2020

MINDFUL

PRACTICING – Mindfulness

and goal setting exercises for fostering
self-efficacy

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The following thesis was accomplished and submitted to the Royal Conservatory of The Hague in partial fulfillment of the requirements for the degree of Master in Music with, as the main subject, Music Education.

Abstract

This research explores the creation and application of mindfulness and goal setting exercises and tests its relationship with the construct of self-efficacy for music learning and practicing. Three separate questionnaires and pre- and post-intervention interviews were applied to a sample of 11 conservatory students. All participants but one rated higher scores of self-efficacy for music learning and practicing in one of the questionnaires. The additional questionnaires, interviews and formats that were analyzed give this study a broader scope for identifying distinct factors that may have a relation with the exercises applied and higher self-ratings of self-efficacy.

The content of this research provides an analysis of mindfulness practices and goal-setting strategies and their application to the instrumental practice of music conservatory students. The material envisioned for this study is both original and retrieved from external sources. Some of the material is taken from author Vanessa Cornett and her book "The Mindful Musician" (Cornett, 2019), as well as from Sarah Samuel's book "Mindful Crafting" (2018) and Bernadette Dijkhuizen-Keogh's work (2019).

This research wishes to provide tools not only for students who want to improve their sense of self-efficacy regarding their instrumental practice but also for teachers, who want to explore the material developed in this study with their students.

Acknowledgments

I would like to express my gratitude and acknowledge the guidance of both my tutors Susan Williams and Adri De Vugt, who guided me through the process and completion of this work. I would also like to thank Mathias Moors and my cello teacher Lucia Swarts for their input and reassurance.

A special thanks to my partner Julien Boijmans and my friends for their continuous encouragement and support throughout these two years of work.

Finally, I would like to express my appreciation to my family for their lifelong love and endless support.

Preface

The relevance of improving one's sense of self-efficacy regarding music learning and practicing appeared at first personal. Nevertheless, it is a common wish among musicians to enhance the quality and efficiency of their practice and wellbeing in general. This research provides both practical and theoretical knowledge for those who are curious about practices such as mindfulness and goal setting strategies.

As a musician, I have struggled for many years with emotional, physical and psychological stress, which has negatively impacted my professional development. Years ago, I started looking for practices that could help me confront these problems. While searching, I found a substantial amount of information, extending from the field of psychology to neuroscience, spiritual practices and sport science. However, this knowledge is still relatively new in the field of music and often out of reach for many struggling music conservatory students and poorly integrated into their learning processes. I am certain I am not the only music student struggling with these issues and therefore, I intend to offer a work that will be valuable to both students and music teachers.

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1 Introduction and purpose

Self-efficacy is believed to be related to a variety of positive traits held by musicians. Studies have begun to relate self-efficacy to some of these traits and, most importantly, to practicing and performance quality (Ritchie and Williamon, 2011). There are certain factors that directly affect the practice and performance quality of musicians, more specifically of conservatory students. Some of these factors are, as described by Sternbach (1995), the necessity to maintain their skills at peak form, endure many hours of solitary practice, constantly self-evaluate their performances and to subject their public performances to scrutiny. There is also evidence that many conservatory students experience severe music performance anxiety (Kenny, 2011). Other everyday struggles for music students regarding their learning and practicing include being able to manage stress, set clear goals, withstand losses and ace competition. Additionally, they must deal with issues such as low self-esteem, sense of belonging, career prospects and opportunities, and finding their place in such a competitive arena.

This brings us to the argument that it is essential to pay attention to how music students go through the learning process in a conservatory environment and to their wellbeing and self-efficacy beliefs. A high sense of self-efficacy and the development of useful mental, emotional and physical skills are, therefore, crucial towards a positive and continuous career development. This has been proven to be the case with athletes, musicians and other creative artists. In line with this and as Altenmüller (2014) expressed, "The need to embrace a holistic approach is linked to the fact that musicians generally experience their profession as a vocation rather than an occupation."

Although there are models developed for improving the practice and performance of musicians (Williams, 2017), there is not enough evidence concerning what learning strategies can be used to increase self-efficacy for learning and practicing with conservatory students (Ritchie and Williamon, 2011). As Zimmerman et al. 1992 suggests (1992), the impact of students' perceived self-efficacy for using self-regulated learning strategies has not been tested directly.

As evidenced by Bonneville-Roussy and Vallerand (2011), the use of adaptive mastery goals and deliberate practice have proven to be fundamental factors towards positive performance outcomes. Likewise, mindfulness-based practices have shown to support positive health in high performing activity settings (Gardner and Moore 2004). Having said this, it is certain that goal setting and mindfulness applications have proven to help musicians obtain better learning and performance outcomes and improve their health and wellbeing. Nevertheless, mindfulness and goal setting, together, have not yet been explored nor directly linked to the acquisition of higher levels of self-efficacy for music learning and practicing with conservatory students. Therefore, and in order to address these issues, this research will examine the following question:

How can mindfulness and goal setting exercises be applied during instrumental practice in order to promote self-efficacy in conservatory students?

In order to do so, this research will focus on creating mindfulness and goal setting exercises for the music student's instrumental practice. It will then observe how these practices affect their sense of self-efficacy concerning their learning and practicing skills. Furthermore, this study will offer an evaluation of the connection between the use of mindfulness and goal setting exercises and the improvements of the student's overall practice quality, growth of

mindfulness traits and self-regulation. It is expected that through mindfulness and goal setting exercises, the music student is provided with a new set of skills that will allow to improve his or her[1] sense of self-efficacy, the quality of practice and awareness and wellbeing. While both goal setting and mindfulness are expected to have a positive effect, this study argues that combining them will have an even stronger effect.

The subsequent chapters will portray an analysis of different empirical and non-empirical sources on topics such as performance anxiety, the musician's wellbeing and musical training and practicing. This will be followed by the extended introduction and analysis of this research's main three topics: self-efficacy, mindfulness and goal setting.

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[1] The pronoun used for referring to musicians, music students or subjects throughout this research includes both genders even when only the male pronoun is used.

2   Literature Review

The six sections that form this chapter interconnect to each other, creating a unified structure. This structure portrays the framework from which this research is based.

First, the topic of performance anxiety is discussed. As stated in the introduction, the ground base of this research partakes from the fact that conservatory students experience -at different levels- specific psychological, physical and emotional problems. Focusing on performance anxiety is a choice made by the fact that many psychological, emotional and physical issues are underlying factors. The topic of wellbeing emerges as the second one in this chapter. Psychological wellbeing is described and factors pertinent to the conservatory student's wellbeing are explored.

To understand the nature of the subjective wellbeing of music students and how the factors involved in their instrumental practice affect their sense of wellbeing, the following section focuses on describing the usual practices undertaken by music students during instrumental practice. This section develops into the most relevant one for this chapter- self-efficacy-. The construct of self-efficacy as well as self-efficacy for music learning and practicing is explored. This is followed by research's evidence concerning self-efficacy in the music field.

