemonic strategies between amateur and professional musicians. Differences have been found in the use of metacognitive strategies and strategic approaches to task implementation in terms of the formulation of mental structures, which were better in expert musicians (Ginsborg, 2002; Williamon & Valentine, 2002). These findings underline the importance of planning and adopting conscious strategic approaches to memorization in order to improve the quality of musical performance. It is interesting that during the educational process itself, attention is rarely given to developing metacognitive strategies for better memorization (Concina, 2019), although effective musical memorization techniques can be learned (Lisboa et al., 2015). One of these techniques is to monitor one's own thoughts during the process of memorizing musical material, and writing these thoughts down in musical notation (Concina, 2019). This should be done in three successive phases (memorizing, building the interpretation, polishing). Memorizing is a complex task that requires constant monitoring to ensure a successful outcome in terms of effective recall of the memorized material.

Performing by heart often produces a greater internal satisfaction in the performer and thereby increases the feelings of inner success, as it liberates the performer of notation and consequently allows them more room for authentic expression.

2.1.71.4 *Mental Practice*

In the past, mental practice was often referred to as *visualization*. However, since it is about mental imagery of performance at various levels of perception (visual, auditory and kinaesthetic), the contemporary literature employs the term mental imagery. Mental practice in the case of musicians therefore primarily involves the development of motor, kinaesthetic, and auditory imagery to improve performance, e.g. through memorization (Bernardi et al., 2013) and developing technical excellence in performance (Clark & Williamon, 2012). Mental imagery, as a form of performer's mental practice, is an effective means of monitoring a situation. Images, like real events, evoke emotions and can influence decisions and behaviour (Zatorre & Halpern, 2005). Moreover, the imagined movement activates the same cerebral cortex areas and neu-

ral pathways linked to the corresponding effectors (muscles) as does the actual performance (Lotze & Halsband, 2006). These pieces of information provide the basis for the use of visualization technique for both performance planning and for supporting mental practice in the practice of physical instruments (Bernardi et al., 2013; Clark & Williamon, 2011; Smith & Williams, 1997; Wright & Smith, 2009). Fine et al. (2015) have found in their research that musicians conceptualize mental practice as practice away from the instrument, involving multiple types of imagery, often in real time, and as focusing on performance preparation, particularly the aspects of performance delivery and physical implementation.

The detailed conditions for successful visualization are determined by the PETTTLEP model, developed by sport psychologists (Holmes & Collins, 2001). In order to bring the imaginary situation closer to the real situation, it is advisable to picture the following: the physical sensations associated with playing a given instrument in a given venue (Physical experience), the characteristics of the particular hall (Environment), the performance of a particular piece of music (Task) in time (Timing) at the level of one's current abilities (Learning); the emotions that the practising person actually feels in such situation, or, e.g., those that they would like to feel in this situation (Emotions). Viewing the performance in terms of the audience's needs and expectations helps the performer to reduce their fear of making mistakes and to more easily open up emotionally and connect with the audience (Perspective). A meta-analysis of the results of 129 studies of practical visualization exercises based on the PETTTLEP model found that the training effectiveness was above 90% (Schuster et al., 2011). In addition, repeated imagination-based training regarding extreme situations (imagining performance mistakes, imagining catastrophic performance scenarios) helps to strengthen the sense of control over events by increasing tolerance to uncertainty and by learning to be creative in dealing with problems in a public performance setting (Clark et al., 2011; Gregg et al., 2008; Wright et al., 2014).

2.1.7.2 Quantity of Practice

Ericsson et al. (1993) conducted a study on the role of practice in musicians' achievement of peak performance. They found that in all groups, the learning began around the age of eight, that the amount of cumulative practice was the highest (7,400 hours) among the top and professional pianists, followed by the good pianists (5,300 hours), and the teachers (3,400 hours). The weekly average of practice of the musicians in the best group and of those in the good group was three times higher than that of the teachers. A comparison was also drawn between professionals and amateurs, which

found that the formers' amount of cumulative practice reached 7,600 hours by the time they reached the age of 18, while the latter's amount of cumulative practice reached 1,600 hours in that time. In addition, the research has also revealed that top musicians also invest more time in informal practice (musical notation practice arising from their internal motivation (interest, satisfaction)) (Ericsson et al., 1993, in Sloboda, 2005).

The most important predictors of the level of musical expertise achieved are the amount of time spent learning an instrument/singing and the amount of practice (Hallam, 2013). Parents have a major impact on primary music school learners' practice, reminding their children to practise (65%) and helping them practise (47%), thereby motivating them (Davidson et al., 1996; Hallam, 2013).

Dedicated practice is estimated to explain only 30% of the variance in performance ability, with 70% explained by other factors (Hambrick et al., 2014). Similar trends were confirmed in a study by Arielle Bonnevill-Roussy and Thérèse Bouffard (2015), where formal practice explained only 18% of musical achievement in students of music. Factors that emerged as more important predictors of musical achievement were self-image, perfectionism, and performance anxiety, as well as parental and teacher influences.

2.1.7.3 Quality of Practice

Whereas music practice research first focused on the amount of practice time needed to develop musical expertise, the research later shifted its focus to the quality of the practice. A number of studies have demonstrated that the quality of practice is a more important predictor of musical performance success than the duration of practice (Zhukov, 2021). Austin and Margaret Haefner Berg (2006) have found that motivation to practise also depends on the pleasantness and calmness of the practice environment. Furthermore, Duke et al. (2009) have confirmed that performance quality is more dependent on the practice strategies than on the scope and duration of the practice. Research on practice strategies suggest that most learners in primary music school employ very basic practice strategies (Austin and Berg, 2006; Hallam, 2013; Leon-Guerrero, 2008; Miksza, 2012). These findings reveal a relatively low level of self-regulation in primary music school learners (to approximately 14 or 15 years of age). Curiously, it appears that neither university students approach practice as strategically as they could (Miksza and Tan, 2015): their prevailing strategies remain playing slowly, gradually increasing the tempo, and practising in parts. Siw Graabraek Nielsen (2008) found

that there is a weak relationship between students' music performance goals and their practice strategies, which led her to conclude that students should improve their practice strategies in order to achieve their performance goals. Kim Mieder and Jennifer A. Bugos (2017) designed a university-level self-regulation programme where students were taught strategies for successful self-regulation (e.g. efficient warm-up, breathing exercises, goal-setting, peer collaboration, verbal meditation, group discussion, reflection, practice, and performance) for two weeks. These training approaches were also encouraged in individual instrument/singing lessons. A significant improvement in students' practice self-regulation has been reported, resulting in improved musical performance (Mieder and Bugos, 2017).

2.1.8 Social Factors Influencing Musical Performance Success

Social influence is an extremely important factor in the success of a musical performance and can be direct or indirect. Social factors (teachers, parents, peers) in the music education process, which can contribute to musical success, have an indirect influence, while the presence of the audience at a musical performance has a direct influence.

Social influence can be centred around the influence of social support (Hallam et al., 2016; Lehmann & Kristensen, 2014), which some authors refer to as “persons in the shadow” (Gruber et al., 2008). Types of support can be informative, instrumental, evaluative, or emotional (Nogaj & Ossowski, 2015; Sęk & Brzezińska, 2008). Informative support includes information exchange, guidance, and counselling to help one better understand the situation, as well as feedback on the effectiveness of the strategies one has used to cope with the situation. Instrumental support is concrete, constructive advice aimed at solving a problem. Evaluative support is a transfer of information which evaluate the employed capacities or strategies. Emotional support, which is the most important, refers to the expression of love, care, trust, and empathy in stressful situations.

Parents, teachers, and peers are the most important social factors influencing academic success (Lehmann & Kristensen, 2014; Nogaj & Ossowski, 2015; Sichivitsa, 2007).

2.1.8.1 Parents

Parents generally have the greatest influence on the nature and form of their child's achievements (Baumrind, 1989; Csikszentmihalyi et al.,

1993, in Hargreaves, 2009). A stable and structured family life contributes to sustaining and motivating learning activities. Some evidence suggests that top performers have parents who were present at instrument lessons and encouraged practice (Howe & Sloboda 1991a; 1991b; Manurzewska 1986; Sloboda & Howe 1991; Sosniak 1985; 1990; in Hargreaves 2009). Parent-child interaction has been identified as one of the most important factors of fostering intellectual development, provided this interaction was non-threatening to the child's self-confidence (Bruner, 1973, in Davidson, 2011).

Lehmann (1997, in Hargreaves, 2009) has performed an interesting bibliographical analysis of the top pianists in music history. He has found that 13 out of 14 pianists, including Handel, Bach, Mozart, Beethoven, Mendelssohn, Chopin, Liszt, and Debussy, received regular practice supervision from their parents. At certain points in their lives, 12 of them lived in the same house as their teachers, who assumed a quasi-parental role.

Jane W. Davidson et al. (1996) has found that the most successful children have parents who are highly involved in their learning activity. After each lesson, these parents wanted the teacher's feedback on their child's progress or even wanted to be present during the lessons. They were thus involved in the instrument learning process until their child reached the age of 12. Father and mother moderately encouraged the child to practise, usually with verbal reminders. They were not directly involved in the actual practice, but only asked the child about the practice or offered some advice. Although the top musicians' parents were closely involved in their child's musical activity, they were not performers themselves, but only engaged in music listening. As their children began to learn the instrument, the time they devoted to music increased.

Bastian (1989) conducted interviews to determine the family background of 62 winners of a German music competition (aged 14–22). The interviews revealed that the families' musical backgrounds differed, that the parents had university education, that at least one instrument was available at home, that most parents assumed an active role in supervising and encouraging their child's development, and that parents were willing to make sacrifices in terms of finances, time and lifestyle to support their child's ambitions. In addition to motivation, Sloboda (1994) also refers to the family environment as the most important factor influencing one's musical development.

Parents serve the most important function in a child's journey towards musical success (Jeppsson & Lindgren, 2018) by providing emo-

tional support, which is an integral building block of a child's musical self-image (Sichivitsa, 2007).

Creech (2009) lists three types of social support from parents: behavioural support, cognitive-intellectual support, and personal support. Behavioural support is a type of support involving the practice of an instrument together with one's child, transporting one's child to instrument lessons, attending their concerts, paying for summer seminars, etc. Cognitive-intellectual support consists of planning various musical activities to help a young person develop their musical abilities (e.g. attending concerts, listening to recordings, participating in informal musical activities). Personal support is a form of support which encourages a child to shape their musical expectations and goals.

Results of a recent study (Orejudo et al., 2020) demonstrate that students of music receive a significant amount of social support in their musical pursuits, although there appear to be differences in terms of age, gender, and level of education.

2.1.8.2 Teachers

The role of teachers in the development of children's musical abilities has been the subject of much research. The focus has been on the effect of teacher expectations on student achievement, with findings suggesting a strong correlation between low achievement and low teacher expectations (Blatchford et al., 1989, Hargreaves, 2009, in Rosenthal and Jacobson, 1968,). The majority of these research efforts have been conducted in classroom settings, where the teacher has interacted with many students. Such settings differ from those that musical instruments are learnt in, which usually involve the teacher interacting with just one pupil or with a small group (up to six pupils), presenting a specific social setting.

Only a limited amount of research on music education has focused on the role or importance of the child's first teacher of instrument. Bastian (1989) reports that young top performers remember their first teacher as relaxed, friendly, and understanding. Some research (e.g. Howe & Sloboda, 1991b; Sosniak, 1985, in Hargreaves, 2009) indicates that first teachers have an extremely important influence on the development of musical skills and, particularly, on the growth of interest in a particular instrument. For if a child has a good personal relationship with their teacher, they will be more committed to learning the instrument. According to Lauren A. Sosniak (1985, in Deutsch, 2012), it is important that the teacher takes a playful approach to teaching in the first stage of a child's learning of an instrument (up to the age of 10) and assum-

ing mainly the role of a motivator; in the second stage (ages 10–13), the teacher should assume the role of a technical and interpretive expert; and in the third stage, a first-rate teacher becomes a role model, helping the learner to form a musical identity. Many authors have reported on the importance of the teacher's role in pupils' musical performance (Harris, 2017; 2021; Kavčič Pucihar, 2019; Pucihar, 2016; Rotar Pance, 2006).

Jane W. Davidson et al. (1998, in Hargreaves, 2009) examined four specific areas related to the first teacher and the current teacher: a child's perception of the teacher's characteristics; the role of gender in the perception of the teacher's characteristics; the frequency and reasons for transitioning to another teacher; and the relationship between individual and group lessons. According to the research, the pupils who received individual lessons were more successful, and significant differences regarding the perception of the teacher existed between groups of pupils. Successful students perceived their first teacher as friendly, relaxed, talkative, and encouraging. It is also interesting that the specified attributes were even more noticeable in the current teacher. It was observed that children used more adjectives related to "personality traits" when describing their first teachers, and more adjectives referring to "professional traits" (e.g. good teacher, good performer) when describing a current or recent teacher. We can therefore conclude that the first phase of a child's learning of an instrument is mainly influenced by the personal traits of the teacher, whereas later it is the professional traits that become more influential. MacDonald (1992, in Hargreaves, 2009) also reached similar conclusions: successful young musicians at the initial stage of learning an instrument form a "family-like" relationship with their teacher. Such relationship is characterized by warmth, intimacy, and affection. At a higher learning stage, the professional qualities of the teacher become more important to the young musician.

The teacher's competence is perhaps the most important item in defining the teacher-student relationship (Gardner, 1983; Hargreaves, 1997; Stefani, 1987; in Davidson, 2011). Competence is a multidimensional concept that can be addressed in terms of skills and prowess or in terms of how competence is attributed to another person, how competence is achieved through imitation and learning by modelling, and how competence is valued and experienced in a specific context. Taebel and Joan G. Coker (1980) investigated the relationship linking teacher competence to student achievement and behaviour. They concluded that a competent teacher connects the learning objectives with the interests and needs of the student, that the student is the instigator of the ver-

bal interaction with the teacher, and that under a competent teacher, the student correctly answers the teacher's independent questions. The first stated characteristic of a competent teacher, namely connecting learning objectives with the interests and needs of the students, was found to have a significant positive correlation with student achievement. In recent years, however, the importance of the core qualities or personal virtues of teachers has become even more emphasized than the importance of their competence (Habe, 2017).

Kohut (1992) states that teaching is an art. A good teacher boosts the student's interest in learning and strives to improve the student's understanding of explanations. In continuation we list some of the characteristics of a good teacher.

1. Good communication skills, both personal and professional. Communication between the teacher and the student unfolds on two levels: the first level concerns the communication regarding skills and musical concepts, the second is personal. The highest level of communication comprises understanding, compassion, and the teacher's utmost affection for the pupil.
2. The teacher sets a positive personal example: a student learns a lot from what they are told by the teacher, but even more from what they see. If the teacher gains the student's trust and respect, the student will even try to imitate the teacher in speech, dress, behaviour, and perhaps even values. They imitate the teacher by unconscious osmosis. This is particularly noticeable in younger students.
3. A good teacher is a superior model of a music performer. The first and most important step in learning to perform music is to produce a good musical image. So, if we want the student to have a superior musical image, the presentation model, the teacher, also needs to be superior. A teacher cannot be an adequate model for performance if the teacher is not themselves an accomplished musician and performer.
4. The student is taught to self-regulate: here the teacher has an extremely important task of teaching the student strategies for home practice, the latter being the most extensive part of learning an instrument.
5. A good teacher is the principal motivator: in the first stage of learning an instrument, the teacher's ability to encourage the child to practise regularly at home is crucial, as home practice is the first requirement for musical progress. They often use verbal praise as a tool of motivation, they write the praise in the child's practice note-

book, and they use pictorial symbols to mark the child's achievement in the lesson.

The teacher's task is to create suitable teaching conditions so that the child's musical abilities can be optimally developed. As musical performance is primarily a non-verbal form of artistic expression, the core of the teaching should also be directed towards the non-verbal aspect, with an emphasis on the development of the right-brain hemisphere skills (synthetic thinking). This means that we should be relying on superior musical presentation rather than on the verbal concepts associated with the left-brain hemisphere (analytical thinking) (Kohut, 1992).

Teachers generally tend to use verbal and cognitively oriented methods. Teaching requires a set of general teaching principles, not rigid rules and formulas. Functional processes for diagnosing and solving problems are also needed. The imitation method, which is grounded in non-verbal communication and in this sense complies with the principles of the sensorimotor learning, corresponds to such rules. Learning by imitation is probably the most effective method to teach an instrument (Kohut, 1992). The only problem is that many teachers reject such teaching because they do not consider it professional enough. Trial and error learning is also effective in learning an instrument, but many teachers are negatively disposed towards this method, too. Suzuki (1969, in Kohut, 1992) stresses the importance of following the principles of natural learning in teaching an instrument, such principles reflecting a spontaneous process of receiving information from the environment, and encompassing the creation of mental imagery, imitation, learning by trial and error, while also including bodily feedback as a means of noticing and correcting mistakes. He developed his own teaching method according to these principles, and it has proved to be extremely useful.

2.2 Direct Factors of Musical Performance Success

In the previous chapters, we have focused on the indirect factors conducive to musical performance success and used the sections on self-regulation and social influences to slowly build a bridge to the direct influences that await us in continuation. We now move to the area covering everything explicitly related to the question of what it is that directly influences musical performance success at a given moment in time. We will begin by focusing on the factors outside the performer—the influence of the audience—and their impact on musical performance success. We will then divide the direct factors into three major groups relating to the performing musician:

- factors of physical self-regulation
- factors of emotional self-regulation
- factors of mental self-regulation

In the context of physical regulation factors, we will examine the regulation of the physiological excitement that occurs before walking on stage. Emotional regulation will address the most common among the musicians' challenges, performance anxiety. Mental regulation will centre on attention, concentration, and mindfulness. All these factors relate to an optimal performance state, which we will examine towards the end of the chapter.

2.2.1 Audience

The influence of the presence of others on one's behaviour is a classic topic in social psychology, which was most broadly researched in the early 20th century (Dashiell, 1935). For over a century, many researchers have devoted their efforts to studying how the presence of others influences individual performance (Triplett, 1898).