The last two sections of this chapter are the two topics chosen as the independent variables for this research. Goal setting and Mindfulness are both outlined and connected to the conservatory student's instrumental practice.

2.1   Performance anxiety

2.1.1   What performance anxiety is and what causes it

Many of the greatest soloists in history – from Maria Callas to Vladimir Horowitz – have struggled with performing under intense expectation (Cox, 2015). It is relevant to speak about performance anxiety since it is one of the main struggles of young and professional musicians. Kenny (2011) writes about music performance anxiety as a dimensional construct, one that might appear as occupational stress, focal anxiety disorder, social anxiety or social phobia, and panic disorder. Evidence shows repeated characteristics of people suffering from performance anxiety. These characteristics include trait anxiety, neuroticism, negative affectivity, introversion, and behavioral inhibition; fear of negative evaluation; low self-concept, self-esteem, self-efficacy, and locus of control; perfectionism; and narcissism and shame (Kenny, 2011).

The causes of performance anxiety are various. Related problems such as anxiety, negativity, distractions, burnout and injuries are widespread among music students and professionals (Cleere, 2017). Other important components of music performance anxiety are the fear of negative evaluation and perfectionism, which is directly linked with social anxiety, self-criticism and performance anxiety (Kenny, 2011). Additionally, it has been proven that given their younger age, conservatory music students may experience more severe music performance anxiety than professional musicians (Steptoe and Fidler, 1987).

According to Creed & Evans (2002), personality factors such as trait anxiety, negative affectivity and introversion are the most important mediators/moderators of stress reactivity. This means that as a student becomes affected by his fear of performing, avoidance and negative emotions linked to the act of playing in public, he will be more likely to engage in a vicious cycle driven by stress and will not enjoy the act of performing. This behavior is linked

to the fact that as a response to stress, children and adolescents tend to use both cognitive and behavioral avoidance.

Consequently, it will be challenging to acquire new skills or to experience mastery over previous failures if the music student avoids situations in which those experiences have occurred (Kenny, 2011). In addition, it is shown that some of the major issues for performing artists are the concern for high standards, excellence and competition (Hays & Brown, 2004; Hays, 2009, 2012; Murphy, 2012). Therefore, it is for many performing artists black or white, all or nothing; Anything less than perfect performance is considered a failure. This anticipation of error serves only to increase performance anxiety.

There is extensive research on the topic of performance anxiety. An example of this is that of Kaspersen & Gotestam (2002), who followed a study in which the results of 126 conservatory students showed that anxiety before and during a musical performance was positively associated with higher levels of negative affectivity. Another related study by Fehm and Schmidt (2004) shows that about one-third of a group of music students between 15 and 19 years old were distinctly handicapped by their anxiety during performance. Additionally, in a sample of 126 Norwegian conservatory music students, 36.5% reported that their music performance anxiety was so problematic that they felt the need for help in this area. (Kaspersen & Gotestam, 2002). Schroeder and Liebelt (1999) surveyed 330 German music students (age 20-23) and found 22.8% with high levels of performance anxiety. Lastly, Wesner, Noyes and Davis (1990) found that 21% of their sample of 302 music students reported high levels of performance anxiety; 16% reported that the level of anxiety harmed their careers.

As the concept of performance anxiety and what causes it becomes clear, it is now necessary to understand how performance anxiety is expressed and what form it takes in the musician's body and mind.

2.1.2 Performance symptoms; our ego in crisis

Every musician has once experienced the familiar symptom driven by heightened adrenaline, which we call nervousness. As Westney (2006) explains, this is a primal mammalian brain reaction that kicks in whenever survival itself is at stake. Although nobody would claim that our physical survival is actually at stake when performing in front of an audience, some significant fear must be sending signals that appear to the brain as survival itself. Moreover, Westney (2006) suggests that these reflexes are triggered by the underlying fear of losing control in front of others and facing the possibility of embarrassment and humiliation, what could be considered a threat to the ego. Moreover, Westney (2006) goes on to explain that many performers have consciously found a way to frame the physical sensations of nervousness in a neutral or even positive way. This example shows what could be done to become more resilient against performance anxiety. Williams (2017) also suggests that the use of affirmations, visualization technique and relaxation exercises can help the musician perform better.

Throughout this chapter, it is shown that performance anxiety is a very complex topic by itself and it is not the intention of this research to immerse further into it. What is of most relevance for this study is the fact that many of the issues pertinent to performance anxiety are evidenced and even reinforced during the daily instrumental practice of music students. Nevertheless, performance anxiety is only one of many topics that may affect the music student's psychological and physical wellbeing.

2.2   Wellbeing

2.2.1   The musician's wellbeing

"A performer who responds with his entire self, not just his thinking mind, can create art of transcendent spirituality"

Psychological wellbeing is a diverse multidimensional concept. Ryff's (1989) research has resulted in the development of an objective psychological wellbeing measurement with components that include autonomy, personal growth, environmental mastery, purpose of life, positive relations with others and self-acceptance.
It is important to reflect on the components that constitute the musician's wellbeing. Every musician, as a unique individual, encounters different obstacles along the way. Nevertheless, they all have in common their conscious and unconscious mind, physical body, intuition and emotion. Westney (2006) argues that if the musician takes care of himself as a whole, it is more likely that his musicianship will radiate in a smooth and natural way. He will be able to sustain a long, healthy relationship with his profession.

Different factors may affect the musician's wellbeing depending on which stage of his life he finds himself in. Let us explore what is relevant for the conservatory student.

2.2.2   The conservatory student's wellbeing

There is a wide array of factors that affect the music student's development and wellbeing. Factors that affect the physical, mental and emotional state of the music student can include experiences in early education, motivation, organizational skills, parental support, self-esteem, previous experiences and sense of self-efficacy.

Let us examine the idea of how the conservatory student's wellbeing can be strongly affected by what is called "occupational stress". Occupational stress begins early in musical careers, as a study by Dews and Williams (1989) shows. In this study, there were ten issues of concern, which included stress, pre-performance anxiety, impatience to progress their musical career, burnout, job insecurity, conflict between music and one's personal life, inadequate practice facilities, and depression. Sternbach (1995) described the working conditions of professional musicians as generating a "total stress quotient" that far exceeds that observed in other professions. Although Sternbach (1995) refers to the profession of the musician in general, it is important to acknowledge that many of these conditions, if not all, appear already in the early musical career of a conservatory student. Cooper (1983) summarized and categorized six groups of organizational variables that may cause stress in the workplace. Below, these categories have been adapted and explicitly transferred to the music student reality.

1) Factors intrinsic *to the music studies* (e.g. noise, room availability, class schedules).
2) Relationships *at the conservatory* (e.g. conflict with classmates, teachers, lack of social support, competition and comparison and integration to the group).
3) Role *in group and individual lessons in the conservatory (*e.g. responsibility and sense of belonging).
4) Career development (e.g. participation in school projects and performances, engagement with classmates and teachers for gigs and paid performances, insecurity to take part in career jobs).

5) Organizational structure and climate *in your classes, individual study, performances and projects (*e.g. lack of autonomy, lack of opportunity to participate in decision making, lack of control over studies and career development).
6) Home and *study* interface (e.g. conflict with parents or partners and music studies, lack of support from relatives for studying a musical career or other personal conflicts).

Research has shown that wellbeing inducing programs can improve certain qualities of music students. Some of these are resilience, performance, health, motivation and a growth mindset. For instance, a study showed that psycho-educational programs provided early in the musician's career could build psychological wellbeing capacity and resilience in the positive dimensions of wellbeing (Clark & Williamon, 2011). Similarly, as stated by Edwards and Steyn (2008), psychological skills training has shown to improve performance among athletes, which can also be employed to improve the musician's ability to perform optimally under pressure. Additionally, findings of another study (Steyn et al., 2016), which explored the efficacy of psychological skills and mindfulness training on the psychological wellbeing of undergraduate music students, suggest overall psychological wellbeing improvement. This finding is in line with the research of Edwards and Steyn (2008) and Gardner and Moore (2004), who reported mindfulness education to support positive health in high performing activity settings. Concerning practicing and motivation, it is proven that having a harmonious passion for playing a musical instrument not only indirectly contributes to better performance, but it also directly leads to positive psychological wellbeing (Bonneville-Roussy, A., L., G., & Vallerand, R. J. 2011). Another skill that is positively related to greater music learning and performing is the "growth mindset". Growth mindset refers to a mastery orientation where individuals "love learning, they seek challenges, they value effort, and they persist in the face of obstacles" (Dweck, 2000, p. 1).

So far, the construct of psychological wellbeing has been discussed. It has also been stated that there are several strategies, such as mental skills training and mindfulness meditation, that have proven to help the student's psychological wellbeing. Nevertheless, it is not clear to what extent these practices have been applied and adapted to the student's instrumental practicing or whether they were trained in isolation and separated from the musical practice.

At this point, it is relevant to explore what are the most common strategies that musicians undertake during their instrumental practice and what, if any, techniques are used to support their learning and practicing.

2.3 Musical learning and practicing

2.3.1 Commonly used strategies for music learning and practicing

Effective practice has been described by Hallam (1997b) as "that which achieves the desired result, in as short a time as possible, without interfering negatively with longer-term goals." What Hallam et al. (2012) argue with this definition is that effective practice can take many forms and that each musician requires considerable meta-cognitive skills to know what is effective for them. Another essential concept is that of 'deliberate practice', which is defined by Ericsson et al. (1993) as goal-oriented, structured, and effortful. However, motivation, resources, and attention are perceived as possibly acting to constrain its effectiveness. Concerning focus, Jørgensen (1995) argues that musicians need to behave like teachers, taking account of their practice aims, the musical content, available learning media, allocation of time,

and specific practice strategies. Such a set of skills has been conceptualized as self-regulation (McPherson & Zimmerman, 2002). A related point of view is that of Williams (2017), who defines quality practice as an explorative and self-reflective activity.

Hallam et al. (2012) suggest that the way a musician practices changes as expertise develops and that practice is central to the development of all aspects of musical expertise. Researchers have also suggested a strong relationship between 'deliberate practice' and an individual's acquired level of performance. Accumulated practice is proven to be a key variable in determining the level of musical expertise attained. Equally important is the quality of the practice undertaken (Hallam et al. 2012; Williams, 2017).

The following evidence gives us an overview of the most common strategies used for learning and practicing by music students. Hallam (1995a, 1995b) shows that typically musicians establish an overview and aural-mental scheme of the music to be learned by studying the score, playing the music, or learning from a live or recorded model. Afterward, difficult sections are identified based on the formal structure of the music, the most difficult parts being divided into smaller subdivisions. Finally, as practice progresses, the sections are linked together.

Similarly, Gruson (1988), who studied 43 pianists from novice to professional level, found that, as expertise developed, there was an increase in the repetition of sections, verbalizing and playing hands separately, while errors, the repeating of single notes, and pauses, decreased. Another study by Hallam (2001a, 2001b) explored the extent to which music students make use of implicit planning and found that those who exhibited high levels of planning completed the task at hand, identified difficulties early on, concentrated their efforts on those difficulties and then integrated learned sections together. Similarly, Duke, Cash and Allen (2011) found that concentration on the sound produced led to more accurate performance than focus on the movements required for making the sounds. Concerning goal setting strategies, Ericsson et al. (1993) concluded that having a clear goal for each practice session was important for learning to occur.

Researchers have also focused on developing new theories that enhance learning and performance. There are vast examples in the field of sport, psychology and neuroscience and some of these practices are being incorporated into the performing arts, and music in particular. An example of this is the book "Quality Practice" by Susan Williams (2017). Williams (2017) proposes a holistic approach to music-making based on the latest theories and findings on motor-skills learning and practice strategies. The first two theories outlined in her book are those of implicit motor learning (Masters, 2012) and the OPTIMAL theory of motor learning (Wulf and Lewthwaite, 2016). The latter theory points out the importance of attentional focus, which – if we translate to music – suggests that focusing on musical intention can help the student learn the complex motor skills needed for playing an instrument in an unconscious/implicit way. Williams (2017) states that with a coordinated participation between body, where the implicit learning happens, mind, where the focus is, and emotion, which is connected directly to music expression, there is the possibility for this complex motor learning to occur in an efficient and effective way. As such, a balanced connection involving body, mind and emotions can be a formula for developing the desired motor skills. Another theory presented in Williams' (2017) book is called "formal practice." This concept was developed by Arielle Bonneville-Roussy and Thérèse Bouffard (2015), who combined the already existing theories of deliberate practice and self-regulation into the concept of "formal practice". Formal practice, as described in Williams' book (2017) involves choosing activities (methods and exercises) according to specific learning goals, and during those activities, staying mentally focused on what one is doing.

Lastly, the OPTIMAL theory of motor learning (Wulf & Lewthwaite, 2016) is presented. OPTIMAL stands for Optimizing Performance through Intrinsic Motivation and Attention for Learning. Wulf & Lewthwaite (2016) suggest that motivational and attentional factors contribute to performance and learning by strengthening the coupling of goals and actions. The conditions that promote learning and performance under the OPTIMAL theory of motor learning are those of autonomy, enhanced expectancies and external focus. The theory argues that each of these conditions are beneficial, even more so when combined. Williams (2017) illustrates that "when a musician is intrinsically motivated, confident and is able to focus on the goal of the task (i.e. expression and making music), there is less focus on the self. This will result in either enhanced learning or performance.