The presence of others arouses competition and social comparison, evaluative judgements, friendly encouragement, distraction, a sense of responsibility, and increased arousal (Geen, 1979; Latané et al., 1979, in Butler & Baumeister, 1998). It is particularly the self-presentational motivation which encourages the performer to strive to make a favourable impression on the people present at the performance (Baumeister, 1982).

The origins of research on social facilitation and inhibition date back to the last years of the 19th century, when Triplett (1898) found that the presence of others during one's individual performance results in better performance. However, if several individuals perform the same activity as a group, the effect is reversed; individuals put less effort and energy into the activity because they rely on others (Ringellman, 1913, in Sanna, 1992). The mentioned experiments constitute the two fundamental social psychology studies on group performance. Early research thus shows that the presence of others can either improve or worsen performance. A more contemporary interest in social facilitation was stimulated by Zajonc (1965) with his motivational theory of social facilitation. According to him, the presence of others, e.g. the audience or fellow-performers, should arouse in a performer a generalized drive that increases the occurrence of the dominant response. When dominant responses are correct, as in simple or well-learned tasks, performance in the presence of others will be further improved, as found in

Triplet's study (1898). In contrast, when dominant responses are incorrect, as in difficult or poorly learnt tasks, performance in the presence of an audience will be inferior. Zajonc (1965) established two conclusions from a review of research on social facilitation: the presence of others hinders the learning of new responses and facilitates the performance of well-learned responses, in both cases reinforcing the dominant response. Cottrell (1972, in Bond, 1982), in deviation from Zajonc's motivational explanation of social facilitation, drew on the observation that the presence of social facilitation depends on one's self-presentation. Self-presentation is the process of achieving a desired identity through public performance (Schlenker, 1982). As the importance of performance increases, so do the concerns regarding self-presentation (Schlenker & Leary, 1982). Social facilitation only occurs when there is a congruence between the perception of the difficulty of the task to be performed and the perception of one's own competence to perform that task. Maintaining self-confidence therefore boosts performance facilitation, while losing self-confidence disrupts the performance. This observation has also been confirmed by Goffman in his research (1958; 1967, in Bond, 1982); in the presence of others, one tries to behave in a way corresponding to one's public self-image. When appearing in front of an audience, one wants to portray one's own ideal self-image. This acceptable self-image has a normative character and compels them to behave in accordance with the corresponding social role. In his research, Bond (1982) found that the presence of an audience interferes with the learning of simple problems in a complex task and does not interfere with the learning of complex problems in a simple task, which is in line with the theory of self-presentation analysis.

Audiences vary. The significance lies primarily in the valence of the behaviour an audience displays towards a performer. Thus, we can distinguish between an audience that wants the performer to succeed, encourages the performer, and lets the performer know that their success will be appreciated and rewarded (supportive audience) and an audience that is not favourably inclined towards the performer (unsupportive audience).

A supportive audience reduces the threat and distress associated with the evaluative structure of public performance. Performers tend to worry that if they perform suboptimally they would make a poor impression on a foreign, unfamiliar audience. On the other hand, they are confident of retaining their friends' and relatives' favourable opinion of them, even if they make a mistake. If a supportive audience genuinely inspires feelings of efficacy and self-worth in the performer (Butler &

Baumeister, 1998), these factors can contribute to a better performance. A supportive audience reduces the pressure in the performer to prove themselves, which in turn leads to a more successful performance. Conversely, several reasons indicate that the presence of a supportive audience may have a negative effect on the performance. Indeed, people who are positively disposed towards us can often provide help which only temporarily alleviates the consequences of stress, which does not help us to improve our coping with stressful events (Butler & Baumeister, 1998). Those who try to help us may misjudge the situation and provide an ineffective type of support that further aggravates the situation for us (Cutrona, 1996, in Butler & Baumeister, 1998). A supportive audience usually sets high expectations for a familiar performer, and can thus make the performer feel that the situation is more challenging than originally estimated (Tesser et al., 1989). The burden of the audience's expectations can generate pressure that will negatively affect the performance, especially if the performer's individual expectations do not match those of the audience (Baumeister et al., 1985). The pressure to meet the high expectations of a sympathetic audience elicits in the performer physiological changes which indicate the performer's anxiety about managing the situation and their ability to do so successfully (Allen et al., 1991). High expectations and demands can translate into unexpectedly weak performances if the performer cannot cope with the pressure. Demanding performances can cause a particular vulnerability to the negative effects of pressure, as they require automated activity from the performer.

Pressured to perform well, they turn their attention to the performance in order to achieve success (Baumeister, 1984). Self-awareness can be a major mediator of performance failure in complex tasks (Lewis & Linder, 1997). And musical performance is exceptionally demanding and requires extraordinary psychophysical fitness. A successful musical performance requires the performer to focus only on the physically and mentally harmonious experiencing of the music during the performance, while their psychomotor skills relating to the technical demands of the piece need to be so automated as to allow them to focus their attention on the music (Kohut, 1992). A supportive audience increases the performer's sense of self-awareness. Those in the performer's favour are likely to be more attentive to the performance than others (Tesser et al., 1989, in Butler & Baumeister, 1998), which can make the performer feel intensely scrutinized. An unsupportive audience is less attentive to the performance.

Jennifer Butler and Baumeister (1998) have reached four main conclusions in their research on the impact of a supportive audience on musical performance.

(1) In a difficult task requiring a high level of skill, performers were less successful in the presence of a supportive audience than in the presence of a non-supportive audience. (2) When the benchmark for success was low, the presence of a supportive audience had no effect. (3) In cases of high criterion for success, the presence of a supportive audience aroused caution and defensive strategies, which resulted in poorer performance: the performer slowed down the performance but without a reduction in the number of mistakes. (4) Although the presence of a supportive audience objectively caused less successful performances, performers reported that such a presence helps their performance and reduces their stress in comparison to the presence of a neutral or unsupportive, even hostile, audience. The results obtained alert us to an interesting phenomenon, namely, that people are not aware of the negative effects of a supportive audience and strive more for emotional comfort than objective success.

Many theoretical explanations have been developed regarding the effects of social facilitation (Geen, 1979, in Sanna, 1992). Although traditional social facilitation research focused on task difficulty as a key moderating variable, some more recent studies report that task difficulty influences the performance through the performer's expectations regarding their own efficacy. For example, Geen (1979) has documented that performers who had previously received negative feedback were less successful at performing in front of an audience than those who had previously received positive feedback. These findings align with Bandura's theory of self-efficacy (1989), which states that one's motivation is determined by two sets of interrelated expectations: self-efficacy expectations, which focus on one's belief in their ability to accomplish something, and outcome expectations, which focus on one's belief that an activity will yield the desired results. Bond (1982) added to these observations that the performer of a simple activity expects a successful performance, and that this performance is further motivated by the presence of an audience. Yet, the performer of a challenging activity will develop expectations of a poorer performance, which will be further weakened in the presence of the audience. Even if a person is confident that they are able to implement a required activity, this does not mean that it will yield the expected results.

We have previously discussed how one's own expectations affect their performance. Now let's examine how the expectations of others affect performance. As stated in the preceding section, a supportive audience has significant expectations of its cherished performer. This often creates pressure which adds to the performer's existing burdens.

Let's first review the positive side of the audience's high expectations regarding performance success. Feather's research (1969) confirms the existence of a positive correlation between prior performance expectations and actual results. Bandura (1977) claims that the expectation of success is conducive to self-attribution of competence and of increased motivation to succeed. Interacting with those who expect success can facilitate performance. Rosenthal and Lenore Jacobson (1968, in Baumeister et al., 1985) have demonstrated improvements in students' intellectual performance when their teachers were confident of their success.

The expectation of success can also have a negative impact on performance. Zanna et al. (1975, in Baumeister, et al., 1985) wanted to repeat the research conducted by Rosenthal and Lenore Jacobson and also include the consideration of the students' expectations. The results indicate that performance did not improve when both the teacher and the student expected success, and was in fact worse than when the teacher alone or the student alone expected success. Swann and Snyder (1980, in Baumeister et al., 1985) have found through their research that performance was worse if the teacher believed that the students were highly capable and that performance success depended on capability. It is likely that they perceived the teacher's expectations of them and could not perform successfully under such pressure.

Numerous research results indicate that the expectancy effect depends on whether it originates from the performer or from the audience (Baumeister et al., 1979; House & Perney, 1974; Seta & Hassan, 1980; Swann & Ely, 1984; in Baumeister et al., 1985). However, the argument that external, public expectations produce outcomes that differ from private expectations contradicts the previously mentioned findings that state the external expectations have a self-fulfilling effect by producing internal ones. Baumeister et al. (1985) found that personal expectations of success improve performance, while audience expectations worsen it. The results were most clear for the people with low self-confidence and for men. The research also revealed that the audience's expectations improved the performance if they were convincing enough for the performer to start expecting success.

Audience presence also exerts a strong positive or negative influence on the success of a musical performance. Performers usually hold negative beliefs about the impact of the presence of an audience (Salmon & Meyer, 1998). The root of performance anxiety, which has the greatest impact on music performance success, lies in this social component, in

the fear of being evaluated by an audience. The presence of an audience and fellow performers can dramatically increase the heart rate, cause excessive sweating, breathing disturbances, tremors, destructive, and catastrophic thoughts. The demands or expectations of others—parents, teachers, friends, critics, audiences—and, on the other hand, the demands of each individual, which become internalized over time, are a frequent source of tension and feelings of inadequacy. Louise Montello (1992) found that the “inner critic” stems from harsh parental, teacher, or peer judgements and that it is one of the most frequently identified components of performance anxiety. Performance anxiety is at its highest when playing in front of peers or critics, and higher when playing solo compared to when playing in a group (Brotons, 1994; Fishbein et al., 1988). The level of the performer’s excitement depends on the size and status of the audience. In contrast, a number of fellow performers reduces anxiety (Jackson & Latané, 1981)

Facilitation effects of audience presence are often overlooked. The audience and co-performers can help a performer reach the optimal level of excitement. Indeed, the illustrious tenor Caruso himself commented that he could not reach an adequate level of excitement to properly sing the high c without an audience.

2.2.2 Physical Symptoms

Before walking on stage, most musicians, beginners and experts alike, experience certain physical symptoms such as stomach and muscle tension, hand tremor, rapid heartbeat, and shallow breathing (Kenny, 2011). These can be accompanied by additional symptoms like dry mouth, flushing of the face and neck, sweating of the hands, more frequent need to urinate, dizziness, etc. (Brugués, 2018). The performer’s body spontaneously adapts to the performance demands. Physiologically, it requires greater alertness and organism activation, which enables better attention, concentration, and memory recall, while simultaneously facilitating the transmission of the music’s emotional messages and the performer’s flow. The key to regulating pre-performance excitement at the physical level is for the musician to recognize that the body’s activation is helping them to perform optimally, since the body adapts to the performance setting by elevating its energy levels to meet the optimal performance demands. It is obviously imperative that the intensity of these physical responses does not exceed the limits of the performer’s control. Physiological arousal and performance success exhibit an inverted U-curve relationship, known in psychology as the Yerks-Dodson

law (Harrison et al., 2020). The law states that optimal performance is achieved with just the right amount of physiological excitement. I illustrate this relationship to musicians by using an analogy of a light bulb: if there is too little electricity, the bulb will not produce light; if there is too much electricity, the bulb will burn out; if there is just the right amount of electricity, the bulb will produce light. The same is true of performance success and physiological excitement. There has to be just the right amount of it for us to shine on stage with our musical performance. The temperament of the performing musician also has to be considered here. A musician whose natural physiological responses are faster and stronger will need less additional situationally driven physiological excitement to perform optimally, while a musician whose responses are slower and less intense will need more of such excitement.

2.2.2.1 Physical Symptom Regulation Strategies

How can one effectively regulate the amount and, above all, the intensity of the experienced physical symptoms before going on stage? It is important to understand that it does not suffice to use a certain somatic technique just before a performance, rather the body needs to be trained daily to be able to relax to the level which is optimal for performance. Excessive relaxation is also not desirable, as it impedes the control of the fine motor movements, and lacks the necessary vigour that enables musical expressiveness. Therefore, it would be advisable for every musician to incorporate into their daily practice some techniques that would allow them to relax physically, emotionally, and mentally, and to practise these mental skills as regularly as they practise their instrument/singing. Such regular practice would also result in physical, emotional, and mental well-being, which in turn leads to better achievements in many areas of life (not only professional).

Pre-performance excitement regulation strategies can be separated into physical, emotional, and mental, albeit only roughly, as there is usually some overlap between them. It bears acknowledging that the strategies I will outline as pertaining to the physical regulation also overlap with the emotional and mental regulation strategies.

As key physical regulation techniques employed by musicians, I identify the progressive muscle relaxation, autogenic training, the Alexander Technique, Feldenkreis method, and the BMC (Body-Mind Centering) method (Braden et al., 2015; Burin & Osorio, 2016; Fullagar et al., 2013).

There are several known experts in somatics for musicians in Slovenia. The BMC method is Ilonka Pucihar's expertise, and the Alexander

Technique is the expertise of Nina Rotner and Danica Bigec, while the Feldenkreis method is the domain of Aleksandra Kragelnik and Nuša Romih Masnoglav.

According to Ilonka Pucihar (2022), several studies have found that as many as 90% of musicians report tension, pain, and injury associated with playing an instrument. She stresses as particularly problematic that musicians begin to experience such problems as early as in secondary school and university. The interrelated and intertwined internal, external, and psychosocial risk factors that accompany intense practice and performance produce overexertion-based physical stress, build-up of tension, poor coordination and, consequently, possible pain and injury. If a musician wants to change the automated dysfunctional bodily patterns, they need to concentrate on the direct experiencing of their body through perceptions, sensations, and proprioception of motor actions. Through body awareness, the musician learns to recognize harmful habits and identify the source of inefficient and harmful patterns of movement. Ilonka Pucihar (2022) lists warm-up, breaks, stretching, strengthening, physical activity, good nutrition, hydration, and somatic education as strategies to reduce the risk of physical injuries in musicians. The latter enables them to learn more efficient movement and integrated body coordination grounded in functional anatomy and the laws of movement.

Progressive muscle relaxation (PMR) is a relaxation technique developed by Dr Edmund Jacobson (1938). The effect of this technique stems from an active approach to recognizing the difference between tense and relaxed muscles, which facilitates the preservation of physical relaxation. The aim of PMR is to train the body to be able to detect tensions and to be able to release them. PMR not only aids in the relaxation of the skeletal muscles, but also contributes to a calmer mind (Romas & Sharma, 2017). It can be “general”, meaning that one can relax while lying down with the eyes closed, or “relative”, meaning that one is active but completely relaxed during the activity (sitting on a chair and being able to relax in the seated position). The latter is especially useful for musicians. There are several stages to learning PMR. The first stage is a progressive relaxation of the whole body, all individual muscle groups. It lasts 15 to 20 minutes. We tense and then relax each muscle group twice. Simultaneously, we bring sensations of warmth into our body by means of suggestion, and deepen our breathing. Once we have mastered the first stage, we move on to the relaxation stage, where we learn to reduce the amount of time needed to enter a relaxed state. This stage lasts five to seven minutes. We focus on breathing and the simultaneous relaxa-

tion of the muscle groups. During the relaxation, the PMR practitioner guides the client with suggestions, such as to focus on the breathing, on the body, to calm down, relax, and close their eyes. The third stage is referred to as “turnkey” relaxation and lasts two to three minutes. At this stage, we focus only on breathing: we inhale, relax before exhaling, and then exhale. We repeat this exercise several times. The next stage, known as differential relaxation, lasts only about a minute to a minute and a half and teaches us to relax a specific muscle group while the other muscle groups remain active. This is followed by a quick relaxation stage, where we inhale deeply a few times, use relaxed suggestion, and then slowly exhale. The last stage of learning PMR is the practical application of the technique in situations that arouse stress and anxiety in us.

Autogenic training (AT) is a form of self-hypnosis. It comprises the systematic relaxation of muscle groups using a relaxation recording, auto-suggestions, or self-guiding. It is a process of bodily self-regulation using the power of thought (Romas & Sharma, 2017). The autogenic training technique is the opposite of the progressive muscle relaxation technique; physical relaxation is achieved by auto-suggestive influence of the mind on the body—by suggestions that are spoken in the mind. AT requires concentration and patience. The basic sequence of autogenic training usually consists of six stages which we practise systematically in order to induce autohypnotic effects in the body. It is important to also self-suggest with a feeling of heaviness and warmth. By concentrating and repeating the suggestions, we can induce a feeling of heaviness and warmth in the body, stabilize the heartbeat and calm our breathing. Autogenic training can be an effective technique for dealing with performance anxiety: after a few weeks of regular practice, when one has already mastered relaxation, one can also relax the muscles before and during performance, thus overcoming the problems such as accelerated heartbeat and hyperventilation (Habe, 2001). Autogenic training is a popular excitement regulation technique, especially in the European countries and Japan (Romas & Sharma, 2017).

The Alexander Technique is a method by which one learns how to eliminate, or at least reduce, tensions in the body caused by certain habits of movement and thought. Thus, one learns to achieve lighter movement with less effort (Harel & Munden, 2008). The Alexander Technique has a long history of helping performing musicians to reduce stress and the likelihood of performance injuries. Musicians perform some of the most complex and demanding physical movements, which they repeat over and over again. Therefore, the usage of the term repetitive strain injury has become quite common in the recent years.

The aim of the Alexander Technique is to attain the correct posture of the head, neck, and spine, which improves balance, coordination, and strength. This method teaches one to consciously control one's movement and posture, which can also be used to eliminate muscle tension (Kenny, 2011). In addition to improving musical performance, the Alexander Technique also contributes to managing performance anxiety, eases breathing, reduces back pain, and increases freedom of movement (Harer & Munden, 2008). Thought to be fundamental to optimal sensory-motor control (or use) for any endeavour is the primary control of the head-neck-spine axis in its relationship to the rest of the body and gravity (Alexander, 1985). This relationship is achieved through inhibition, the ability to recognize harmful neuromuscular patterning associated with particular tasks, and the conscious quieting of these responses, beginning with the neck muscles (Alexander, 1985). The practice of inhibition is thought to increase the reliability of both kinaesthetic and proprioceptive input. Alexander's directions are then employed in order to achieve a redistribution of muscle tone and maintenance of the expansion of the skeletal frame. This resultant "good tension" or postural tone is thought to effectively support compressive forces both from gravity and various activities (Cacciatore et al., 2014). Faulty internal body schema ("body maps") are also retrained, as well as any erroneous concepts of posture and movement, resulting in a more accurate felt sense of optimal functioning in gravity (Conable, 1998). For musicians, balanced alignment or posture becomes a sensitive interaction of the whole body with gravity and the instrument, and a dynamic responsiveness to varying needs for muscle tone, flexibility, and strength. Since the training of the Alexander Technique aims to improve the musician's use of the whole self (Alexander, 1985) through the inhibition of stressful reactions and the development of constructive thought and movement patterns (Alexander, 1987), such strategies potentially change the way the practice and playing of music are approached, which may in turn affect the quality of performance outcomes, such as tone, technique, poise, and musicality (Kleinman & Buckoke, 2013; Rosenthal, 1987).

The Alexander Technique is widely used in tertiary music education and has also been taught for many years at the Academy of Music in Ljubljana. Use of this technique produces a performance that is more fluid, livelier, and less tense and rigid. It has also been used by musicians such as Yehudi Menuhin, Sting, and Paul McCartney.

The *Feldenkrais method* is a somatic technique, just like the Alexander Technique. It aims to increase the awareness of movement in space in everyday tasks, or to increase the attention towards movement. Move-

ment awareness enables one to move more fluidly and helps to reduce various types of pain, muscular imbalances, movement disorders, obstacles, and injuries (Jain et al., 2004). The Feldenkrais method can help us to free ourselves from dysfunctional bodily patterns or learn new ways of moving and thinking. This method is usually taught in positions that lessen the effects of gravity (such as lying down, sitting), and employs movements such as rolling and crawling. The Feldenkrais method typically does not address posture directly, whereas the Alexander technique focuses on dynamic posture (Jain et al., 2004). This method uses two techniques: awareness through movement and functional integration. During an awareness through movement session, the instructor verbally guides a group or individual through a series of movements to explore systematically the relationship between the body position and space. The students are encouraged to experiment with movements freely. Ideally, the students become more aware of their movements independently, without the practitioner directing the experience. Each individual attempts to perfect the movements at their own pace. The impact of the technique soon becomes apparent: well-being improves very quickly, movement becomes lighter and more efficient, and this is reflected in the performance of everyday tasks, which the individual performs more easily and with greater satisfaction. The second technique is individual and adapted to each student. Unlike the first, it is mainly centred on touch, not verbal instructions. The use of touch creates new experiences for the student (Jain et al., 2004). The teacher uses gentle touches and movements as a tool to remove the habitual harmful movement patterns and replace them with new, more functional patterns instead. The Feldenkrais method is popular especially among professional athletes and artists who perform a lot, as it helps them improve their performance (Jain et al., 2004).

The *BMC (Body-Mind Centering)* method is an integrated, holistic, and embodied approach to movement, experiencing of the body, and consciousness (Hartley, 1995). It was developed by Bonnie Bainbridge Cohen, who drew on her knowledge of anatomical, physiological, psychophysical, and developmental principles to devise a specific application of movement, touch, voice, and mind. The uniqueness of this method lies in the specificity with which each of the body systems can be embodied and integrated. It is a creative process involving self-discovery in a state of openness of the body and mind. The ultimate goal is to discover the ease that underlies transformation. BMC is based on the embodiment and application of anatomical, physiological, psychophysical, and developmental principles, utilizing movement, touch, voice, and mind. The method combines both Western medicine and science (anatomy,

physiology, kinesiology) as well as various Eastern philosophies. In the study of BMC, one learns about one's body systems, such as cells, skeleton, ligaments and muscles, organs, endocrine system, nervous system, body fluids, fascia, fat, and skin. One also learns about the dynamics of perception; breathing and vocalization; and integration of the mind and body. The BMC method is also taught at the Academy of Music of the University of Ljubljana and is led by Dr. Ilonka Pucihar.

Central to all these methods is that they approach the pursuit of overall well-being by focusing on achieving physical well-being, which is in turn reflected in emotional and mental well-being (Hartley, 1995).

2.2.3 Emotions

2.2.3.1 Positive and Negative Emotions During Performance

Musical performance triggers a wide range of emotions; from those that we experience as positive to those that we experience as negative. With regard to emotions in performance, we need to focus on both the valence (positive, negative) and the intensity of the emotions (weak, strong). Compared to other types of performance (e.g. sports, surgery, piloting, etc.) where the content of the performance itself never holds much inherent emotional charge, the content itself in music performance is emotionally charged. Specifically, the character of a piece contains a variety of emotional content which the musician must be able to relive and, through their expression in performance, convey to the audience as convincingly as possible. Here lies a similarity with dancers and actors, whose performances also reflect strong emotions. Such performances pose a paradoxical challenge, since they require of the performers to simultaneously surrender to their emotions in order to convey the message as convincingly as possible, while not becoming overwhelmed by them, and to control their own pre-performance excitement. Thus, musical performance entails a double emotional burden: the performers have to balance the emotions that arise from the music itself and their own emotions that arise when they perform.

Frequently, a broad spectrum of positive and negative emotions of varying intensities emerges before, during, and/or after the performance. The musician is excited to take to the stage, anticipating the course of the performance, but at the same time fearful of mistakes, surprised by unpredictable factors on stage, ashamed, disappointed, and guilt ridden if they do not manage to perform the piece to the best of their skills and abilities.

Thus, mixed emotions are associated with musical performance; both positive and negative affects are present (Larsen et al., 2001), and multiple emotions of the same or opposite valence may be present (Larsen & McGraw, 2014). Mixed emotional experiences are generally aversive until a suitable manner is found to cope with discomfort (Williams & Aaker, 2002). Some theories emphasize the importance of the verbal naming of the emotional states as the first step of emotion regulation (Kaleńska-Rodzaj, 2018; 2019). In fact, being able to recognize all the emotions that arise when performing is the first step to successful emotion regulation. In practice, however, it can be observed that the experience of pre-performance excitement is reduced to experiencing stage fright/performance anxiety, while all other emotional dimensions are mostly overlooked (Kaleńska-Rodzaj, 2018; 2019). Bringing awareness to all of the emotional dimensions associated with performance allows musicians to redirect their attention towards more positive performance outcomes (Folkman & Moskowitz, 2000; Tugade & Fredrickson, 2004). Few research studies have underlined this important phenomenon of mixed pre-performance emotions (Gabrielsson, 2001; Gabrielsson & Lindström Wik, 2003; Lamont, 2012). The majority of research has focused on emotional states of high intensity and specific valence, such as musical performance anxiety (hereafter MPA) (Kenny, 2011). With regard to the relation of mixed emotions to performance quality and the performer's well-being, it has been found that the most frequent emotions arising before the performance are hope, sadness, and anxiety. Based on their combinations, six pre-performance emotional profiles were created: high MPA, moderate MPA, calmness, impatience with mixed emotions, joy with dizziness in the background, and flow (Kaleńska-Rodzaj, 2018).

2.2.3.2 Emotion Regulation in Musical Performance Delivery

Emotion regulation refers to a process by which individuals influence what emotions they experience, when they experience them and how they experience and express them. Emotion regulation can be automatic or controlled, conscious or unconscious, and can affect one or more points in the process of emotion formation. [Gross, 1998, p. 275]

The concept of emotion regulation embraces both positive and negative sensations, along with how they can be strengthened, used, and controlled.

Emotion regulation has three components:

1. the beginning of actions that trigger emotions
2. the suppression of actions that trigger emotions
3. the modulation of reactions triggered by emotions

Ideally, the third component is the best way to make the most of the regulatory processes (Gross, 1998).

As I mentioned in the previous section, a musician often has an ambivalent emotional attitude towards performing: they look forward to it and feel positive excitement, yet fear possible inability to display their mastery, as well as the opinions of the audience, etc. These two main emotions are joined by a number of others which the performer may be able to access consciously, but there exist even more which unconsciously colour the performance experience and guide the quality of the performance. Once the performer recognizes the emotions overwhelming them prior to walking on stage, the second important step is for them to learn to adapt the present emotions to the performance setting in order to optimize their performance. I will discuss this in more detail in the next section as part of the introduction of the IZOF model, which is a model of the individual zone of optimal performance, developed by Hanin (2003; 2007) in the context of sport psychology, but is also applicable in psychology of musical performance. Presently, however, we shall focus on the main guidelines for emotion regulation.

Music performance research studies that focus on cognitive processes in expert musicians have received considerable attention (e.g. Evans & McPherson, 2017; López-Íñiguez & McPherson, 2020; Woody & McPherson, 2010). In recent years, however, it has become increasingly acknowledged that the key drivers of learning and achievement are emotions (e.g. Keefer et al., 2018; Pekrun, 2014). This has generated a growing number of studies on the emotion regulation in the academic context (Ben-Eliyahu, 2019), including the discipline of music.

Both situational demands and individual characteristics influence how one regulates one's emotions when engaging in challenging activities (Kobylińska & Kusev, 2019). The situational norms and the socio-cultural context of the implementation of an activity shape the kinds of strategies one will use to regulate one's emotions. It is particularly interesting to discern the strategies we use when we want to proactively regulate or control our emotions in challenging situations (Kobylińska & Kusev, 2019), which is often the case in musical performance.

Performers regulate their emotions differently; some respond rigidly and inflexibly, often maladaptively, while others manage to develop more sophisticated methods of adaptation (Hollenstein et al., 2013). Effective emotion regulation results from an interaction between strategy-situation-personality patterns (Kobylinska & Kusev, 2019).

2.2.3.3 Emotion Regulation Strategies

There is a large body of research confirming the usefulness of a variety of pre-performance emotion regulation strategies. Although all of these strategies are undoubtedly useful and practical, a problem arises when we need to choose the most suitable regulation strategy (Gross, 2015; Ochsner et al., 2012).

Most scientific studies on emotion regulation focus on a specific age group which might benefit from the strategy or on a specific situation in which the strategy works best (Webb et al., 2012). There is not much discussion on proven methods to always tame our emotions. Contemporary researchers agree that emotion regulation should not be limited to a specific time frame or set of individuals in particular circumstances, and have therefore proposed some strategies that could be universally applicable (Aldao, 2013; Gross, 2015).

Cognitive Reappraisal

Cognitive reappraisal provides long-term well-being and offers a lasting solution to emotional distress. Reappraisal is not intended to suppress or eliminate negative emotions, but rather to seek better ways of coping with them (Davis et al., 2010). Cognitive reframing diverts our attention from our distress, thereby reducing the impact of negative emotions (Troy et al., 2013).

Self-Soothing

Any form of self-soothing can reduce the toxic effects of fear, anger, and sadness brought on by negative experiences (Heiy & Cheavens, 2014). Scientists maintain that self-soothing, as opposed to self-confrontation, provides better and faster containment of emotions.

Attention Control

A performer can use attention control to shift their attention away from negative emotions, which enables them to see these emotions from a rewarding perspective. The performer focuses on what they are gain-

ing from the increased pre-performance excitement, on its adaptation-al functions, and how they can harness them to perform better (Brooks, 2014). Thus, the performer learns to adapt their responses and thereby improves their psychological well-being (Gross & John, 2003).

Emotion Regulation Therapy (ERT) and Cognitive Therapy for Emotional Regulation

Emotion regulation therapy is a person-oriented approach to addressing affective reactions. It aims to help individuals recognize, acknowledge, and describe their own emotions, allow unconditional self-acceptance which ultimately produces emotional regulation, prevent avoidance of emotions, and choose actions that contribute to well-being, as well as learning to make better decisions and develop constructive critical thinking and problem-solving skills (Mennin & Fresco, 2014). ERT interventions operate on four levels: attention and acceptance, cognitive restructuring, emotional distancing, and stimulation of positive emotions.

Cognitive therapy interventions used in emotion regulation include cognitive distraction, which refers to the shifting of attention from a negative emotion to something pleasant (Gross, 1998). The approach is practical: a therapist or coach provides their client with encouragement on which the client can focus during moments of distress. Gradually, the client learns to divert their attention the moment they catch themselves surrendering to dysfunctional emotions (Nolen-Hoeksema et al., 2008; Sheppes et al., 2011). Cognitive labelling is a neurolinguistic process of recognizing emotions as they arise. Research results suggest that when we are able to recognize and literally name our feelings and have full awareness of our emotional boundaries, the response of the amygdala, the part of the brain controlling negative emotions, diminishes (Lieberman et al., 2007).

Breathing Techniques

Breathing techniques are one of the most commonly used musicians' strategies to regulate pre-performance excitement (Habe, 2002; MacAfee & Comeau, 2023; Zhukov, 2019). This is not surprising, as rapid and shallow breathing is among the most frequently reported physiological symptoms of performance anxiety (Habe, 2002; Kenny, 2011).

Breathing techniques increase the endurance and strength of the muscles responsible for expanding the chest during inspiration (Gosse-link, 2004). Breathing therapies have been practised for over a thousand years, but it was not until the late 20th century that they gained

popularity in Western countries. They are rooted in Eastern practices such as yoga, tai chi, and Buddhism. There are many known breathing techniques:

1. *Deep breathing* prevents air from getting trapped in the lungs and enables the inhalation of fresh air. We perform the exercise standing or sitting, with the elbows pushed slightly backwards to expand the chest. Then we inhale deeply through the nose and hold the breath while counting to five before slowly exhaling through the nose.
2. *Active expiration* relies on the application of abdominal muscle pressure, causing their contraction and consequent optimal diaphragm expansion (Gosselink, 2004).
3. *Diaphragmatic breathing* targets the regulation of the abdominal wall during inspiration and expiration and can be aided by a hand on the abdomen. The exercise is performed sitting or lying down. When we observe our inhalation and exhalation through the lifting and lowering of the abdominal wall, the exhalations gradually become longer and we become more relaxed and calmer.
4. *Breathing with pursed lips* forces us to decelerate our breathing and make a conscious effort with each breath. In this exercise, we relax our neck and shoulders and, with our mouth closed, slowly inhale through the nose, counting to two. Then we purse our lips, like for whistling, and exhale through them.
5. *Yogic breathing or pranayama* promotes conscious guidance of the breath. “Prana” means energy and “ajam” means control and regulation (Maheshwarananda, 2000). The purpose of pranayama is to increase the volume of oxygen in the lungs and blood in order to achieve a steady rhythmic breathing pattern and ultimately relaxation. This type of breathing comprises three phases: inhalation (pura-raka), breath retention (kumbhaka) and exhalation (rechaka), their ratio being 1 : 4 : 2 (e.g. if the inhalation lasts four seconds, we hold the breath for 16 seconds, and the exhalation lasts eight seconds) (Romas & Sharma, 2017). Pranayama includes alternate-nostril breathing, one side at a time. We exhale and gently close the right nostril with the thumb of our right hand. Then we inhale through the left nostril and close it with the ring finger of the right hand. We remove the thumb and exhale through the right nostril. We inhale through the right nostril and close it again with the right thumb. We remove the ring finger and exhale through the left nostril. This concludes one cycle of pranayama. We continue with cycles in the same order, starting with the closing of the right nostril and inhal-

ing through the left. We breathe alternately through one nostril and then through the other for about five minutes and finish the whole pranayama by exhaling through the left nostril.

6. *The 4–4–8 technique* involves breath regulation by calming the mind. With eyes closed, we inhale air through our nose, counting to four in our head, then we hold our breath, counting to four again. Afterwards, we exhale, while directing our attention to counting up to eight. We repeat the cycle 10 times.
7. *The positive energy cloud* is an exercise performed in hip-width stance. We start with the arms folded in front of our chest. As we inhale through our nose, we raise our arms vigorously into the air, and as we exhale, we bring them back to our chest, holding fists. We repeat this several times, slowly increasing the pace of breathing, and then gradually decreasing it. The technique is called the positive energy cloud because we imagine a cloud of positive energy above our head and we draw its energy into our body with our arms.

Tapping

Tapping or emotional freedom technique (EFT) is a technique for achieving emotional freedom. It was developed by engineer Gary Craig. EFT is a tool that integrates verbal and physical processes to achieve effective performance. It combines the stimulation of acupuncture points while mentally activating the target psychological problem. When tapping an acupuncture point, deactivation signals are sent directly to the stress centres of the midbrain (amygdala) and the stress deactivates simultaneously on physical and emotional levels. The ability to consciously face a memory or emotional trigger without any stressful emotions can be a great tool of preparation for a performance, concert, exam, audition, or competition (Oražem, 2021). The EFT process comprises four basic steps. The first step includes preparation, where we name the problem and focus on it. We rate the intensity of the problem on a scale of 0 to 10. Then we form a sentence and repeat it three times while rubbing a painful spot. This sentence opens with a description of the problem (e.g. “Although I feel nervous before performance”), followed by a general sentence of acceptance (“... I fully and deeply accept myself”) (Fone, 2012). In the second step, we follow a protocol that involves tapping all meridian points and simultaneously speaking the setup sentence we formulated in the first step. We repeat this seven times. The sequence of meridian points is as follows: eyebrow, side of the eye, under the eye, between the lower lip and the chin, on the collarbone, under the upper

arm, thumb, index finger, little finger, karate point. In the third step, we focus on the problem whilst rolling our eyes and murmuring a simple song. This activates the right brain hemisphere. All along, we tap the gamut point. A more exact gamut point process is to close the eyes, open them, look sharply to our lower right and sharply to our lower left without any head movement, roll our eyes clockwise, then counter-clockwise, and proceed to murmuring the song for about five seconds. Then we quickly count from one to five, and murmur the song again for five seconds, and finally move on to the next step. In step 4 we repeat the process of step 2. This concludes one tapping cycle. We use the scale to evaluate the severity of the problem anew. If it has decreased, we can conclude the tapping session, otherwise we repeat the cycle (Oražem, 2021).