From all the empirical evidence previously shown, it is understood that some of the key factors for learning and practicing effectively are self-regulation, goal setting, focus and a high sense of self-efficacy. All of which will be central to the purpose of this research.

2.4   Self-efficacy

2.4.1   Defining Self-efficacy

Self-efficacy is a construct defined as the belief in one's capabilities to achieve a particular result. The importance of these individual beliefs led Bandura (1977) to introduce and define self-efficacy as "the conviction that one can successfully execute the behavior required to produce a certain outcome." This definition focuses on the individual's beliefs as key factors in determining the course of actions taken (Greene & Miller, 1996). Thus, and as Williams (2017) states, the music student's beliefs about himself and the world have a profound influence over his development.

An interesting factor about self-efficacy is that it is strictly task-specific (Pajares, 1996; Pajares & Miller, 1995). This means that, even within a single domain, one may hold a range of different self-efficacy beliefs. For instance, self-efficacy for performing a piano concerto may differ from self-efficacy for improvising on the piano. Bandura (1986) proposes four key factors that directly influence our self-efficacy beliefs: mastery experiences, vicarious experiences, verbal persuasion, and physiological signs. Another influential self-efficacy researcher, James Maddux, suggested that there may be a fifth main source of self-efficacy: imaginal experiences, or visualization (Maddux, 2012).

Bandura's initial research discussed these influences (Bandura, Adams, & Beyer, 1977), with subsequent studies examining self-efficacy's relationship to cognitive processes, the self-regulation of motivation and affective processes. In short, a strong sense of self-efficacy enables a person to engage with more complex cognitive processes, set more hierarchical and achievable goals, and exercise control over stress in difficult situations. Furthermore, a high sense of self-efficacy has also shown to relate positively to the use of independent learning strategies (Zimmerman & Martinez-Pons, 1990) and stronger links to achievement (Zimmerman et al., 1992). Therefore, higher self-efficacy can enhance the learning and practicing of music students and allow for a more successful outcome in the tasks that students engage in during their practice time.

It is important to distinguish between self-efficacy and other psychological constructs. Bandura (1984) separates self-efficacy from the expectancy-value theory, where actions are pursued because of the expectation of success and the perceived value of the outcome. Although outcome expectations are directly related to self-efficacy, self-efficacy beliefs do not stem from the value or reward associated with the result of a task.

When speaking about self-esteem, it argued to be directly associated with constructs such as motivation, performance, and wellbeing (Deci & Ryan, 1995). Nevertheless, one must first understand the difference between contingent self-esteem and true self-esteem. "Contingent self-esteem", as stated by Deci and Ryan (1995), refers to feelings about oneself that result from or depend on matching some standard of excellence or living up to some interpersonal expectations. True self-esteem is more stable, more securely based in a solid sense of self. The following example shows the differentiation between the two types of self-esteem. "A woman who is true to herself would have a high level of true self-esteem simply by being who she is. Her self-worth would essentially be a given and would have developed as she acted autonomously within the context of authentic relationships". One could translate this type of self-esteem as one that begins with the acceptance of oneself as what we are in that precise moment. Acceptance, as will be described later, is also an essential construct in mindfulness meditation.

Constructs such as self-concept (one's view of oneself), self-esteem (one's approval of oneself)

and self-efficacy (one's belief in one's capacity to achieve outcomes) are central concerns for the healthy development of the conservatory student (Kenny 2011) and as stated by Westney (2006), there are many ways in which one could cultivate a true self-esteem "the same way one can cultivate the vitality with which we make music: trusting ourselves more, enjoying and respecting what we already have inside."

2.4.2 Self-efficacy for music learning

As mentioned in the previous subchapter, Bandura (1993) demonstrated that perceived self-efficacy has an influence on both goal setting, analytical thinking and on the motivational process, which directly relates to the goals that people choose and how they achieve those goals. In a context such as music learning, goals, cognitive processes, and the interaction of these aspects with motivation are all central parts of the learning process (Schunk, 1989b). Nevertheless, in the context of music learning and performing, one should differentiate the two tasks as separate ones. Self-efficacy for music learning can thus be defined as relating to a person's beliefs in his capability to acquire the skills and knowledge needed to learn a musical-related task. In contrast, self-efficacy for performing involves as Schunk (1996) states, the beliefs to execute a task successfully by implementing a previously learned set of skills.

2.4.3 Previous research on musical self-efficacy

There is a wave of new research that has explored the construct of self-efficacy in relationship to music learning and performing. McCormick and McPherson (2003), for instance, investigated the role of self-efficacy in a performance setting. In a sample of 332 instrumentalists aged between 9 and 18, self-efficacy was measured before a graded music performance examination with one item: 'I have fully mastered the requirements for today's examination.' Results revealed that ratings of agreement with this statement achieved a direct path to performance. Moreover, Nielsen (2004) studied 130 music students in higher education concerning learning and the use of practice strategies. She investigated self-efficacy beliefs with an adaptation of one of the motivational subscales of the Motivated Strategies for Learning Questionnaire. Except for effort regulation, self-efficacy was found to relate to all the assessed areas: rehearsal, elaboration, organization, critical thinking, metacognition, time and study environment, peer learning and help-seeking.
Additionally, Ritchie and Williamon (2011) researched the specific nature of self-efficacy beliefs within music. Separate questionnaires assessing self-efficacy for musical learning and self-efficacy for musical performing were developed and tested. The reliability of the new questionnaires was demonstrated using internal reliability tests and exploratory factor analysis. The analysis revealed a significant overall difference between self-efficacy for musical learning and for musical performing, which suggests that music students have more confidence in their abilities to learn than to perform.

All of this research reinforces the theoretical foundation that self-efficacy needs to be assessed in task-specific settings, as a different skill base is required for a sub-area of a domain (Pajares, 1996). Accordingly, this research aims to focus on musical learning and practicing skills that conservatory students develop during their instrumental practicing.

2.5 Mindfulness

2.5.1 History and description of mindfulness

The term mindfulness and its practice originate in the Buddhist tradition in India over 2,500 years ago (Goleman & Schwartz, 1976). Since its introduction by Kabat-Zinn and its endorsement by Buddhist monk Thich Nhat Hanh, mindfulness has rapidly become a popular practice and research subject in western society. Such research has mainly been concerned with the effectiveness of mindfulness as a clinical intervention for stress, depression, anxiety, or some other diagnosis. It has resulted in the development of Mindfulness-Based Stress Reduction (Kabat- Zinn, 1996) and Mindfulness-Based Cognitive Therapy (Williams et al., 2007).