Emotional Catharsis Technique

A common problem that musicians have with emotion regulation is the inability to let go of emotions. Even after the musician has recognized the inadequacy of irrational thoughts, they struggle with the removal of these thoughts from their mind (Singer et al., 2012). With emotional catharsis, which is a means of pouring out repressed emotions, we can achieve the emotional balance we often seek. The practice is simple and includes five steps: (1) observation of emotions as they are without trying to change them, (2) evaluation of the experience and sensations accompanying a particular emotion, (3) cultivation of the ability to not identify oneself with one's emotions, (4) oral naming of emotions or putting them down in writing, and (5) conversation about emotions with others (instrument teacher, fellow musicians, therapist, etc.).

The Strategy of Realistic Setting of Goals Related to Pre-Performance Emotions

In the last years, the strategy of realistic setting of emotion-related goals has gained prominence in the management of pre-performance emotions (Osborne et al., 2020). The new conceptualization of emotion-related goals acknowledges the emotional experience and expression of emotions (Greenaway & Kalokerinos, 2019). This paradigm distinguishes one-dimensional goals into emotional experiences (e.g. to feel less performance anxiety) and expression (e.g. to show less performance anxiety on stage), and argues that emotional goals can in fact be two-dimensional, so that different combinations of desire for emotional experience and expression are possible. These combinations may include aligned as well as unaligned goals related to emotional experience and expression. This

means that a performer's goal can be to experience and express emotions (goal 1), to experience emotions and not express them (goal 2), to express emotions but not experience them (goal 3), or to neither experience nor express emotions (goal 4). Although researchers and practitioners have so far assumed that music performers always want to reduce pre-performance anxiety, current findings suggest that this is not always the case. In fact, some performers seek to experience excitement when they perform, probably due to a belief that excitement actually contributes to a better performance. We could link this case to goal no. 2, where the performer wants to feel the excitement, but does not want to reveal it to the audience (Brooks, 2014). The modern notion of emotional goals in the regulation of pre-performance excitement can help us to design optimal emotion regulation strategies, while acknowledging that performers may pursue differing goals in terms of their performance emotions (Osborne et al., 2020).

Emotion Regulation Strategy Based on the IZOF Model

The ideal performance state depends on the regulation of many emotions in terms of valence and intensity. The *Individual Zones of Optimal Functioning* model is a theoretical framework and simultaneously a practical approach that enables qualitative and quantitative analyses of pre-performance excitement in relation to the performance (Hanin, 2007). The model is derived from sports psychology, where it is extensively used. It monitors the mental states which significantly influence and predict an athlete's success. Using the model increases consistency of the achievement of good competition results. It is about identifying individual emotional patterns which shape performance. The model is grounded in the assumption that the ideal competitive or performance state is associated with a certain intensity range of particular emotions. It is also grounded in a multidimensional concept of competition anxiety as an integral component of the mental state and the performance process (Hanin, 2007).

Studies on anxiety in sport have revealed that the optimal anxiety state curve is highly individual, that the best performances are linked to certain anxiety zones, that performance is worse when the athlete's anxiety does not match their individual zones, and that the relationship between anxiety and performance is highly specific to the task type (Hanin, 2007).

The IZOF model serves as the baseline for the identification of the IZOF profile. It concerns the recognition of indicators of emotions that

are helpful or harmful to performance. Hanin (2007) distinguishes between positive emotional states (relaxed, pleasant, carefree) and negative emotional states (tense, angry, wild). Both can function positively or negatively.

Emotion self-regulation has been linked to the Individual Zone of Optimal Performance (IZOF) in sports by Robazza and Montse C. Ruiz (2018). Recognizing both aspects is highly important in music. When we talk about the emotions involved in musical performance, we are mostly talking about stage fright or performance anxiety. Similarly, most studies on emotion regulation in musical performance have focused on the regulation of performance anxiety (Khodabandeh et al., 2021).

Only a pilot study has been conducted regarding musical performance in relation to the IZOF model, namely in pianists (Yao, 2016). It confirmed that the IZOF is also applicable to music performance, as it helps musicians to recognize the states within/outside the optimal performance zone. The IZOF model is based on a retrospective method which allows an individual to recall previous own performances and report on the corresponding sensations during these performances (Hanin, 1986; 1989). The retrospective results are used to measure and determine the optimal performance zone of the individual performer. Once this zone is determined, the quality of future performance can be predicted based on the emotional and physical states of the individual. Knowing one's own optimal performance zone helps one cultivate the optimal physical and psychological state for one's own optimal performance (Yao, 2016).

2.2.4. Thoughts

Our beliefs, viewpoints, and mindset regarding performance form the foundation for the regulation of our pre-performance thoughts. The physical and emotional manifestations of pre-performance excitement are directed towards success or failure as a result of the interpretation of what is felt. If a musician attributes a positive role to felt sensations, this means that they are aware of how they can harness what they feel physically and emotionally to optimize their performance, which enables them to move towards musical success and to accept their experiencing of performance-related sensations as a challenge. If, however, these sensations are attributed a negative role and are perceived as a threat, then the musician is moving towards musical failure. A common occurrence at the thought level is catastrophizing: anticipation of all the negative things that could potentially happen in a performance. These often-irra-

tional thoughts pull the performer into a vicious circle of thoughts from which it becomes difficult to escape. Additionally, it produces a mental overload which shifts the focus from the performance to the musician's internal experiences.

2.2.4.1 Mindset

Mindset is the psychological foundation for experiencing success or failure in various areas of life, including musical performance. Our mindset about performance is an important determinant of how we experience the success of our own musical performance.

Carol Dweck (2012), the author of the concept of mental convictions, speaks of growth mindset and fixed mindset. Some people believe that their abilities are mostly unchangeable and beyond their control. Accordingly, they try less, believing that they cannot significantly change their abilities. They are consequently less successful. Such people avoid challenges (Blackwell et al., 2007). This type of mindset is considered fixed. People with a growth mindset, however, believe that they can change and develop their abilities with effort and perseverance (Dweck, 2012). Such individuals like to face challenges and assume more demanding tasks. When they experience failure, it does not consume them (Dweck, 2007).

Mindset is also linked to self-image. The self-image of those with a fixed mindset is built by proving their own abilities. When they encounter an obstacle or experience a failure, their self-image is lowered (Muel-ler & Dweck, 1998). Individuals with a growth mindset build self-image through challenges. When they experience a failure it doesn't discourage them or lower their self-image, but further motivates them to improve their own skills. (Robins & Pals, 2002)

There are various interesting differences between people with fixed mindsets and people with growth mindsets as to their perception of their own success. People with a fixed mindset see success only in their own superiority, that is, they only feel successful if they are better than others (Dweck, 2007). In contrast, people with a growth mindset feel successful when their results are a reflection of their best efforts at the given moment, and of their learning and progress. Therefore, their sense of success is not tied to the results of others or to external circumstances, but only to what they can control.

Even more important differences arise in the experience of failure: people with a fixed mindset struggle more with experiencing failure. It often blocks them and leaves a dent in their self-image. After failing, they

are quicker to lose motivation and more likely to feel unsuccessful. The desire for the best results will cause them to rather abandon an activity than to underperform compared to others while improving their own knowledge/skills. In contrast, people with growth mindset use failure as a tool for growth. They learn from their own mistakes and use their failures to their advantage, as they further motivate them to improve. They often feel successful because they experience success every time they make progress (Dweck, 2007).

In music, growth and fixed mindset have been studied with regard to music education and not directly to performance. The results have revealed that students with growth mindset believe that hard work and practice can produce improvement, which in turn can speed up their progress. They are also free of the need to endlessly prove their excellence, and are driven by a desire to learn and gradually improve (Davis, 2016).

In music, our mindset about experiencing musical performance success is strongly related to our attitudes towards mistakes (Davis, 2016). There is an unwritten rule that musical performance should always be perfect, without mistakes. This fundamentally suggests a fixed mindset, as the focus is on the result: not just any result, but the perfect result. A fixed mindset in music, especially in classical music, collides with anything that is not perfect, even in terms of mental skills. So being vulnerable is not an option, one has to be perfect. This also implies the demand of flawlessness in all performance aspects: technical, expressive, and mental. This is unrealistic and unfeasible. Like elsewhere, the goal in music should be continual progress, not some unattainable ideal of perfection.

2.2.4.2 Attention, Concentration and Mindfulness

Attention and concentration are two of the most important cognitive skills impacting performance. Young musicians often report that they find the most challenging of all psychological skills to be the sustentation of optimal attention and concentration in performance. Self-doubt and concern about possible mistakes and unforeseen circumstances are common before performance. They are accompanied by an increased, pre-performance anxiety, which diverts attention. These factors shift the focus away from the musical performance, making it essential for the performer to attempt to calm their thoughts and concentrate on the performance. At the end of this chapter, we will also address mindfulness, which is the conscious presence that enables optimal attention.

Attention is selective, which is why we usually notice only a limited number of aspects of any given situation and ignore the rest. The outcome of a performance is therefore critically dependent on the performer's ability to manage distractors and allocate their attention effectively to the performance rather than allowing their attention to be diverted to the audience or the performer's own concerns.

Good attention is complete focus on a goal. Such effort is thought to depend on the interest and enthusiasm regarding a subject. This kind of attention is called "natural" attention (Kohut, 1992). The process of natural attention comprises four phases: the phase of directed attention, demanding self-discipline; the phase of interest, demanding internal motivation; phase of absorption, which involves focusing on something in a way that requires a very powerful distractor to divert attention from it; and the phase of fusion with experience, which demands complete integration of body and mind, whereby the individual, the instrument, and the music function as one.

A performer who is capable of good attention is able to focus on the music itself. Their thoughts are directed towards a physically and mentally harmonized experience of the music, and their psychomotor skills required by the technical demands of the piece are so automatized that they can focus their attention on the expressiveness. Such attention also produces optimal arousal. The performer does not dwell on thoughts of possible mistakes, on the audience's reactions, or on the fear of failure. Their focus is narrow and directed exclusively towards musical recreation.

One of the most notable features of attention is its selectivity (Vičič, 1998). With attention, the performer gathers relevant information from the external or internal environment and directs their consciousness or mental energy towards it. Meanwhile, the performer is able to keep irrelevant information away from their consciousness. Selectivity also entails bringing attention to the right things at the right moments (the ability to fluctuate attention). This is very important in musical performance. Musical performance requires a full set of simultaneous activities, requiring the performer to be highly agile in directing attention. In orchestral settings, members of the orchestra typically oscillate their attention between multiple relevant stimuli, including the conductor, their sectional colleagues (e.g. the first violin), and their own instrument.

Although attention is a selective process, a person can focus on several elements at once. Cognitive psychology experts explain the exist-

ence of several attentional “pools” with individual limited capacities that should not be exceeded (Kremer & Scully, 1994, in Vičič, 1998). These pools are usually reserved for their respective types of information (auditory, visual, kinaesthetic), and if the capacity of any pool is exceeded, this results in reduced performance quality (Hardy, 1996, in Vičič, 1998).

After prolonged practice, some skills become so automated that conscious control is no longer needed and attention can be directed elsewhere. Such automatic processing requires no attention and has unlimited capacity, is faster, and can be performed concurrently (Hardy, 1996, in Vičič, 1998). Among musicians, this mechanism is extremely common. Some finger placements are fully automated. In the same way, we no longer think about every memorized detail when playing a piece by heart, but are guided by the whole. The problem arises when trying to focus attention on automated movements, since this usually causes unpleasant consequences which result in reduced performance quality (Kremer and Scully, 1994, in Vičič, 1998).

Attention is also related to the level of arousal. Arousal and attention are inversely proportional (Easterbrook, 1959, in Vičič, 1998): as arousal increases, attention narrows, and vice versa.

Two significant aspects of attention are its intensity and duration. The more attentive we are to something, the shorter the amount of time we can sustain the attention, and vice versa (Vičič, 1998). Intense concentration requires a lot of mental energy. During prolonged intense concentration, the nervous system automatically establishes a protective inhibition, which one experiences as a decrease in concentration. Excessive attempts to concentrate are misplaced as the attempting individual becomes more focused on their mental state instead of the activity they are performing.

Stanislavski (1949, in Salmon and Meyer, 1992) argues that in musical performance, conscious attention is primarily captured by the interpretive activity, which is then joined by moods and emotions as well as cognitive processing. Motor and technical skills are to some extent automated, meaning that these processes are only partly subject to conscious control. The symptoms of anxiety are known for their tendency to occupy a large part of conscious attention during excessive excitement. The occurrence of these symptoms shifts the focus of attention. This is the reason for the importance of the ability to control the expression of symptoms. Uncontrolled, they consume excessive amounts of attention, which is needed to be directed at the interpretation, mood, emotion, and cognitive processing.

The quality of musical performance is also directly influenced by attention to the self, which refers to the extent of the performer's self-reflection, attention to their own behaviour, their body, and the impression they hope to make on others (Lamovec, 1994). It is a relatively permanent personality trait, but can also emerge as a result of specific conditions. The presence of others tends to increase one's attention to oneself; in such circumstances, one becomes acutely aware of oneself as an object of observation and evaluation by others. Attention to the self hinders social interaction, since it reduces attention to environmental cues; encoding and transformation of information are compromised, as is the choice of behavioural response. Anxious people often focus attention on themselves due to a sensation of being judged by others. Attention depends mainly on one's interpretation of objective events.

2.2.4.3 Thought-Regulation Strategies

Much has been written on mental practice and its role in musical performance preparation (Clark et al., 2011; 2014; Clark & Williamon, 2011; 2012; Connolly & Williamon, 2004).

Mindfulness Meditation

Attention can be practised through mindfulness meditation. The latter is rooted in the practice of meditation. The practice of meditation has vastly increased since the 1960s (Murphy & Donavon, 1997). Scientific interest in meditation has increased dramatically in recent years (Cahn & Polich, 2006), with a growing body of evidence pointing to its usefulness in health care and stress management (Chiesa & Seretti, 2009), and to a certain power to enhance positive feelings (Chang et al., 2004), which increase tolerance to pain and reduce anxiety (Wachholtz & Pargament, 2005). Thus, it appears that meditation is an effective tool for improving overall well-being. Mindfulness practice involves developing a specific kind of awareness, namely one that is conscious, non-judgemental, and focused on the present moment (Kabat-Zinn, 1990). Mindfulness meditation supports the development of the ability to control the focus of attention freely and flexibly. It can change the habit of constant comparison with the standard (maladaptive perfectionism), which increases the fear of failure, narrows the field of attention, and can interfere with information recall (Moran, 1996). A decrease in self-focus enhances the experience of flow (Jackson, 1995), while positive feelings arise from self-efficacy (Silvia, 2003). In addition to sharpening the concentration, systematic mindfulness practice enhances the ability to focus on

a task instead of on oneself (“decentering”), and supports the skill of accepting one’s own mistakes and one’s current level of artistry. Such acceptance is the result of learning about the functioning of the mind and body and developing compassion for oneself (Neff, 2003).

In music, mindfulness meditation is the most frequently reported strategy for achieving the optimal performance state. Numerous studies have confirmed the usefulness of mindfulness practice in musical performance (Chang et al., 2004; Hall Carlson, 2019; Lin et al., 2008; Moore, 2013; Shaw et al., 2020; Shorey, 2020).

Virginia Anne Farnsworth-Grodd and Linda Cameron (2013) found that music students whose mindfulness is more expressed as a trait are better able to cope with pre-performance thoughts and emotions. Further, Raquel Rodríguez-Carvajalet et al. (2017) report that dispositional mindfulness has a positive effect on self-awareness and negative mood in music students. As to the performance anxiety, it has been observed that a stronger dispositional mindfulness in musicians lowers their level of performance anxiety (Diaz, 2018). Steyn et al. (2016) have demonstrated that mindfulness practice for musicians with performance anxiety improves their mental well-being. This aligns with the research confirming the impact of mindfulness practice on the increase of well-being, positive emotions, and life satisfaction, as well as on the development of mindfulness as a trait, and the reduction of stress and depression (Hribar, 2012).

Gallagher (2020) discusses mindful performance, stressing that the optimal performance requires higher states of consciousness which allow the performer to calm their mind and focus exclusively on their performance. His definition of performance mindfulness corresponds to the presence of some dimensions of performance flow, namely the fusion of attention with activity, complete focus on the task, and loss of self-awareness.

Cognitive Restructuring

This is the stage where the perceived situational aspects are identified and interpreted according to the performer’s knowledge and experience. The meanings given to these perceived situational aspects evoke particular emotional responses. For example, the thought “They are already here” can cause fear or delight, depending on the musician’s subjective interpretation of this statement. The technique of cognitive reinterpretation enables one to change one’s assessment of a situation and one’s ability to cope with it. It facilitates reconsideration of the causes and consequences of the experience of emotions, and the recognition of common

modes of interpreting individual aspects of a situation in form of certain cognitive patterns and interpretive errors (Beck et al., 1979). This recognition is an opportunity to change the approach to performance, to oneself, and to the audience, and to develop more agile interpretations that contribute to greater efficiency on stage. A meta-analysis of research on psychological interventions in MPA has demonstrated a high degree of usefulness of psychological techniques stemming from cognitive-behavioural therapy (Burin & Osorio, 2016). For example, they prevail over pharmacotherapy in the treatment of depression and anxiety disorders: cognitive therapy reduces the activity of the amygdala as well as the anterior cingulate cortex (ACC) and insular cortex, and changes the activation of the certain areas of the prefrontal cortex, which facilitates emotion regulation (Clark & Beck, 2010; Linden, 2006). According to research grounded in musical performance, the focus of the performer's attention and their manner of thinking are key to their psychological well-being and their performance on stage. Concentration on the emotional aspects of the piece being performed (interpretation orientation) and playing for the audience (communication orientation) seem to be the most helpful attention anchors, while concentration on the playing technique or notation alone results in a less expressive, "dry" performance, perceived by the performer as less comfortable and as restrictive of the freedom on stage (van Zijl & Luck, 2013; van Zijl et al., 2014). Investigations into musicians' pre-performance self-talk (Steptoe and Fidler, 1987; Tokarz & Kaleńska, 2005) suggest that MPA is associated with catastrophizing ("I am almost certain I am going to make a terrible mistake, and it is going to ruin everything"), while positive thinking strategies can reduce MPA ("I know I am a good performer, and I have prepared well for this; I will continue and make them sit and take notice of me") in the same manner as the realistic thinking strategies ("I will surely make some mistakes, but everyone makes mistakes"). Attention on musical performance and a development-oriented attitude where the performer accepts themselves promote well-being on stage.

The 3, 2, 1 *VAK* technique (Lundeberg, 2001) is one of the most powerful techniques for calming the mind. It involves the directing of attention to different sensory stimuli: visual (V), auditory (A), and kinaesthetic (K). We begin by focusing our attention on a chosen visual stimulus and holding it there for 20 seconds, then we choose another visual stimulus and focus on it again for 20 seconds, and then repeat this with a third stimulus. Then we close our eyes and focus on the chosen auditory stimulus for 20 seconds, then on the second auditory stimulus for 20 seconds, and then on the third. This is followed by focusing on the kinaesthetic

stimuli, perhaps the heartbeat or deep breathing, perhaps the tension/relaxation in a particular area of the body. Again, we focus for 20 seconds on the first kinaesthetic stimulus, then on the second, and finally on the third. Then we open our eyes and enter the second cycle, where we shift our attention twice: we choose one visual stimulus, then another. We close our eyes and focus on one auditory stimulus and then on another. With eyes closed, we repeat this again with the two selected kinaesthetic stimuli. In the third cycle, we focus on each stimulus modality only once; that is, we focus on one visual stimulus for 20 seconds, on one auditory stimulus for 20 seconds with eyes closed, and on one kinaesthetic stimulus for 20 seconds with eyes closed. In the second and third cycle, we can choose the same stimuli as in the first cycle, or we can choose different stimuli each time. In the second and third cycle, as in the first one, we focus on each stimulus for 20 seconds. This technique is learnt by firstly receiving external guidance. Afterwards, we can record our voice to use the recording as guidance during practice. Once we have mastered the internal timing and are guided by our internal clock, the practice can be implemented in a variety of circumstances (e.g. on the bus, during a break). This practice helps the performer to quieten their mind before walking on stage in a very short time.

The *STOP* technique is rooted in behavioural-cognitive therapy (Cina, 2021). It is a technique for regulating mental distractors and stopping disruptive automatic thoughts. Automatic thought is a mental flow existing alongside the apparent mental flow. The mental practice is aimed at revealing automatic thoughts, as we are mostly unaware of having them. Automatic thoughts are generally expressed through emotional and physical responses, and it is only with training of their conscious recognition that we can identify the thought that preceded a particular feeling. We generally accept automatic thoughts as truth, without examining them. The technique is initially performed by writing down all of our automatic thoughts that have arisen during the practice or simply by recording them on the phone while we practice. The next step is to learn to stop these thoughts; if we are of the visual cognitive type, we may visualize a stop sign every time an automatic thought arises. If we are of the auditory type, we may hear a commanding internal voice saying “Stop” after an automatic thought emerges. But if we are of the kinaesthetic type, we can imagine someone putting a hand on our shoulder and stopping us after we have had an automatic thought. This technique can be used before or during performances: when disruptive thoughts begin to overwhelm us, they can be easily stopped with the aid of a visual/auditory/kinaesthetic stop prompt.

From Stress to Mental Well-Being

This chapter addresses the challenges faced by professional musicians and/or the students of music to whom music is an important part of their identity. This chapter examines the journey from the experiencing stress to the experiencing mental well-being in professional musicians or those training to become professional musicians.

First, we will define the stress related to the professional music career, outlining its potential origins with regard to the phase of performance (before, during, and after performance), and mental resilience training as the most efficient strategy to regulate stress levels in musicians. Next, we will focus on two concepts of pre-performance excitement, namely performance anxiety and, in contrast, the performance flow. It bears clarifying that performance anxiety is considered the most common stressor in musicians, while flow is considered to be a predictor of mental well-being. At the end of the chapter, we will also consider the psychological well-being of musicians.

3.1 Profession of Performing Musician as a Source of Stress

The music profession is frequently romanticized as a profession where one can constantly pursue one's passions. This idyllic surface image is far from the truth, because although vocationally engaging in music is a privilege and provides musicians with a real sense of psychological well-being (Murko, 2016), it is also a major source of stress.

Theorell et al. (1990, in Gabrielsson, 2012) conducted a research study which compared six occupational groups: physicists, aircraft mechanics, air traffic controllers, waiters, loading staff, and symphony musicians. They found that symphony musicians and loading staff have the highest blood pressure at work and the lowest chance of co-determination at work. These results support the hypothesis that the combination of high occupational demands and low co-determination chances may have a negative impact on health. Most of the participating musicians rated the opportunities to use their personal knowledge and skills in their work as good, and although almost half of them experienced their work

as physically and mentally stressful, 90% reported high satisfaction with their job.

The occupational stressors and challenges musicians face are reflected in relatively high rates of mental health problems (Perkins et al., 2017). For example, the classical musician profession is characterized by constant comparison with others and by competitiveness, high rates of job insecurity, financial instability, and personal sacrifice (Mac-Namara et al., 2016; Perkins et al., 2017). Additionally, these musicians spend very long hours practising, often in isolation (Ericsson & Harwell, 2019). All of these challenges can function as barriers to optimal mental health (Perkins et al., 2017; Wristen, 2013). A high amount of practice can also cause musculoskeletal pain related to instrument playing (Baadjou, 2018) and overuse injuries (Bird, 2013), which have been linked to an increased risk for depression (Kenny & Ackermann, 2015). Indeed, the lifestyle habits of musicians are frequently characterized by unhealthy practices, such as insufficient and irregular sleep schedules (Araújo et al., 2017; Pecen et al., 2016). Sleep quality is poor among many musicians (Araújo et al., 2017; Vaag et al., 2016), which is correlated with mental health problems (Roberts & Duong, 2013). Given these music-related stressors and challenges, scholars have emphasized the need to support musicians in building psychological resilience (Araújo et al., 2017; Osborne et al., 2014; Wiggins, 2011).

Various musical profiles (music teacher, soloist, orchestra member, conductor, composer) face specific stressors in their work environment. For example, typical stressors in composers are the lack of creative ideas and the lack of time, in professional music performers the audience's reaction to their performance, and in music educators the monotony of everyday teaching or problems with discipline in the classroom (Kohut, 1992).

The profession of performing musician requires a number of skills in order to develop and maintain a successful musical career. These skills include technical excellence, expressive quality, business skills, and the ability to interact with audiences and other stakeholders (Vaag et al., 2014; Williamon, 2004).

A systematic review of the literature on the occupational demands of performing musicians identified seven categories of work demands: public exposure, personal hazards, repertoire, competition, job context, injury and illness, and exposure to criticism (Vervainioti & Alexopoulos, 2015).

Most performing musicians teach or work as a self-employed person in addition to their primary occupation, which signifies constant tran-

sitions among occupational roles (Bennett, 2009; Throsby & Zednik, 2011). Being a self-employed musician in culture is especially stressful (Mills, 2004). The multifaceted nature of professional identity challenges music performers with a number of professional demands in the organizational, interpersonal, and personal domains (van Selms et al., 2023).

The impact of physical demands on the physical health of performing musicians has been extensively studied (Ackermann et al., 2012; Gembris et al., 2018; Kok et al., 2016; Rickert et al., 2013). It has been found that the musical performer profession is extremely demanding and that the fear of physical injury and actual physical injuries resulting from occupational overstrain are significant sources of stress.

Interpersonal relationships, which are many and varied (with colleagues, management, the audience, the media, etc.), also significantly contribute to these musicians' experience of stress. A harmonious work environment has been found to have a significant impact on job satisfaction in musicians (Dobson & Gaunt, 2015; Lim, 2014), thereby reducing stress. In the personal domain, the main sources of stress tend to be perfectionism and coping with performance anxiety (Kenney, 2011).

Most of the research that has examined stress in musicians has focused on stress in orchestral musicians (Bartel & Thompson, 2021; Gembris et al., 2018; Lipovšek, 2017; Parasuraman & Nachman, 1987; Persson, 1994; Piperek, 1981; Schmale & Schmidtke, 1985; van Selms et al., 2023; Steptoe, 1989). Steptoe (1989) has found that as many as 21 of 65 members of British orchestras experienced high levels of performance anxiety. Persson (1994) observed in his research on the occupational stress in orchestral musicians that the most frequent reported stressors were concert performances, group and individual practices, playing in small ensembles, irregular working hours which often conflict with family life, teaching, and high concentration during concerts which consequently causes sleep disturbances.

Piperek (1981) and Steptoe (1989) have concluded that musicians reported among the stressors they experience in their profession the fear of making mistakes, the fear of a decline in their musical skills with age, anonymity in a group of people, tensions between orchestra members, conductor's incompetence, and the inability to influence the choice of a musical programme. Schmale and Schmidtke (1985) report that among 1,800 German orchestral musicians, 28% experience sleep disturbances, 52% are sensitive to weather changes, and 58% experience various problems related to the music profession. Often, various personality dis-

orders and addictions develop as a result of the stressful nature of the music profession. Ostwald (1987) and Ostwald and Avery (1991) have presented a number of case studies of such disorders and suggested adequate treatment methods.

Parasuraman and Nachman (1987) had 65 orchestra members complete a questionnaire concerning the importance of various factors in commitment to the orchestra and involvement in the music profession. The predominant factors of commitment to the orchestra were higher age, and the conductor's consideration and support. The main determinants of professional involvement were full-time, regular employment, and individual involvement in work. Stress has reduced both types of involvement and prompted strong thoughts about quitting. The recommended actions to reduce stress were organizational interventions, improvement of the conductor-musician relationship, and the strengthening of work commitment.

Special symphonic orchestra advisors have emerged to assist in managing various stress factors within orchestras. Their expertise encompasses resolving conflicts in the conductor-musician relationship, addressing disputes among different orchestral sections, alleviating dissatisfaction with the programme director, and navigating situations where orchestra members are considering accepting alternative job offers (Gabrielsson, 2012).

Even pop musicians perceive their lives as highly stressful. In addition to performance anxiety, they identify the following stress factors: too much work, sleep deprivation, strenuous travel (touring), social isolation during touring, tension between professional obligations and social engagements, occupational insecurity, fear of competition combined with feelings of self-doubt and depression, conflicts with other band members, managers and record companies, and drug addiction (Raeburn, 1987).

Lastly, let's turn our attention to the experience of stress in music academy students. Interestingly, very little research has been produced in this area. The focus of most of them has been on the main stressor, performance anxiety, with a noticeable shift towards examining flow and psychological well-being in the last few years.

Wesner et al. (1990) reported that 21% of music students at the University of Iowa School of Music experienced noticeable pre-performance stress, 40% experienced moderate stress, 9% of students often avoided performance opportunities due to anxiety, and 15% of students sought professional help. Music students reported performance anxiety, over-

load, depression, and impatience with professional progress as common stress factors (Step toe, 1989).

Tuula Jääskeläinen (2022) states that research on stress in music students is still scarce, with the exception of the most commonly reported stressor, performance anxiety. Bernhard (2007) observed that the most common sources of stress in music studies are performance anxiety, perfectionism, and career challenges. Music students also suffer from painful musculoskeletal conditions and other health problems related to the study of music (Ginsborg et al., 2009), but there are also reports of differences in experienced stress, particularly between genders, and in mood, physical tension and somatic symptoms among music students studying under various programmes (Zetterberg et al., 1998). A major recent stressor for the music students was the Covid-19 pandemic, as it caused sudden and unexpected changes in their learning circumstances (Habe et al., 2021) and in the habits and behaviours of music students in their daily lives (Rosset et al., 2021). In music studies, workload is often associated with negative consequences that can be caused by difficult or unmanageable study situations. Such consequences are, for example, burnout (Bernhard, 2007) and mental illness (Koops & Kuebel, 2021).

3.2 Stress During the Various Stages of Preparation for the Musical Performance

When identifying musical performance stress, consideration is usually focused exclusively on the actual musical performance. However, the experience of stress regarding a specific performance is a consequence of the entire preparation for the performance. If we focus solely on the performance, we can quickly lose sight of the more subtle preparatory aspects of performance and how they relate to stress and tension.

Performing musicians understand that even practice and preparation for performance involve physical and mental burden. An individual's frame of mind during practice has a profound impact on their thoughts, emotions, and feelings on stage. Practice is not only the sharpening of technical and interpretive skills: it entails the formation of beliefs, behavioural patterns, emotions, and certain tensions in the body (e.g. tension in the arms, tension in the neck muscles) associated with the music. The perception of stress therefore needs to be focused on the circumstances and manner of the performance preparation. The quantity and quality of practice affect our performance sensations. If the strategy of practice and of performance preparation cause physical and men-

tal burden, the performance of the piece played in such circumstances will reflect this tension.

In order to make reasonable and realistic assessments of performance stress, it is essential to consider the performance preparation as a whole. From a psychological perspective, each phase of performance preparation contains situations that can trigger tension, stress and anxiety (Kohut, 1992):

Phase 1: decision to perform

Effective coping with performance-related stress has to begin before the performance itself. Important factors that need to be acknowledged here are the selection of musical pieces we intend to perform and the reasons for this selection. Individuals generally have the freedom to choose the pieces they want to perform. However, the selection can also be fixed (competitions, auditions). When choosing the piece, the performer needs to consider the importance of choosing one that aligns with their skill level. It is of key importance that the performer likes the piece they intend to perform. While the choice must certainly be at least partly adjusted to resonate with the audience's tastes, the foremost consideration must be the performer's own perspective, as the interpretation is fundamentally shaped by it. When choosing a programme, the performer should be aware of their motives and follow them. Neglecting to do so can make the mental and physical strain of practice increasingly difficult to withstand. If the performer is strongly influenced by the opinions of others, a number of potential stressors can arise already during the performance preparation.

It is essential to maintain a sense of control in order to cope with stress. If the performer feels that they can manage the situation, the perceived stress is considerably lower. From this standpoint, performing is stressful, since the performer believes that there is no other option but to perform. This thought of theirs is untrue. Performing is their decision, as is (usually) the choice of programme. If they acknowledge their active role in the performance, as well as their ability to choose, they can greatly undermine the power of potential stressors from the very first step.

Phase 2: active psychomotor preparation for a performance

Performers differ considerably as to their preparation for performances. What is effective for one person may be ineffective for another. The prac-

tice method depends on the individual, but also on the type of piece and on the performance.

Miklaszewski (1989) identified three phases of performance preparation, based on interviews with ten prominent Moscow pianists:

1. mental imagery development phase, which occurs in the light of all previous musical knowledge (acquiring knowledge about the music and developing ideas on how a piece should be performed)
2. technical skills training phase (tacking technical problems)
3. comprehensive preparation phase (combining the previous phases with experimental practice which results in the final version of the piece performance)

One has to distinguish between learning a piece of music and learning to perform it.

During active psychomotor preparation, musicians often practise elements they will never perform (typical examples being scales and études).

Learning to perform a piece is extremely important, but often not sufficiently focused on by musicians. Learning a piece is forming an internal, mental image of the piece and information related to it (Sloboda, 2005). Once all this is internalized, a “cognitive map” is created, which we use to find our way within the piece. The more data there is in the “cognitive map”, the less we have to rely on the notation. With practice, the cognitive map is gradually developed and enriched, which enables increasing reliance on these internal mental images. One of the most stressful situations for a musician is performance by heart. To avoid this problem, performers and music educators have developed various memorization techniques over the years (Gabrielson, 2012). Many find it easiest to gradually reduce their reliance on notation. Whereas it is common in some to move directly from playing by notation to playing by heart, others find this too difficult and learn by heart in stages, using a variety of strategies. Internal images of a piece can be formed auditorily, visually, or kinaesthetically (Sloboda, 2005). Reading a piece from the notation provides the basis for a visual mental image of the music. But this presentation alone does not provide us with enough information on the sound of the piece. We also need audible information. However, since music conveys emotional messages, it is also important for effective interpretation to cultivate a kinaesthetic mental image. This process involves perceiving touch and movement within the music, as well as the other sensations that the music evokes in us. Mental images in the cognitive map are usually of all the listed sensory origins.

Phase 3: mental preparation for a performance

Effective preparation for a performance does not end with learning the piece. With the latter, the performer acquires a precise internal mental image of the music, so that they are able to perform the piece fluently, often even by heart. Yet, learning a piece of music is a process of complete assimilation of the piece, with the performer adding their own distinctive qualities. The performer influences the piece, and the piece influences the performer through its intrinsic properties. The former is a case of assimilation, the latter of accommodation. It is therefore evident that both, assimilation and accommodation, are needed for the successful performance of a piece.

Learning a piece is a process of encoding information (Sloboda, 2005). One of the main criteria for determining the degree of absorption of the information contained in a piece of music is the ability to perform it. We should bear in mind that performing and playing are essentially two separate activities. Regardless of how well we have learned the piece, we cannot yet presume that we are fully prepared to perform it. This is due to a number of psychological reasons. Firstly, there is a big physical and mental difference between the state of practice and the state of performance. During practice we are usually relaxed and physiologically balanced, but when we perform, our physiological balance is disrupted, leading to an atypical sensation. The difference between the two situations is significant enough to shift our attention to a different bodily response rather than to the music itself. Moreover, the skills required to perform are quite different from those required to practise. Although there are many approaches to learning, most musicians typically start with analytical practice. In contrast, performance requires an integrated approach. Musicians often claim that one has to simply surrender to the musical performance. However, performers are finding this difficult. There are four possible reasons for excessive analyticity in performance (Salmon & Meyer, 1998).