Mindfulness is described to be the outcome of training in formal meditation techniques. It is also understood to be a state of heightened awareness and focus on the reality of the present moment, with a mind that acknowledges and accepts the moment, cleared of feelings, thoughts or judgments about it (Bishop, 2002). Additionally, mindfulness meditation is, as Walsh (1995) states, a self-regulatory practice designed to train attention in order to bring mental processes under greater voluntary control. For the past decades, mindfulness has acquired a surprising level of popularity within western society. An example of this can be seen in sports training and performing arts. A major reason for such a success, as argued by Brown and Ryan (2003), is attributed to its ability to facilitate wellbeing

To better understand the processes and principles that underlie mindfulness, several researchers have sought to clarify the concept by clearly establishing its facets. Bishop et al. (2004) pointed to two dimensions of mindfulness: self-regulation of attention and the attitude of openness to experience. Furthermore, Shapiro et al. (2006) tried to break mindfulness down into a simple, understandable construct. This construct reflects the core components of formal mindfulness practice: intention, attention, and attitude. These components, according to Shapiro et al. (2006), are not to be understood as separate processes or stages but as interlaced aspects of a single cyclic process.

Thus, the practice of mindfulness meditation can be described by the following facets: first, an intention to practice; second, bare attention to internal or external stimuli with the possibility of sustained attention, shift, and inhibition; and last, an attitude of mindful, non-judgmental acceptance, openness, self-compassion and non-reactivity (Birrer, Röthlin & Morgan, 2012).

The main purpose of mindfulness practice is to bring awareness to our thoughts, emotions and bodily sensations and to train our focused attention by concentrating on a particular point.

Evidence suggests that mindfulness can positively impact psychological behaviors such as bare attention, experiential acceptance, values clarification, self-regulation/negative emotion regulation, clarity about one's internal life, exposure, flexibility, non-attachment, and less rumination (Birrer, Röthlin & Morgan, 2012). These attributes are central to better learning and practicing.

2.5.2 The mindful musician

As opposed to neuroscience, sports or psychology, little research has focused on the relationship of mindfulness with creativity, practice or performance enhancement in music. Nowadays, mindfulness practice goes beyond its initial formal doctrine. Thus, informal

practices that are tailored for specific goals and tasks are becoming more regular in the practice of mindfulness in western society, as is the case of music-making and practicing. As an example, Westney (2006) describes mindful practicing as an activity to be done in an open-systems way, in which all that is required are "clear intentions (goals), self-acceptance, and that ongoing detached awareness of the truth of the moments."

In line with the idea of mindful awareness, flow theory supports the notion that when a musician's action and awareness merge, they can enter flow, a state of absorption that allows for heightened creativity (Csikszentmihalyi, Abuhamdeh & Nakamura, 1990).This notion is expressed by singer Martha Elliott (2010), who describes that present, non-judgmental awareness allows her to immerse in creative musical expression, leaving "no room for the ego to get in the way with thoughts, doubts, judgment or even effort" (Elliott, 2010).

When the music student lets go of the illusion of control, he becomes, in the words of Westney (2006), more relaxed and, at the same time, more observant. The process begins to be trusted and some kind of inner connection is made. Westney (2006) discusses how our reactions towards what we perceive as negative experiences or mistakes during practicing drive us and our energy away from the helpful evidence. "We fly into the past and future expectations instead of being in the here and now" (Westney 2006). The dissolving of ego-consciousness in general, so crucial in music practicing and performing, is indeed a universal value.

Two of the most popular mindfulness-oriented techniques used by musicians are the Alexander Technique and the Feldenkrais Method. Both are well-known practices among musicians. Alexander describes his technique as an educational discipline focused on releasing unnecessary muscular tension and finding the freedom of movement that allows choices for body use that are free from unnatural conditioning (Maisel, 1995).

Similarly, the Feldenkrais Method works using exercises called 'awareness through movement'. These exercises aim to expand self-perception through movement sequences that bring attention to parts of the body that are usually outside of focal awareness. Feldenkrais claims that by using his method, musicians, actors and artists can extend their abilities and enhance creativity (Feldenkrais, 1977). Alexander's and Feldenkrais' theories address primarily physical aspects of posture, movement, and coordination, and their relationship to thought and awareness (Xu Hui, 2010).

Samuel (2018) compares the act of mindfulness meditation with music-making, exposing the similarities between both practices. A clear reason why they complement each other so well. The author attributes to both activities the power "to enable and to widen our perspective and gain a greater understanding of different ways of doing things." Similarly, Eva Hoffmans (1989) declares that learning to play the piano was a sort of "moral education" in which she became aware of the motions and conduct of her inner self. These experiences describe the expanding of awareness, which will allow the music student to bring his own thoughts and beliefs into consciousness. As a result, the student may recognize previously blind assumptions about himself and his relation to music learning and practicing, and thus being able to choose a better course of action.

Regarding the power of thoughts, Samuel (2018) states that "the thoughts and beliefs we have about our life will determine how we respond to different situations." When we become more conscious of our thoughts and reactions, we become more conscious creators of our lives. And so it follows, when we are more mindful in our practicing, then we become more creative musicians (Samuel, 2018).

2.5.3 Previous research on mindfulness for music learning and practicing

Concerning music practicing and performing, the research of Schooler and colleagues (1993) suggests that judgments, in the form of verbalized thoughts, may impede insight problem-solving and disrupt the flow state. Thus, it is proposed that through cultivating non-judgmental awareness in mindfulness meditation, it is possible to maintain states of creative insight and flow for more extended periods. Moreover, in a research led by John Z. Newton (2015) in which the relationship between musical creativity and mindfulness meditation was explored among participants, findings showed that mindfulness meditation enhanced perceived creativity. Furthermore, all participants expressed a transformation in their relationship to particular thoughts through introspection. For example, being mindful of thoughts when they arose enabled participant B to create a mental space to reflect on self-judging (Newton, 2015). Additionally, Acceptance Commitment Therapy has been studied as a performance enhancement program for musicians and proven to be a promising new treatment option for music performance anxiety. Nevertheless, its principles have not yet been incorporated in music learning. Researches conducted two single-case experiments and a pilot study which Acceptance Commitment Therapy used as a Music Performance Anxiety Treatment; the participants were a professional drummer (Juncos et al., 2014), an undergraduate violinist (Juncos & Markman, 2015), and seven vocal students from an elite choir college (Juncos et al., 2017).