- (1) The performer usually perceives the performance situation as threatening and therefore tries to control it. The performer believes that if they are sufficiently focused and careful, they will avoid potential mistakes.
- (2) One of the reasons for this is the fact that the musician invests a greater amount of time in practice than in performance, so they apply the analytical style that prevails in practice to the performance itself.
- (3) Lack of self-confidence is also an important factor in over-analytical performance., not only in the sense of relaxation and openness during performance, but also in the sense of the presence of these personality

traits in everyday life. If one tends to be suspicious of others, cautious, inward-oriented, in short, wanting to control things in their environment, one will also have considerable difficulties in relinquishing control during a performance. (4) Another important factor here is the extent to which we are able and to which we allow ourselves to experience various emotional states in our daily lives, for example sadness, joy, or anger, since the performance setting usually arouses extremely strong physical and mental sensations. For a person struggling to manage strong emotions in everyday life, this burden will be too heavy. Since almost every performer is affected by at least one of these factors, mental preparation for performance is all the more important. Preparation strategies should impact particularly self-trust and self-confidence by boosting them.

Playing in front of an audience is one of the ways to prepare oneself mentally for a performance. In this context, the performer should gradually approach realistic circumstances and increase the complexity of the performance, with consideration to the size and status of the audience. First such performances are organized in front of a smaller, more familiar, domestic audience. Later we gradually approach the characteristics of the specific performance for which we are preparing. If possible, we should also hold one of the preparatory performances in the same venue as the actual performance.

Salmon and Meyer (1998) state that the following techniques, individually or in combination, can encourage the increasing complexity of the performance setting: gradually increasing the audience size, gradually increasing the audience status, using audio or video recordings of the performance, performing the piece by heart, and performing in situations that are as similar as possible to the setting in which the main performance is to be performed. It is also recommended to use a performance assessment sheet, as it allows the performer to systematically monitor their progress. Keeping a performance assessment report equips them with a sense of readiness and supports their self-confidence. It is crucial to allocate time following each performance to thoroughly complete the performance report, since it provides the performer with useful feedback. Another effective tool is the subjective/objective assessment/plan (SOAP) self-assessment scale (Salmon & Meyer, 1998), since the feedback obtained provides the grounds for planning the next steps. When setting goals, we need to be as precise as possible.

Research in developing public performance skills has identified the therapeutic value of non-threatening, friendly audiences, accurate feedback as constructive criticism, gradual exposure to anxiety-provoking

performance settings, and of guaranteed success during initial performance practice (Kohut, 1992).

The controlling of destructive thoughts occupies a special part of the mental preparation for a performance. These are unwanted, usually negative thoughts that disturb our attention and are mostly unpleasant. They focus on danger, mistakes, and other threatening, unpredictable things. They focus our attention on irrelevant stimuli. The most troubling aspect of disturbing thoughts is that they are difficult to control. A plan to cope with destructive thoughts has to account for the need to develop increasingly task-oriented behaviour. Some people find it helpful to simply say “stop” every time an unwanted thought arises and thus gradually eliminate them.

In addition to the stated factors, there are also those which mainly concern pre-performance readiness (Salmon & Meyer, 1998) and thus influence performance success: the use of mental imagery to practice without instrument, the simulation of performance setting through prior systematic planning, prior exposure to the circumstances of the actual performance, and perception of the performance as a positive challenge (Salmon and Meyer, 1998).

Phase 4: musical performance

As the performance approaches, the performer begins to feel changes in their sensations, thoughts, and behaviour. These changes begin a few days before and intensify until the performance itself. For most, they disappear as soon as the performance begins, but for some they escalate during the performance and linger as feelings of tension even after the performance. Most performers feel completely drained after their performance.

The time immediately before taking to the stage and the beginning of the performance are particularly stressful. This is when the performer experiences the greatest possible stress and tension. Many performers, professionals and amateurs alike, describe the pre-performance experience as “frightening”, “overwhelming”, and even “terrifying”. Such subjective reactions are mainly a response to the dramatic physical and mental changes that accompany the anticipation and experience of performing on stage. Curiously, such sensations are experienced even by seasoned performers before a performance, even though they have never experienced the anticipated catastrophic consequences. The changing part seems to be the interpretation and the consequences following these sensations. Effective and experienced performers are more aware

of their own physiological changes prior to performance. They cope with them and experience less anxiety (Salmon, 1990). Over the years, they develop a number of coping strategies to manage stress. Their purpose of these strategies is to reduce over-stimulation, increase concentration, and harness excess physical energy.

3.3 Pre-Performance Excitement as the Main Stressor in Musicians

Pre-performance excitement is most directly related to musical performance success, or is most frequently reported by musicians as problematic. After many years of using the clinical term performance anxiety, and after numerous discussions with music performers, as well as based on a review of a number of research studies, I have concluded that it is more appropriate to refer to the sensations felt before walking on stage as pre-performance excitement, rather than as stage fright, performance anxiety, or fear of performing. The importance of adequate naming of the psychophysiological state prior to performance has been alerted to in performance psychology by Alison Wood Brooks (2014), who has argued that naming determines the mindset, either towards a growth or a fixed direction (Dweck, 2016). The pre-performance sensation that envelops the performer before stepping onto the stage is at its core devoid of any connotation. However, as soon as this psychophysiological sensation is framed within the context of stage fright, performance anxiety, or fear of performing, an *a priori* negative emotional connotation emerges, affecting the physiological and emotional charge which could otherwise serve as an additional potential for optimal performance. This potential manifests itself as the performer's inner light, which ignites them, so that they radiate it into their surroundings and pass it to the audience. Therefore, even top performers report experiencing pre-performance excitement; however, they have learned through experience to evaluate it positively and to regulate it appropriately using adequate strategies if the excitement happens to be excessive or insufficient (Braden et al., 2015; Clarke et al., 2020; Juncos & Markman, 2016; Kenny et al., 2014).

But what are the primary reasons that cause pre-performance excitement to often overwhelm the performer, rather than being effectively managed by them? In general, we can trace the origin to internal sources, namely the feelings of personal competence and perfectionism, the core of which lies in the fear of making mistakes, as well as to external sources, such as social evaluation and concern about what parents, teachers, peers, and the audience will say—in short, what others

will think (Kenny, 2011). Curiously, research over the past decade has increasingly indicated that internal factors are more prevalent, with the fear of one's own fallibility outweighing the fear of social evaluation. It is therefore not surprising that even top performers, regardless of their outstanding musical achievements and the positive reactions of social stakeholders, still feel that their performance is not quite exemplary enough and face performance anxiety. The most common and entirely normal physiological response present in almost every performer before walking on stage includes symptoms such as an increased heart rate, stomach tension, shallow breathing, and tremors. It is important to note that different groups of musicians experience different symptoms; for instance, wind and brass players may experience dry mouth, while string players may face sweating and hand tremors (Kenny, 2011). Subsequently, cognitive and, in extreme cases, behavioural responses are layered onto these primary responses. This initiates a vicious circle where, upon the performer's arrival on stage, mental or behavioural cues can activate an associative physiological response as a conditioned reflex.

While there is an inverted U-curve relationship between physiological symptoms and performance, meaning that we perform best when we are optimally physiologically excited, the relationship between performance and mental symptoms is inversely linear, meaning that the fewer distracting thoughts we have, the better we perform. Hence, the problem lies in our mental interpretation of a perfectly normal experience of pre-performance excitement as either positive or negative. The first step is therefore for the performers to become aware of their unrealistic expectations and desires to prevent pre-performance excitement from manifesting. The latter needs to be brought into awareness, accepted as a welcome performance companion and, in the case of under/over-activation, use coping strategies such as various breathing techniques, visualization, autogenic training, progressive muscle relaxation, or a number of physical techniques (the Alexander Technique, Feldenkreis method, Body-Mind Centering, etc.). It bears emphasizing that these techniques should be practised daily, and that the performer should use minor performances to try out what works best for them personally. In certain countries where music is driven by high productivity demands the pharmacological approach involving the usage of betablockers is still widely applied. Recently, there has been a growing recognition of the pivotal role teachers play in this context, highlighting the importance of providing them with training in the approaches of the Acceptance and Commitment Therapy (ACT). Another common approach is performance coaching, which is problem-oriented and operates mostly on the surface

level. If the causes are deeper, the performers experiencing them can benefit from psychotherapeutic counselling. Considering the extensive scope of preventive and curative strategies, I intend to dedicate a separate volume in the form of a handbook to this subject, and publish it in the near future. To begin with, it is crucial to clarify our attitudes toward performance. We should reflect on our motivations for performing, consider what we aim to communicate to the audience through our music, and identify opportunities to incorporate our unique “performer signature” to the performance.

So, what are the factors that influence the degree of pre-performance excitement, and what triggers the onset of musical performance anxiety (MPA)—the pre-performance state encompassing both physical and mental symptoms, which may lead to psychosomatic responses at the behavioural level? It is possible to recognize a greater personality inclination towards experiencing MPA in certain individuals based on their genetic structure. These are the individuals who are more likely to experience anxiety or social anxiety as personality traits. It has also been found that MPA is stronger in individuals with lower self-esteem and considerable perfectionist tendencies. In terms of gender, most research suggest that MPA is more pronounced in women; however, it is noteworthy that psychophysiological studies utilizing direct physiological measurements—such as heart rate, psychogalvanic reflex, and breathing depth—have revealed no significant differences between genders or have even indicated that the physiological symptoms are more pronounced in males. This would suggest that women tend to be more self-reflective and more aware of their own feelings, which results in a more intense psychological experience of MPA. Differences as to the instrument group were also found: percussionists and brass players were reported to experience the lowest amount of MPA, while singers, woodwind players, and string players were reported to experience the highest amount of MPA. Studies have also found that musicians who begin performing at an early age experience less MPA than those who begin performing later in life. Another interesting observation is that MPA appears not to dwindle with years of experience. It is rather the performer’s experience of MPA that undergoes positive changes. With regard to age, it appears that MPA becomes most pronounced during puberty. The reasons for this can be found in the increased hormonal fluctuations, enhanced self-awareness during the development of personal identity, and in the capacity for hypothetical reasoning, which emerges during the abstract thinking phase. The intensity of the MPA is also influenced by external factors, such as the size of the audience, the number

of performers on stage, and the formality of the performance. It has been found that MPA increases with the size of the audience and the formality of the performance, but decreases with the number of performers on stage. Research has also revealed that MPA is most pronounced among classical musicians, considerably less so among jazz musicians, and least pronounced among entertainment musicians.

Ultimately, it is best to harness the pre-performance excitement to be able to experience flow, to which I will dedicate one of the following sections.

3.3.1 Performance Anxiety

Performance anxiety, also known as fear of performing, is a situational form of anxiety stimulated by social exposure during performance. It is not tied exclusively to performance; it can occur in any performance-related context where the performer is exposed to social evaluation, e.g. public speaking, sport, acting, or dancing. Performance anxiety was only recognized as a clinical disorder in the Diagnostic and Statistical Manual of Mental Disorders in 1994, when it was briefly mentioned as a form of social phobia (American Psychiatric Association, 1994). In the latest version of the classification of psychological and psychiatric disorders in the DSM-5 (American Psychiatric Association, 2013), it is listed in the chapter on social anxiety. Most musicians do not experience performance anxiety as a mental disorder, but the condition needs to be addressed and treated appropriately if the symptoms are so disturbing that they have a recurrent negative impact on performance success.

Dianna Theadora Kenny (2011) defines MPA as a persistent disruptive apprehension related to musical performance. She stresses the need to distinguish between MPA and social anxiety (2016). She argues that the definition of MPA should be based on a threefold typology: (1) severe MPA as a focal disorder in an otherwise healthy musician, (2) severe MPA as a manifestation of social anxiety, and (3) severe MPA as part of a more complex psychopathology, where affected individuals may suffer from an extreme combination of emotional, cognitive, and somatic anxiety, along with serious problems relating to selfhood and self-esteem (Kenny, 2011).

The occurrence of MPA among musicians is difficult to assess due to three reasons:

(1) inconsistencies in the naming of the phenomenon, (2) inconsistencies in methodological approaches (Matei et al., 2018), and (3) the inclu-

sion of various populations of musicians. The occurrence of MPA varies from 16.5% to 60% (Fernholz et al., 2019).

3.3.1.1 Individual and Contextual Differences in Experiencing MPA

Dianna Theadora Kenny (2011) has summarized the findings of numerous studies that confirm the occurrence of MPA regardless of age, gender, level of musical ability, experience (Boucher & Ryan, 2011; Brugués, 2011; Dempsey, 2015; Habe & Kržič, 2017; Hendricks et al., 2014), and the impact on both professional musicians and students (Braden et al., 2015; Clarke et al., 2020; Juncos & Markman, 2016; Kenny et al., 2014). MPA is generally more intense when the performer is being evaluated and the fear of failure is present, but it can occur in absolutely any performance situation (Kenny, 2011). Many top classical performers of world renown struggled with MPA, e.g. Martha Argerich, Maria Callas, Enrico Caruso, Frederic Chopin, Vladimir Horowitz, and Sergei Rachmaninoff.

MPA is shaped by both individual and contextual factors. It appears to involve a combination of genetic factors and the learning environment (Figueiredo Rocha, 2021). Certain personality traits are thought to predict MPA, and a number of studies report that it has a meaningful positive correlation with anxiety as a trait (Cox & Kenardy, 1993; Habe, 1998; Kenny et al., 2004; Kokotsaki & Davidson, 2003; Osborne & Kenny, 2008; Smith & Rickard, 2004; Wiedemann et al., 2019) or that neuroticism (emotional lability) predicts MPA (Miranda, 2020; Smith & Rickard, 2004; Steptoe, 1989). Sadler and Miller (2010) report that negative emotional states predict over half of cases of MPA in performers. The connection between MPA and social anxiety has also been extensively documented (Nicholson et al., 2015; Dobos et al., 2019; Kenny, 2011; Nicholson et al., 2015). A number of authors have confirmed a link between MPA and concepts of self-evaluation, such as self-esteem and self-efficacy, which is particularly true for music students (Dobos & Piko, 2017; Habe, 1998; Schröder & Liebelt, 1999). Bianka Dobos and Bettina Franciska Piko (2017) have found that self-esteem and self-efficacy are protective factors in terms of prevention against MPA. The latter is thought to also be related to self-representations (Castiglione et al., 2018; Schnare et al., 2012; Varvarigou et al., 2014). Claudia Castiglione et al. (2018) report that higher levels of MPA are associated with a higher discrepancy between current and future self-representations of musical self in professional musicians.

An important factor that often contributes to MPA is perfectionism. Patston and Margaret S. Osborne (2016) have examined the predictive role of perfectionism in MPA from a developmental perspective. They found that correlations between perfectionism and age consistently exhibit a strong, positive, highly significant link to MPA between the ages of 10 to 17, particularly in terms of concern about making mistakes. They also found that this link increases with years of experience. Bianka Dobos et al. (2019) found that four out of six subscales of perfectionism significantly predicted MPA, among which parental criticism and doubts about actions were positive, while parental expectations and preference for organization were negative predictors. Similarly, Sintija Leva Bukovnik (2018) confirmed the existence of a significant connection between MPA and perfectionism among Slovenian musicians; namely, a negative connection between MPA and personal standards, and a moderately positive connection between MPA and doubts about performance, expectations, and parental criticism.

With regard to gender, most studies confirm higher levels of MPA in women at all developmental stages (Brugués, 2011; Habe, 1998; 2002; Habe & Kržič, 2017; Nolen-Hoeksema, 2012; Kenny, 2008; Yondem, 2007). However, it should be noted that studies using physiological metrics have not confirmed differences in MPA (Abel & Larkin, 1990; Ryan, 2004).

In contrast to individual factors, there are many contextual factors for MPA, including the size of the audience, the nature of the performance (competition, audition, concert), the type of performance (rehearsal, solo/group performance), the musical genre, the instrument played, and previous performance experience. Research studies indicate an increase in MPA with audience size (Broughton, 2015; Endo et al., 2014; Habe, 1998; Kwan, 2016). Competitions induce higher MPA (Michiko et al., 2009; Papageorgi et al., 2007), while solo performances induce higher MPA than group performances (Habe, 1998; Goren, 2014; Nicholson et al., 2015). Nicholson et al. (2015) found that social anxiety predicts MPA in both practice and performance settings, while the fear of negative evaluation predicts MPA in practice and in solo and group performance settings. Some studies have suggested that MPA varies depending on the instrument played (Iuscă & Dafinoiu, 2012; Kemp, 1996; Manning, 2013). Dorina Iuscă and Dafinoiu (2012) have found that string players and singers experience significantly higher MPA than pianists, woodwind players, and brass players. Manning (2013) reports the highest levels of MPA in woodwind players and the lowest in brass players and percussionists. He also notes that different instrumentalists

experience different symptoms: hyperventilation is common in woodwind players, sweating in brass players, cold hands in string instrument players, and muscle tension in percussionists.

Classical musicians report the highest levels of MPA compared to jazz and entertainment musicians (Leva Bukovnik, 2018; Murko Feguš, 2016; Papageorgi et al., 2011). While some studies find that MPA decreases with experience (Biasutti & Concina, 2014; Habe & Kržič, 2017), others find that more experience entails more responsibility and thus a higher MPA (Kirchner, 2003), probably as a consequence of increased perfectionism (Kenny, 2011; Patston & Osborne, 2016). Numerous studies confirm a high level of perfectionism among professional musicians. (Patston, 2010; 2014).

3.3.2 Flow

Flow is a multidimensional state of consciousness that occurs when one feels that they have enough ability and control to perform an activity which is important to them (Csikszentmihalyi, 1990). While experiencing flow, one is fully engaged in the activity and focused on performing this enjoyable and satisfying activity (MacDonald et al., 2006). Flow arises when an activity offers just the right challenge for the performer to somewhat expand their own performance capacities (Chirico et al., 2015); the performer in this case is internally motivated by the quality of the experience they are having.