2.5.4 Mindfulness in sports

Several studies investigate mindfulness in sports or mindfulness-based interventions with athletes. An early study by Kabat-Zinn and collogues (1985) provided training in mindfulness meditation to collegiate and Olympic rowers with specific applications of mindfulness to rowing. The researchers reported that collegiate rowers exceeded the coach's expectations based on the athletes' level of experience and physical abilities. Furthermore, several rowers who medaled at the Olympics reported that mindfulness training helped them perform at their full potential. This evidence shows that dispositional mindfulness is a performance-relevant trait in sports and that mindfulness-based interventions may also be helpful for musicians. Empirical evidence suggests that dispositional mindfulness is related to more flow, less fear, and fewer task-irrelevant thoughts (Birrer, Röthlin & Morgan 2012). In line with this, several researchers found that mindfulness-based approaches promote improved emotional functioning and self-regulation (Hözel et al., 2011). MRI brain scans taken before and after an MBSR (Mindfulness-Based Stress Reduction) program found augmented gray matter in the hippocampus, a critical area for learning and memory, and a reduction of gray matter in the amygdala, a region associated with anxiety and stress. Participants assigned to the control group showed no such changes (Hözel et al., 2011). Additionally, it was found that practicing mindfulness supports the self-regulatory processes that buffer against psychological distress (Jimenez, Niles, & Park, 2010).

Many books on sports coaching talk about the problem of anxiety and the development of mental skills during training. One of the earliest books to address this issue is Timothy Gallwey's The Inner Game of Tennis, which aims to give insights into the mental aspects of playing tennis. He describes two selves: Self One, the I, who is giving instruction, and Self Two, myself, who is performing the action. One is the teller and the other is the doer. The process of getting the two selves to work together in tennis involves learning skills such as letting go of judgments, the art of creating images and letting it happen (Gallwey, 1974).

2.6 Goal setting

2.6.1 Defining goal setting

Goals are defined as playing a pivotal role in transitions from an existing state to a desired state or outcome (Spence, 2007). As such, the goal construct has been variously defined in terms of cognitions (Locke, 2000), behavior (Bargh et al., 2001) and affect (Pervin, 1983). Cochran and Tesser (1996) describe goals as "a cognitive image of an ideal stored in memory for comparison to an actual state; a representation of the future that influences the present; a desire (pleasure and satisfaction are expected from goal success); a source of motivation, an incentive to action" (as cited in Street, 2002, p.100). Carver and Scheier (1998) argue that all human behavior is a continual process of moving towards or away from mental goal representations. This is not to say that all goals are consciously held. Under many conditions, we enact complex outcome-directed behaviors even though we may not have consciously set specific goals.

2.6.2 The model of goal-directed self-regulation

Grant (2012) argues that goal theory provides a framework that can help a student explore, identify and then create helpful goals in order to facilitate purposeful positive change. The Model of Goal-directed Self-regulation (Grant, 2012; see figure 1) is a framework that works together with the principle of self-regulation. Self-regulation is a process in which the individual sets a goal, develops a plan of action, begins action, monitors performance, evaluates the performance by comparison to a standard, and based on this evaluation change actions to enhance performance and better reach his or her goals (Carver & Scheier, 1998). In practice, the steps within the self-regulatory cycle are not separate stages. Each stage overlaps with the next.

Zimmerman (1998) defines the self-regulation process as one that involves "self-generated thoughts, feelings, and actions for attaining academic goals," which is based on conceptions developed in both general education (Zimmerman, 1998) and music education (McPherson & Zimmerman, 2002). Another definition is given by Zimmerman and Martinez-Pons (1988), who describe self-regulated learners as "metacognitively, motivationally, and behaviorally active participants in their own learning process."

Researchers indicate that self-regulated learners make greater use of learning strategies and achieve better than learners who make little use of self-directed learning strategies (Zimmerman & Martinez-Pons 1990).

Grant (2012) argues that goal setting should facilitate the development and implementation of an action plan. The action plan should be designed to motivate the individual into action and should also incorporate means of monitoring and evaluating performance, thus providing information on which to base follow-up actions.

Figure   **1**

Generic Model of Goal-directed Self-regulation (Grant, 2012)
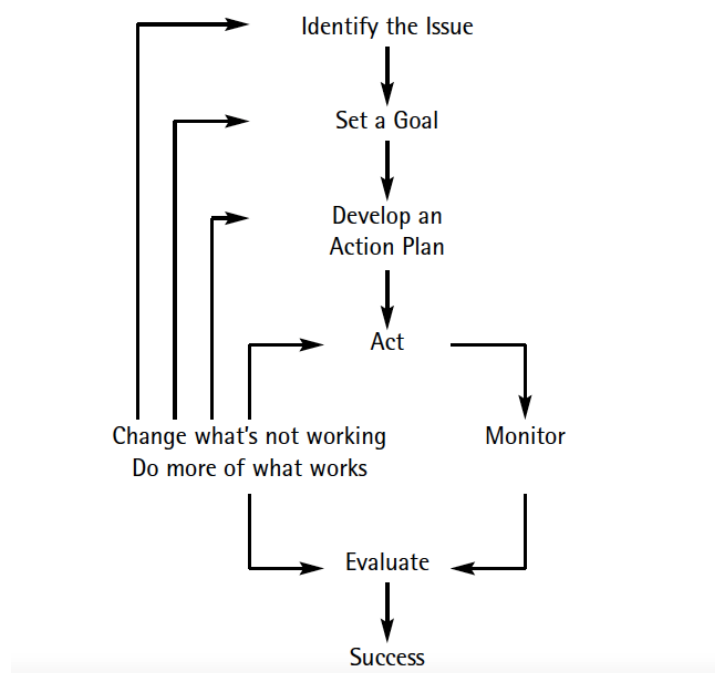
The monitoring and evaluation of actions and the generation of feedback as the individual moves through the self-regulation cycle is a vital part of the process. As Grant (2012) discusses, some behaviors will be easier to monitor than others. In the case of the music student, movements and sound reproduction can be relatively straightforward to observe or listen to. Internal factors such as motivation, self-efficacy and concentration might be more difficult to monitor, and the student might have to be more creative in devising means of monitoring and evaluating them. The generation of feedback is seen by Locke and Latham (2002) as crucial since the right feedback can provide information about subsequent goals and actions. This process, if done well, will eventuate in successful goal attainment (Locke & Latham, 2002). Regarding goals satisfaction and motivation, Sheldon (2002) argues that goals that are aligned with the student's intrinsic interests or personal values are more likely to be personally satisfying when achieved, and as a result, motivate the student for engagement in future challenges.

2.6.3   Types of goals

There are over twenty types of goals that can be used, including outcome goals, distal and proximal goals, approach and avoidance goals, performance and learning goals, and higher and lower order goals. As Grant (2012) mentions, these distinctions are important because different types of goals impact differently on the person's performance and his or her experience of the goal-striving process.
The material developed for this study will use two different time framing goals, weekly goals and daily goals. Therefore, the following section will elaborate on the qualities of both weekly goals, seen as outcome goals, and daily goals, seen as performance or learning goals. Emphasis is put on the use of SMART goals (Doran, 1981) and approach-directed language.

A vital factor when setting goals is time frame. Distinct time frames can influence the

individual's perception of the attainability of the goal (Karniol & Ross, 1996). Distal goals, for example, are longer-term goals and are similar to the vision statements often referred to in business or management literature (Grant & Green, 2004). Proximal goals are shorter-term and tend to stimulate more detailed planning than distal goals (Manderlink & Harackiewicz, 1984), and hence are important goals when used in action planning.

Another relevant factor for setting goals is the use of approach-directed language. Opposite to an avoidance goal, an approach goal is expressed as a movement towards a specific state or outcome. For example, 'to enjoy performing for an audience and embrace the feeling of excitement.' Such goals can help define appropriate goal-striving behaviors. Not surprisingly, there are differential effects associated with avoidance or approach goals. Coats, Janoff-Bulman, and Alpert (1996) found that people who tended to set avoidance goals had higher levels of depression and lower levels of wellbeing. Other studies have found that approach goals are associated with both higher levels of academic performance and increased wellbeing (Elliot & McGregor, 2001).

Weekly goals = Outcome goals

A weekly goal can be seen as a medium time frame goal and it can follow the principles of outcome goals. Outcome goals are usually a statement of some desired outcome (Hudson, 1999). This approach to goal setting can be useful for individuals who are committed and have the necessary ability and knowledge. Outcome goals that are difficult and are specifically and explicitly defined allow performance to be precisely regulated, and thus often lead to high performance (Locke, 1996). One of the most famous goal setting frameworks that can be applied to outcome goals is the "SMART goal," which defines effective goals as Specific, Measurable, Attainable, Realistic and Time-bound (Doran, 1981).

Daily goals= Performance and learning goals

Daily goals, seen as shorter in a time frame, can be stated as performance or learning goals. Performance goals focus on task execution and are typically expressed as being competitive in terms of performing very well on a specific task. Performance goals tend to focus the individual's attention on issues of personal ability and competence (Gresham, Evans & Elliott, 1988). An example of a performance goal in music learning could be 'to play this sonata with outstanding accuracy.' Performance goals can be very powerful motivators, especially when the student has been exposed to mastery experiences. However, performance goals can, in fact, impede performance (Grant, 2012). This is particularly the case when the task is highly complex or the goal is perceived as very challenging, and where the individual is not skilled or low in self-efficacy.

In many cases learning goals may better facilitate task performance (Seijts & Latham, 2001). Learning goals focus the individual's attention on the learning associated with mastering a task, rather than on the performance of the task itself. An example of a learning goal in music learning might be 'train to have around and powerful sound.' Learning goals tend to be associated with a range of positive cognitive and emotional processes including the perception of a complex task as a positive challenge rather than a threat, greater absorption in the actual task performance (Deci & Ryan, 2002), and enhanced memory and wellbeing (Linnenbrink, Ryan & Pintrich, 1999).
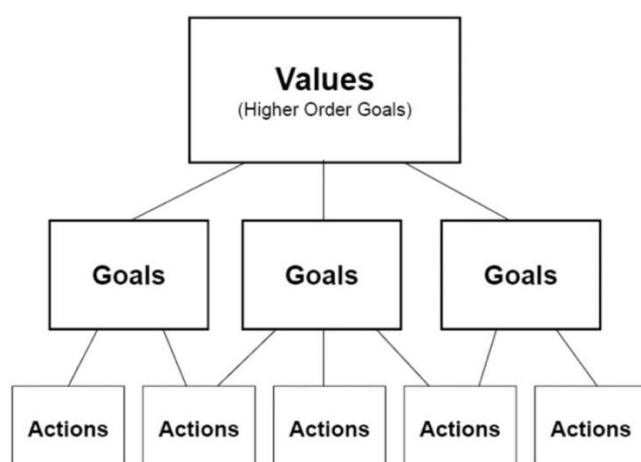
2.6.4 Goal hierarchies, choice and action planning

Grant (2012) suggests the following framework, which explains the hierarchy and connections between values, goals and specific action steps. (see Figure 2).

The Goal Hierarchy Framework (Grant, 2012)

In this framework, higher-order abstract goals such as 'to be a great cellist' can be understood as being situated vertically higher than the lower order and more specific goal 'to win the auditions for the young national orchestra by the end of the year" (Chulef et al., 2001). Higher-order goals from this perspective equate to values. With this model, Grant (2012) proposes a hierarchical relationship between values (higher-order goals), goals and action plans.

Action planning is described as the process of developing a systemic approach for attaining goals and is particularly important for individuals who have low self-regulatory skills (Kirschenbaum, Humphrey & Malett, 1981). One key outcome of successful action planning is the acquisition of what is called an "implementational mindset" (Gollwitzer, 1996). The implementational mindset is engaged once the decision to act has been made. This mindset has a determined, focused quality and is biased in favor of thinking about success rather than failure. This mindset is associated with higher levels of self-efficacy, self-regulation and goal attainment (Bandura, 1982).

Self-concordance refers to the relationship between an individual's intrinsic motivations and values and emphasizes the extent to which individual perceives their goals as being determined by their authentic self, rather than induced by external sources (Grant, 2012). Motivation can determine how hard you are willing to persist in order to obtain something. Thus, it is important to be highly motivated, most importantly, intrinsically motivated. The main influences on intrinsic motivation are the attitude towards ourselves, high self-efficacy, our own expectations and autonomy (Williams, 2017).

In conclusion, one can acknowledge the importance of goal setting strategies as they can help visualize, achieve and assess the development of musicians. As such, goal setting remains a key topic in music learning and performing, and appears to have a reliable influence on our learning and practicing outcomes and achievements.

3   Methodology

This chapter entails all relevant information related to the research design and process that was used to respond to the following question:

How can mindfulness and goal setting exercises be applied during instrumental practice in order to promote self-efficacy in conservatory students?

The first section of this chapter presents the methods chosen for the study and the reasoning behind it. The following section covers the aim and details of the study. Subsequently, the research materials and procedures used for the intervention are revealed. Concluding this chapter, the chosen tools for data collection are defined and explained.

3.1   Research Method

The following intervention used multiple case study and design research as the two main research methods since they proved to be the most relevant for the circumstances of the overall research objective. This becomes evident as the purpose was first to develop specific exercises, some taken from external sources and others adapted and specifically designed for this research, and secondly, to put these exercises under the scope of a multiple case study and observe its results.
Case studies are used in design research to analyze a phenomenon, to generate hypotheses, and to validate a method. Though they are used extensively, there appears to be no accepted systematic case study method used by design researchers.

A case study can be defined as an empirical research method used to investigate a contemporary phenomenon, focusing on the dynamics of the case within its real-life context. (Teegavarapu et al., 2008). Engineering design research is a means to explore, describe, justify, validate, and utilize design knowledge. An early definition of design was "a series of steps taken by designers to transform a given situation into a preferable one." From an empirical perspective, design knowledge has two components: scientific knowledge and tacit human knowledge (Teegavarapu et al., 2008). Major objectives of conducting design research are grouped into five main categories, namely, empirical research, experimental research, development of new tools and methods, implementation studies and others, which include design theory and education (Teegavarapu et al. 2008).