Csikszentmihalyi (1990) defined the experience of flow in nine dimensions, the first of them being the balance between abilities and challenges mentioned in the previous chapter. The next dimension is one I have already mentioned, namely the fusion with performance. This is followed by clarity of goals, whereby one has clarity about what they want to achieve by the activity and strategically plans to achieve it. The next dimension is the unambiguity of feedback, which the musician recognizes directly from their performance or from the audience's reactions, which means that the feedback follows immediately after the performance. Total focus on the task is another dimension, and one I have previously addressed, as it involves complete engagement with the here and now and the activity at hand. The next dimension is the sense of control, which seems somewhat paradoxically at odds with the dimension of reduced level of self-awareness. In essence, a sense of control emerges as a result of superb performance preparation, allowing the performer to completely surrender to the musical activity and thus, in a way, lose self-awareness. It might be worth considering renaming this dimen-

sion, since it actually concerns the loss of one's own control. The dimension describing a transcendental value is the altered experience of time. It is when time seems to pass slower or faster, and to, the perception of some, it even stops. The final dimension is autotelic experience, which I have also previously addressed: it is a key motivational component which prompts one to perform a task during which one experiences feelings of internal satisfaction.

Flow in music has been studied in a variety of contexts: during listening to music, performing various musical genres, teaching music, during musical improvisation, and composition (Habe et al., 2019). It is a frequent phenomenon in musical performance (Habe et al., 2019; Sinnamon et al., 2012). Musicians describe it as an ecstatic state in which music emerges spontaneously; a mysterious sense of harmony between the body and the mind. When they manage to perform a piece optimally, they experience a kind of trance. Flow seems to be instrumental in achieving the highest levels of performance, performance being musicians' way of unending creative exploration and discovery. Hence, every music performer strives to approach or reach this optimal performance state as often as possible. Flow can be a predictor of emotional aspects of well-being in musical performance (Freer, 2009).

It is a mental state containing cognitive, physiological, and affective aspects and coincides with a peak psychophysiological state (Biasutti, 2017). Performers experiencing flow report that their performance requires a high level of focus. They are completely absorbed in the activity occupying their attention (Sinnett et al., 2020), encountering a sense of optimal experience and deep internal satisfaction (Csikszentmihalyi, 1990).

Flow is also a predictor of quality music practice (Chirico et al., 2015). The learning of an instrument/singing requires the acquisition of fundamental skills relating to musical performance, and musical success requires an infinite amount of time and dedication to practice, enabling the musician to reach high standards of excellence. Performance skills need to be carefully honed through motor learning mechanisms, which include both mental and physical practice. Musicians spend hours on end completely absorbed in practising a piece, which is characteristic of flow (Sawyer, 2015). A performer has to avoid time loss and distractions that break concentration and prevent the emergence of flow. (Biasutti, 2017).

Being in the flow is being in a state of complete absorption, of complete engagement in the musical performance, it is when we lose the

sense of space and time, when we are simply in the moment, here and now, when a sense of something sacred/transcendent emerges, when we merge with the music, merge with the audience into one, when we are in a state of a kind of superconsciousness, when we gratefully experience a profound grace of being able to channel the beauty of the music, which is inviting also the others into its world. It is a sense arising where the words end and the music breathes with the creation. In a state of flow, we return to the original functions of music, which are to connect, communicate, and heal. Flow is a state of optimal performance, which is usually experienced only for a brief time. It is the most beautiful reward for our engagement with music, and it evokes a self-rewarding (autotelic) feeling. It is what Maslow referred to as peak experience. Some authors also refer to flow as being in a Zone, which is an optimal performance space.

The author who introduced the concept of flow is Mihaly Csikszentmihalyi, who recognized the existence of this optimal state of performance in his study of creativity. He found in his research that interviewees often reported a state of complete immersion in a creative activity, which he labelled as enthusiasm. In a state of enthusiasm, one is fully harnessing one's own potential, and is internally motivated to perform the task, with a reduced sense of self-awareness and of time. A requirement for experiencing flow is an appropriate balance between abilities—to which I would also add personality traits—and the complexity of the performance. No matter the extent of a musician's musical abilities, skills, and competences, it is their personal structure which guides the realization of their musical abilities in the context of performance. Thus, someone with superb musical skills but anxiety prone personality may require lower performance challenges than someone with a different personality structure. When seeking a balance in musical performance, we also need to consider the psychological readiness to perform. This is because, for example, if a performer cannot concentrate properly on stage, if they cannot regulate their level of physiological excitement, then the difficulty of the musical performance will need to be lowered accordingly.

The performer achieves optimal performance delivery through intense absorption and concentration (Biasutti, 2013). When a musician is in the spirit of flow, they focus only on the creative moment and, when performing optimally, report that they have managed to overcome their cognitive limitations. The state of flow increases the level of expression and imagination, and the musicians feel comfortable enough to dare to experiment with new musical ideas (Biasutti, 2012; 2015a; 2015b; 2015c).

Another important requirement in musical performance is the ability to interact with the audience, which involves transferring the results of musical practice to a concert setting. Flow can arise during practice or during a concert, with live performance before an audience as the factor of facilitation and promotion of the conditions to experience flow (Biasutti, 2017). Performers play best when they have an audience, because the concert situation stimulates multi-layered processes of engagement with the audience in a transcendent experience. The concert context and the audience can stimulate the experience of flow and inspire the performing artist. The joint immersion in the musical experience with the audience during a live performance amplifies the experience of enthusiasm. In spite of this, it is difficult to predict the on-stage occurrence of the flow, as it depends on many factors. A contrasting effect not to be disregarded here is that of the pressure of performance anxiety, which reduces the likelihood of experiencing flow.

3.3.2.1 Individual and Contextual Differences in Experiencing Flow

Csikszentmihalyi (1990) states that, although it is difficult to control and direct the conditions for the experience of flow, the greatest progress can be achieved by developing the right mindset. Internal motivation can be a key requirement to enter a state of flow, while self-confidence and a certain level of concentration can help to sustain it.

A number of external and internal circumstances can disrupt the onset of flow. External circumstances are contextual aspects and negative environmental factors, whereas internal circumstances are, for example, anxiety and impatience. A hectic and loud environment can interfere with the concentration needed for flow. Weather conditions such as wind or rain can hinder outdoor performances. If one doubts one's own abilities, anxiety develops. Impatience affects concentration.

However, certain conditions can encourage flow. The surrounding social environment can offer the performer the right stimulus for optimal performance (Tan & Sin, 2019). It is also important to have enough time to prepare for the performance. Musicians need to develop an awareness of themselves and their skills in order to develop their capabilities. The connection with the body needs to be developed in accordance with the current interactive and embodied approaches to human cognition (Schiavio et al., 2019; Schiavio et al., 2020). Although there are individual and contextual differences, we can use a variety of strategies to deliberately induce flow, improvisation being one of them. Improvisation stimulates

playfulness and inhibits analytical processing, which facilitates the onset of flow (Biasutti & Frezza, 2009).

3.4 Resilience as a Strategy for Coping with Stress in Musicians

The concept of mental resilience is commonly used to discuss how an individual (or group of individuals) withstands important stressors or challenges threatening their functioning, development, or well-being, or how they respond to them (Kegelaers, 2019; Masten, 2014). Research demonstrates that resilience reflects a psychological state that emerges over time and as a result of a dynamic interaction between the protective resources which can be divided into those related to personality (e.g. assessments of challenges, optimism, self-efficacy, commitment, etc.) and those related to environment (e.g. social support, psychological climate, etc.) (Bryan et al., 2019; Sarkar & Fletcher, 2014). Over the last decade, the construct of resilience has attracted attention of the performance psychology exploring education (Hartley, 2011), the military (Crane et al., 2012), police work (van der Meulen et al., 2018), sports (Kegelaers & Wylleman, 2019), and the visual arts (Siddins et al., 2016), among other areas. Studies in these areas suggest the role of resilience as an important psychological characteristic for the achievement of optimal mental health (Hu et al., 2015; Kegelaers et al., 2021). Margaret S. Osborne et al. (2014) found resilience to be a critical psychological feature of protection against the negative consequences of performance anxiety in musicians. Kegelaers et al. (2021) suggest that classical musicians may face an increased risk of mental health problems compared to the general population due to significant professional challenges and stressors, and that their mental resilience is a significant determinant in this matter. An important finding of their research was that symptoms of depression/anxiety as a consequence of occupational stress are relatively common in musicians. On top of that, music students had significantly more symptoms compared to professional musicians. Resilience and general physical health have been found to have a negative correlation with mental health problems. The results reinforce the need for further research into mental health issues in music students and provide preliminary evidence on the importance of psychological resilience in classical musicians.

3.5 Psychological Well-Being in Musicians

In the last several years, there has been a growing effort to promote musical performance success through deliberate and systematic enhancement of physical and psychological well-being in music students

and professional musicians. Mental preparation, an established and long-standing practice in sports, has only begun to be addressed systematically and more broadly in music in the last few years. It involves the development of programmes to help musicians optimize their mental skills and, consequently, achieve greater success and satisfaction (Williamon & Antonini Philippe, 2020).

Psychological well-being is a multidimensional phenomenon encompassing both emotional and cognitive dimensions of subjective experience, which is the result of individual evaluation of numerous aspects of life (Disabato et al., 2016). There are two orientations in research on psychological well-being: the hedonic orientation, centring on the individual's subjective well-being and its three main constituents, namely life satisfaction (cognitive component), positive affect and negative affect (emotional component), and the eudaimonic orientation, which defines psychological well-being more broadly and focuses on the experience of life meaning and on self-actualization (Musek, 2008). The factors that influence subjective well-being are genetic, motivational, emotional, and cognitive. The best predictors of subjective well-being in the area of personality are extroversion in a positive correlation and neuroticism in a negative correlation (Musek, 2008). The eudaimonic approach defines psychological well-being as a construct with six dimensions: self-acceptance, positive relationships with others, autonomy, environmental mastery, meaning in life, and personal growth.

The last few years have seen a growing exploration of the concept of well-being in music. Most of the research emphasizes primarily the negative aspects of well-being in professional musicians, particularly regarding their physical health (Matei et al., 2018). Studies reveal often insufficient adaptation strategies to achieve health (Antonini Philippe, 2013; Antonini Philippe & Güsewell, 2016). A growing body of research suggests that the specific stressors and demands faced by musicians in their professional domain are reflected in performance-related pain and physical discomfort, performance anxiety, and occupational stress, which can have a significant negative impact on musicians' well-being and present barriers to successful performance (Cruder et al., 2018; Williamon & Thompson, 2006).

The findings indicating significant levels of negative well-being in music students and in professional musicians have in recent years informed the intervention programmes designed to promote well-being in the music education environment, directed at conservatory and academy students (Ascenso et al., 2017; Ascenso et al., 2018; Matei & Ginsborg, 2022; Perkins et al., 2017). Roberta Antonini Philippe et al. (2019)

have found that music students should be directly encouraged to take care of their health and that an emphasis on the value of physical and psychological well-being at all levels is needed. Just like athletes, musicians need to focus more on building physical and psychological well-being from the very beginning of their education (Williamon et al., 2017).

The PERMA model, which reconciles hedonic and eudaimonic well-being and builds on positive emotions, engagement, relationships, meaning, and achievements, has also been tested in music performance psychology (Ascenso et al., 2018). It has been observed that all five dimensions of the model have a strong presence in professional musicians, the most prominent dimension being meaning.

A number of practically oriented research projects are currently underway, investigating pre-performance routines and efficient methods of acute stress recovery, with the primary aim of developing a programme to boost psychological skills for successful musical performance (Williamon & Antonini Philippe, 2020). The aim of such a programme is reportedly to improve musical performance as well as to increase the internal satisfaction and enjoyment of performing (Weinberg & Gould, 2007).

Some research studies on mental well-being have also been conducted on the Slovenian population of musicians. The three Slovenian studies focused on flow. According to the results, several dimensions of flow are positively correlated with measures of subjective well-being. (Smolej Fritz & Avsec, 2007). Two surveys were conducted comparatively among Slovenian athletes and musicians. In a study among top musicians and athletes, positive correlations were found between life satisfaction and all nine dimensions of flow, but only the balance between abilities and challenges predicted life satisfaction (Habe et al., 2019). Results of a research study conducted during the Covid-19 pandemic indicated that, in musicians and athletes alike, life satisfaction and study satisfaction, as well as positive and negative affect, can be predicted using the flow dimensions (Habe et al., 2021).

A review of the vast literature on the subject of musical performance success and optimal musical performance reveals that much has changed in this area in the last ten years. For several decades prior to this, sport psychology was ahead of the music psychology. Now, we are witnessing major advances in the research on the factors of musical performance success as a prototype example of one of the most complex types of performance, which also serves as a model for performance optimization in other professions (surgeons, pilots, etc.).

At present, there are three main trends in musical performance research: (1) from an elementarist approach of studying the elements of a successful musical performance to a holistic study of musical performance as an emotional and social phenomenon,

(2) from a focus on investigating psychological problems as barriers to achieving musical success to investigating factors that promote musicians' well-being, and (3) from a theoretical research orientation to a practical one in terms of designing interventions to optimize musical performance.

So what does the future hold? The listed trends will certainly also extend to music education, so that it will incorporate from the very beginning a holistic approach to planning a musical performance. This will enable teachers of instruments/singing to consider the whole musical self-image in their teaching, rather than just the academic and cognitive aspects which currently dominate the teaching. This will also boost student satisfaction and, consequently, motivation. The education of future teachers of instruments/singing will also include the acquisition of basic skills for successful mental preparation for performance, so that they will be able to help future students to preventively build the emotional and social competences needed to perform successfully. It will become increasingly important to recognize that the purpose of music education is not merely to sharpen musical skills, but to contribute to one's overall well-being and to benefit from transfer effects of active en-

gement in music. We will also witness an increase in inclusion in music education.

It is also professional musicians who will need a more deliberate and systematic engagement with various holistic well-being support mechanisms, given that the high market demands are increasingly causing them to burn out, develop depressive and anxiety disorders and, physically, a number of motor impairments.

A visionary look into the future of the music profession is actually a look into the past, into the evolutionary origins of music itself as a means of experiencing, connecting, and healing. I believe that we are entering a time when the holistic effects of music become its focus and music regains its role as a means of promoting well-being at all levels of one's functioning, be it physical, cognitive, emotional, social, or spiritual, and, consequently, as a means of promoting the well-being of society. The performance of music will transcend the boundaries of comparison and competitions and return to its original functions of inclusion and bonding. The path to achieve this is through the experience of flow—complete immersion, internal satisfaction, and motivation—while listening to, performing, and creating music.

I conclude this monograph with a thought by Slovenian composer Marij Kogoj: "There is nothing more beautiful and perfect in nature than music. It guides a person into the depths of their soul."

Thus, we musicians have an important mission, for we are the intermediaries who help music to enter the depths of the human soul, always bearing in mind that in this process we must first enter the depths of our own. We need to get to know it well, and manage it, too, in order to genuinely reach the audience with our music.

Music performance is one of the most demanding and complex activities, requiring a high level of physical and mental abilities, skills, and expertise from the performer. Successful musical performance is the result of a prolonged process of musical education, during which performance competence is developed and shaped with the support of teachers, as well as parents and peers. We differentiate between factors indirectly influencing the success of musical performance, as a result of the music educational process (e.g. musical abilities and talent, mental representation abilities, personality traits, motivation, self-regulation through practice), and factors directly impacting musical performance (such as audience influence, physical readiness, emotional readiness, and the performer's mental readiness). Based on a review of research in the field of musical performance success, it can be observed that in the last decade, research focus has shifted from examining problematic aspects (primarily dealing with performance anxiety) to exploring mechanisms for promoting holistic well-being among musicians (flow, resilience, passion, life satisfaction, self-efficacy, etc.). Two concepts often studied in relation to musical performance success and situated at two diametrically opposed experiential poles are performance anxiety and flow. In the first chapter of the monograph, we establish the theoretical foundations of the psychological constructs of success and performance. We define musical performance as one of the most demanding forms of performance, as it requires a conglomerate of various abilities, skills, personality traits, and motivation from the performer. Musical performance is paradoxical in that it combines numerous polarities into a whole: on the one hand, it demands complete concentration, while on the other, the musician must quiet mental control to enter a state of flow; on the one hand, it requires intense emotional immersion that is transmitted to the audience through performance, while on the other, it necessitates the regulation of these emotions to a level where they remain under control throughout the performance; on the one hand, motor automatization, on the other hand, the ability to control specific movements; on the one hand, the abili-

ty for individual introverted immersion into the world of the psyche, on the other, extroverted sharing of music with the audience. Challenges in reconciling these polarities are faced by young musicians when they step onto the stage; hence, it is not surprising that the psychological aspect of preparing for a musical performance is so important. Another challenge lies in the fact that the evaluation of musical performance is always subjectively biased. How then can success in such a complex field be defined? The experience of success depends greatly on the perceptions and criteria of each individual. Something that may inspire a sense of success in one person may not be particularly meaningful to another. Criteria vary greatly, ranging from internal factors (a sense of pleasure, flow, curiosity, or interest) to external factors (awards in competitions, successful auditions, good grades, or positive music reviews). It is generally true for musicians that they have extremely high criteria for success and are rarely satisfied with their performance; if they are, this feeling of satisfaction is very short-lived. The holistic success of a musical performance primarily stems from the ability of the musician to combine internal and external criteria for success. Each musician must ask themselves what musical success means to them and strive to achieve goals aligned with this definition on their career path.

In the second chapter of the monograph, we address the factors influencing the success of musical performance, categorizing them into indirect and direct factors. In the part on indirect factors influencing the success of musical performance, we deal with abilities, personality traits, performance self-esteem, self-efficacy, motivation, and self-regulation. We found that musical abilities can be divided into general and specific categories. We define them as universal and innate in human genetic potential, just like language abilities, for example. Above-average musical abilities manifest as musical giftedness, which, with appropriate environmental stimuli and individual motivation, individuals shape into musical talent. In addition to musical abilities, the ability to create mental representations is also crucial for musical success. The latter is closely linked to audiation, a fundamental universal musical ability representing the capacity to imagine sound without the actual presence of sound. Successful musicians also exhibit certain personality traits, among which openness, androgyny, originality, independence, self-motivation, perseverance, sensitivity, high capacity for interpersonal communication, need for attention, and anxiety stand out. In the interplay of experiencing one's own musical abilities and the personality traits of the musician, performance self-esteem is formed, which in its active form of self-efficacy enables the self-regulation of the musician. Self-regulation encom-

passes key (meta)cognitive and motivational processes and strategies that pave the way for changes in becoming a successful performer. Finally, we highlight the crucial role of parents and teachers in encouraging a child on their musical path.

In the following part, we focus on the direct factors influencing the success of musical performance. Initially, we focused our attention to the direct influence of the audience. We found that the size and formality of the audience impact the performance's success. The influence of these two factors, however, is indirect; they directly stimulate pre-performance excitement, which then affects performance success. The larger the audience and the more formal the performance circumstances, the greater the pre-performance excitement and the lower the performance success. On the other hand, audience size can also act as a facilitator of performance success, as seen in larger concerts where a collective flow is generated within the large social group of listeners, which transfers between the performers on stage and the audience.

In addition to the influence of the audience, we dedicate attention in this part to the physical, emotional, and cognitive regulation of pre-performance sensations in performers. It is necessary to note that all regulation strategies involve a blend of different levels, but we categorize them into three major groups based on the focus of each strategy. Furthermore, we emphasize that these are by no means all the pre-performance self-regulation strategies; rather, we present those most commonly practised in psychological performance preparation in the Slovenian context. Thus, in strategies for regulating physical symptoms, we focus on progressive muscle relaxation, the Alexander Technique, the Feldenkrais method, and the BMC method. Their essence lies in optimal body positioning during musical performance and establishing optimal muscle tone. This is followed by emotion regulation strategies, where we highlight various breathing techniques as the most commonly used and effective among musicians. We also introduce some techniques derived from cognitive-behavioural therapy, including cognitive reappraisal of pre-performance emotions, self-soothing, attention control in relation to emotions, emotional regulation therapy, emotional catharsis technique, goal setting strategies related to pre-performance emotions, and emotion regulation strategies based on the IZOF model. The essence of pre-performance emotion regulation strategies is to first accept that performance evokes a range of mixed emotions, with the most important aspect being our ability to regulate their intensity and transform them into interpretive quality of performance. It is important to keep our emotions in check so that they do not overwhelm us but are also

strongly present in the musical performance. The last level of pre-performance regulation focuses on thoughts. Practice shows that it is more effective in the psychological preparation of musicians for successful performance to first address regulation at the physical and emotional levels, with thoughts following changes at these two levels. The psychological mastery of top performers lies precisely at this level, where performers are able to skilfully direct their attention and concentration during performance, achieving a high level of mental fortitude where various physical or social distractors do not affect them.

As a fundamental strategy for regulating thoughts, we highlight mindfulness meditation training, and we also mention cognitive restructuring techniques and stop techniques derived from cognitive-behavioural therapy. For mental pre-performance regulation, musicians most commonly use the 3,2,1 VAK technique, which helps them train their concentration multisensorially. We conclude this part by emphasizing that regulating physical, emotional, and cognitive pre-performance sensations requires a strategic approach, enabling the performer to consistently prepare psychologically for various performance circumstances. This is a complex and demanding process that allows the performer to use certain techniques to stimulate automated optimal physical/emotional/cognitive responses shortly before or during the performance.

In the third chapter, we define the path from stress to psychological well-being. Initially, we paid a lot of attention to the stressfulness of the musical profession and education and found that active engagement in music brings numerous challenges. The profession of a musician is considered one of the most stressful, with sources of stress being internal or external. The most common internal stressors for professional musicians as well as music students are performance anxiety and perfectionism. External stressors mainly include career challenges related to competitiveness and financial problems. Performance-related stress occurs at various stages; it can occur well before an important performance, just before a performance, during a performance, or even after a performance. We identified resilience training as the most effective strategy for managing stress among musicians. However, just as the profession of a musician is stressful, it is also a source of inexhaustible psychological well-being. Engaging in music is intrinsically rewarding and falls into the category of self-actualizing activities that deeply fulfil individuals. While research shows that there is much more reporting on the effects of well-being in amateur music engagement, professional musicians also report high satisfaction with life and subjective well-being. Musical activities are among the most autotelic (self-rewarding) activities that

inspire individuals and bring feelings of internal satisfaction, motivation, and absorption in the activity. Flow, as a form of supreme feeling, brings deep meaning and enables transcendent experiences.

We conclude the monograph with reflections on the vision of the future of music and musical performance.

Glasbena izvedba je ena izmed najzahtevnejših in najkompleksnejših dejavnosti ter od izvajalca zahteva visoko raven izkazovanja fizičnih in psihičnih sposobnosti, spretnosti ter veščin. Uspešna glasbena izvedba je rezultat dolgotrajnega procesa glasbenega izobraževanja, v okviru katerega se razvija in oblikuje izvajalska kompetentnost s pomočjo podpore učitelja pa tudi staršev ter vrstnikov. Razlikujemo med dejavniki, ki na uspešnost glasbene izvedbe vplivajo posredno, saj so rezultat glasbenoizobraževalnega procesa (npr. glasbene sposobnosti in glasbeni talent, sposobnosti miselnega predstavljanja, osebne lastnosti, motivacija, samoregulacija z vadbo ipd.), in dejavniki, ki nanjo vplivajo neposredno (vpliv publike, fizična pripravljenost, čustvena pripravljenost, miselna pripravljenost izvajalca). Na podlagi pregleda raziskav na področju uspešnosti glasbenega nastopanja lahko ugotovimo, da se je v zadnjih desetih letih raziskovalni fokus preusmeril od preučevanja problematičnih vidikov (predvsem ukvarjanja z izvajalsko anksioznostjo) k iskanju mehanizmov za spodbujanje celostnega blagostanja pri glasbenikih (zanos, rezilientnost, strast, zadovoljstvo z življenjem, samoučinkovitost ipd.). Dva koncepta, ki sta na dveh diametralno nasprotnih doživljajskih polih in v povezavi z uspešnostjo glasbenega nastopanja preučevana najpogostejše, sta izvajalska anksioznost in zanos.

V prvem poglavju monografije smo postavili teoretične temelje psihološkima konstruktoma uspeha in izvedbe/nastopa. Glasbeno izvedbo smo opredelili kot eno izmed najzahtevnejših oblik izvedbe, saj od izvajalca zahteva konglomerat različnih sposobnosti, spretnosti, veščin, osebnostnih lastnosti in motivacije. Glasbena izvedba je paradoksalna v tem, da združuje številne polarnosti v celoto – po eni strani zahteva popolno koncentracijo, po drugi strani pa mora glasbenik utišati miselni nadzor, da lahko stopi v stanje zanos; po eni strani zahteva močno prepojenost s čustvi, ki jih preko izvedbe prenesemo na poslušalce, po drugi strani pa njihovo uravnavanje do te ravni, da jih imamo lahko ves čas pod nadzorom; po eni strani avtomatizacijo motorike, po drugi strani zmožnost

nadzora specifičnih gibov; po eni strani zmožnost individualnega introvertnega poglobljanja v svet psihe, po drugi strani ekstravertno deljenje glasbe z občinstvom. In še bi lahko naštevali. Z izzivi usklajevanja navedenih polarnosti se srečujejo že mladi glasbeniki, ko stopijo na oder, zato ni presenetljivo, da je psihološki vidik priprave na glasbeni nastop tako pomemben. Izziv je tudi ta, da je ocenjevanje glasbene izvedbe vedno subjektivno obarvano. Kako torej opredeliti uspešnost na področju, ki je tako kompleksno? Doživljanje uspeha je zelo odvisno od zaznav in kriterijev vsakega posameznika. Nekaj, kar bo nekoga navdalo z občutkom uspeha, za drugega ne bo predstavljalo nič posebnega. Kriteriji so namreč zelo različni, na eni strani notranji (občutek užitka, zanos, radovednosti, interesa), na drugi zunanji (nagrade na tekmovanjih, opravljene avdicije, dobre ocene, dobre glasbene kritike). Za glasbenike na splošno velja, da imajo izjemno visoke kriterije uspešnosti in da so le redkokdaj zadovoljni s svojo izvedbo, če pa že, je ta občutek zadovoljstva zelo kratkotrajen. Celostni uspeh glasbenega nastopa izhaja predvsem iz tega, da glasbenik uspe združiti notranje in zunanje kriterije uspešnosti. Predvsem si mora vsak glasbenik pri sebi zastaviti vprašanje, kaj zanj predstavlja glasbeni uspeh, in si prizadevati, da v skladu s tem uresničuje cilje na svoji karierni poti.

V drugem delu monografije smo nagovorili dejavnike, ki vplivajo na uspešnost glasbenega nastopanja, in jih razdelili med posredne in neposredne.

V poglavju o posrednih dejavnikih, ki vplivajo na uspešnost glasbenega nastopanja, smo se ukvarjali s sposobnostmi, z osebnostnimi lastnostmi, izvajalsko samopodobo in s samoučinkovitostjo, z motivacijo in s samoregulacijo. Ugotovili smo, da lahko glasbene sposobnosti delimo na splošne in specifične. Opredelili smo jih kot univerzalne in vrojene v človekov genetski potencial, ravno tako kot npr. jezikovne sposobnosti. Nadpovprečne glasbene sposobnosti se udejanjijo v glasbeni nadarjenosti, ki jo z ustreznimi spodbudami okolja in z lastno motivacijo posameznik oblikuje v glasbeni talent. Poleg glasbenih sposobnosti pa so za glasbeno uspešnost zelo pomembne tudi sposobnosti ustvarjanja miselnih predstav. Slednje je neločljivo povezano tudi z avdiacijo, temeljno univerzalno glasbeno sposobnostjo, ki predstavlja zmožnost zamišljanja zvoka brez njegove konkretne prisotnosti. Za uspešne glasbenike so značilne tudi nekatere osebnostne značilnosti, med katerimi izstopajo odprtost, androgenost, originalnost, neodvisnost, samomotiviranost, vztrajnost, občutljivost, visoka kapaciteta medsebojne komunikacije, potreba po pozornosti in anksioznost kot poteza. V prepletu z doživljanjem lastnih glasbenih sposobnosti z osebnostnimi lastnostmi glasbenika se oblikuje

izvajalska samopodoba, ki v aktivni obliki samoučinkovitosti omogoča samoregulacijo glasbenika. Samoregulacija zajema ključne (meta)kognitivne in motivacijske procese ter strategije, ki so tlakovalci sprememb na poti uspešnega izvajalca. Na koncu smo izpostavili še ključno vlogo staršev in učiteljev pri spodbujanju otroka na njegovi glasbeni poti.

V nadaljevanju smo se osredotočili na neposredne dejavnike, ki vplivajo na uspešnost glasbenega nastopa. Najprej smo pozornost namenili neposrednemu vplivu publike. Ugotovili smo, da številčnost in formalnost publike vplivata na uspešnost izvedbe. Vpliv teh dveh dejavnikov pa je posreden, saj neposredno spodbujata predizvedbeno vznemirjenje, to pa potem vpliva na uspešnost izvedbe. Čim večje je občinstvo in čim formalnejše so okoliščine nastopanja, tem večje je predizvedbeno vznemirjenje in slabša uspešnost. Po drugi strani pa številčnost publike lahko deluje tudi kot olajševalec uspešnosti, kar lahko vidimo na večjih koncertih, kjer se v veliki socialni skupini poslušalcev ustvari skupinski zanos, ki se preliva med izvajalcem/izvajalci na odru in publiko.

Poleg vplivu publike smo v tem poglavju namenili pozornost tudi telesnemu, čustvenemu ter miselnemu urnavanju prednastopnih senzacij pri izvajalcih. Treba je opozoriti, da pri vseh strategijah urnavanja prihaja do prepleta različnih ravni, vendar pa smo jih kategorizirali v tri večje skupine, izhajajoč iz fokusa določene strategije. Prav tako izpostavljamo, da to še zdaleč niso vse strategije predizvedbene samoregulacije, temveč smo predstavili tiste, ki jih v svoji praksi vodenja psihološke priprave na nastop najpogosteje izvajamo v slovenskem prostoru. Tako smo se pri strategijah urnavanja telesnih simptomov osredotočili na progresivno mišično relaksacijo, na Alexandrovo tehniko, metodo feldenkreis in metodo BMC. Njihovo bistvo je, da izhajajo iz optimalnega pozicioniranja telesa pri glasbeni izvedbi in vzpostavljanju optimalnega mišičnega tonusa. Sledile so strategije urnavanja čustev, kjer smo v ospredje postavili raznolike dihalne tehnike, kot najpogosteje uporabljane in hkrati najučinkovitejše med glasbeniki. Predstavili pa smo tudi nekaj tehnik, ki izhajajo iz vedenjsko-kognitivne terapije, in sicer ponovno kognitivno ovrednotenje predizvedbenih čustev, samopomirjanje, nadzor pozornosti v povezavi s čustvi, terapijo čustvene regulacije, tehniko čustvene katarze, strategijo realnega zastavljanja ciljev, povezanih s predizvedbenimi čustvi, ter strategijo urnavanja čustev na podlagi modela IZOF. Bistvo strategij urnavanja predizvedbenih čustev je, da v prvem koraku sprejmemo, da nastopanje iz nas izvabi paleta mešanih emocij, pri čemer je najpomembnejše to, da znamo regulirati njihovo intenzivnost in le-to transformirati v interpretativno kakovost izvedbe. Pomembno je, da imamo svoja čustva vedno na

vajetih, da nas ne preplavijo in odnesejo, hkrati pa so v glasbeni izvedbi močna prisotna.

Kot zadnji ravni predizvedbenega uravnavanja smo se posvetili mislim. Praksa kaže, da je pri psihološki pripravi glasbenikov na uspešno izvedbo učinkoviteje, da se najprej lotimo uravnavanja na telesni in čustveni ravni, misli pa sledijo spremembam na teh dveh ravneh. Psihološko mojstrenje vrhunskih izvajalcev pa je ravno na tej ravni, kjer so izvajalci zmožni tako spretno usmerjati svojo pozornost in koncentracijo pri izvedbi, da dosežejo visoko raven mentalne čvrstosti, ko jim raznoliki fizični ali socialni distraktorji ne pridejo do živega. Kot temeljno strategijo uravnavanja misli smo izpostavili trening meditacije čuječnosti, prav tako pa smo navedli še tehniko kognitivnega prestrukturiranja in tehniko stop, ki izhajata iz kognitivno-vedenjske terapije. Za miselno predizvedbeno uravnavanje glasbeniki najpogosteje uporabljajo tehniko 3,2,1 VAK, s pomočjo katere veččutno urijo svojo koncentracijo. To poglavje smo sklenili z zaključkom, da uravnavanje telesnih, čustvenih in miselnih predizvedbenih senzacij zahteva strateški pristop, s pomočjo katerega se izvajalec dosledno psihološko pripravlja na raznovrstne izvedbene okoliščine. Gre za dolgotrajno kompleksno in zahtevno psihološko pripravo, ki izvajalcu omogoči, da v kratkem trenutku tik pred izvedbo ali že na samem nastopu z določenimi tehnikami spodbudi avtomatizirane, za izvedbo optimalne telesne/čustvene/miselne odzive.

V tretjem poglavju smo opredelili pot od stresa k psihičnemu blagostanju. Na začetku smo veliko pozornosti namenili stresnosti glasbenega poklica in glasbenega izobraževanja ter ugotovili, da aktivno ukvarjanje z glasbo prinaša številne izzive. Poklic glasbenega izvajalca velja za enega najstresnejših poklicev, izvori stresa pa so lahko notranji ali zunanji. Najpogostejša notranja stresorja tako pri poklicnih glasbenikih kot pri študentih glasbe sta izvajalska anksioznost in perfekcionizem. Zunanje stresorje pa predstavljajo predvsem karierni izzivi, ki se navezujejo na tekmovalnost in tudi na finančne probleme. Stres, ki je povezan z nastopanjem, se pojavlja v različnih fazah; lahko že precej časa pred pomembnim nastopom, lahko tik pred nastopom, med njim ali celo po njem. Kot najučinkovitejšo strategijo za obvladovanje stresa pri glasbenikih smo navedli trening rezilientnosti. Ravno tako, kot je poklic glasbenika stresen, pa je po drugi strani vir neusahljivega psihičnega blagostanja. Ukvarjanje z glasbo je notranje nagrajujoče in se umešča med dejavnosti samouresničitve, ki posameznika globoko osmišljajo. Res je sicer, da raziskave kažejo, da je pri amaterskem ukvarjanju z glasbo poročanja o učinkih blagostanja precej več, vendar pa tudi poklicni glasbeniki poročajo o visokem zadovoljstvu z življenjem in o subjektivnem

blagostanju. Glasbene dejavnosti so namreč ene izmed najbolj avtote-
ličnih (samonagrajujočih) dejavnosti, ki posameznika pokličejo v zanos.
Prinašajo mu občutke notranjega zadovoljstva, notranje motivacije in
zatopljenosti v izvajano dejavnost. Zanos, kot oblika vrhunskega občutja,
prinaša globok smisel in omogoča transcendentna doživetja.

Monografijo smo zaključili s premislekom o tem, kakšna je vizija
glasbeništva in glasbenega nastopanja v prihodnosti.

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This is a very sincere and at the same time very sensible book that "grounds" the idealizations of the profession of musician as a mere easy profession ... Throughout the entire book, we can perceive a palpable and encouraging attitude towards the general well-being of musicians and towards experiencing such a beneficial enthusiasm of musicians in interaction with the audience; these moments of beauty and wonder that today's world longs for and because of which we become better people. The work convincingly shows that all of this is possible and accessible.

Dr. Ilonka Pucihar

The monograph represents an original contribution to the theoretical and practical aspects of musical performance. The discussed topic will be a valuable tool in the process of educating future musicians at all levels of music education, as well as to help all professional musicians of classical music and other genres. The discussed topic is also suitable for various artistic and other profiles involved in public performance.

Dr. Karolina Šantl Zupan

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