Yin (2003) argues that when the researcher chooses a multiple case study, he can analyze the data within each situation and across different situations, unlike when a single case study is selected. Additionally, according to Baxter & Jack (2008), in a multiple case study, the researcher studies multiple cases to understand the similarities and differences between the cases. As a result, the researcher can provide the literature with important influences from the cases' differences and similarities (Vannoni 2015).

3.2 Intervention

3.2.1 Aim

The objective of this research is first to design a set of exercises conformed by goal setting strategies and mindfulness principles. Second, to integrate these exercises in the instrumental practice of music conservatory students and observe through a multiple case study, the effects on the participant's sense of self-efficacy. To evaluate the student's self-efficacy levels, the research applied the data collection tools before and after the intervention and used both qualitative and quantitative collection methods.

3.2.2 Subjects

A number of 11 subjects (8 women and 3 men) were recruited to participate in the study. The subjects were bachelor pre-master, master and graduate students from the Royal Conservatory of The Hague and from both the classical department and the education department. Subjects were aged between 23 and 28 years old (mean= 25,9). The students specialized in different musical instruments: cello (2), double bass (1), flute (1), guitar (1), harpsichord (1), horn (2), viola (1), violin (1) and voice (1). The age, gender and instrument of the students were chosen at random. The wish to have no control over the selection of the subjects was deliberate in order to have different circumstances and, therefore, being able to observe different scenarios. There might be differences in experience, performance standards and expectations of students in accordance with their level of studies and specialization. One could conjecture, therefore, that the differences in the focus and course of learning between these groups may be reflected in students' self-efficacy scores, and particularly that for musical learning.

3.2.3 Environment

The intervention was held on the premises of The Royal Conservatory of The Hague and in the home of the students. The intervention lasted four weeks, during which participants had to apply the material that was given.
The length of the practice sessions varied, depending on the routine and criteria of the student. Although it was proposed to engage in sessions of 20 minutes, this criterion was not a parameter for the study itself but merely a recommendation. Therefore timing, duration and break setting were not controlled.

3.2.4 Materials

There were three questionnaires and two interview designs used for this study. The first questionnaire – 'Attitudes towards specific musical learning and practicing activities, Self-efficacy' - (See Appendix A) was adapted from Ritchie and Williamons' (2011) self-efficacy for musical learning scale. With each item, a Likert-type rating scale was presented, ranging from 1 (Strongly disagree) to 5 (Strongly agree). Each of the 11 items was specifically oriented to musical learning and practicing activities, with no specificity on attitudes toward specific musical performance activities, as is the case for Ritchie and Williamons' (2011) scale.
Certain basic word changes were made in light of research supporting task-specific orientation into self-efficacy observation. The scale was made task-specific through a preliminary instruction for the respondent to recall their last practice session, to think about their current

learning and practicing activity and musical material, and then to respond to each statement with their actual practice context in mind.

Each of the 11 items in the original scale was specifically oriented to musical learning with the association and aim of playing in an upcoming imaginary performance. With the new scale, this last intention was removed to only focus on the learning and practice experiences of the student regardless of a performance prospect. Seven of the original statements were used for the new questionnaire. Nevertheless, certain changes were made in each of these statements to remove the performance prospect and allow for more specificity regarding certain learning and practicing activities. For example, "I am confident that I can successfully learn the music for this performance" was changed to "I am capable of playing the music I am practicing at this moment." The missing four statements were devised for the new questionnaire in order to observe more closely specific attitudes regarding the beliefs of learning and practicing an instrument.

Following recommendations by Bandura (2006), the scale was titled 'Attitudes toward specific musical learning and practicing activities' and not 'Self-efficacy questionnaires.'

The second questionnaire was titled 'Attitudes towards specific musical learning and practicing activities – Mindfulness, goal setting and self-regulation' (See Appendix B). This questionnaire consisted of seven items addressing mindfulness, goal setting and self-regulation attitudes and was devised in consultation with teachers and music professionals. Respondents were asked to rate the seven statements individually using a Likert-type rating scale, from 1 (Never or very rarely true) to 5 (Always true).

The third and last questionnaire used for this study was the Freiburg Mindfulness Inventory (Walach et al., 2006), a reliable questionnaire for measuring mindfulness. Consisting of 14 items that cover all aspects of mindfulness in a generalized context, the purpose of utilizing this inventory was to observe the experience of mindfulness in the participants. A Likert-type rating scale was used, rating 1 as rarely and 4 as almost always.

There were two interviews designed for this study. The first one was applied before the intervention and intended to better understand the practice habits and sense of self-efficacy of the participants. The second one was developed to assess the experience of the participants after finishing the activities of the intervention.

The material developed for the study consists of four main elements:

- Mindfulness material: **3 weekly handouts** (See Appendix C) were given to each participant, one per week. The topics covered on these handouts were (I) awareness training - somatic experiences (breathing, body sensations and movement), (II) Acceptance training - awareness of thoughts and emotions in a non-judgmental way, and (III) Self-compassion and valued-behaviors training - nurturing self-compassion and cultivating positive and valued behaviors. Additionally, **two weekly mindfulness exercises** were designed and included in the practice formats. One of the exercises was a formal guided meditation and the other an informal adaptation of mindfulness into musical activities.

- Goal-setting material: **3 practice formats** (See Appendix D) were envisioned to apply and assess the goal setting strategies and mindfulness exercises developed for the intervention. The core structure of the formats remained the same throughout the study and only small changes were made according to the new mindfulness topic of each week. Weekly and daily goals were to be applied in accordance with the level of the repertoire the students were playing. In the format, the students were asked to divide the repertoire into warm-up material, new material, developing material and

performance material. Mindfulness exercises were to be applied every day. Participants received an explanation on how to use the format and how to write their goals through the **Mindful practice guide** (See Appendix E).

- The daily practice format: This format served to keep track of the use of goal setting and mindfulness exercises by the student. The last section of the format was designed for self-assessment, following the model of goal-directed self-regulation (Grant, 2012).

- Video recording and video recall formats: A 20 min video recording was asked from each participant during the last week of the intervention. During the recording of the video, students had to practice as usual. The indication was to speak aloud all their thoughts, decision and any mental cognitive event going on in their heads. Before the end of the week, they were asked to watch their video and to fill in a video recall format (See Appendix F) to observe and assess their practicing.

3.2.5 Procedure

The first step of the intervention consisted of interviewing each student. The content of the interviews served mostly to appraise and understand the current practice habits of the participants and to evaluate aspects related to self-efficacy. Besides the interview, the participants completed three questionnaires. Questionnaires served as pre-intervention control.

After the process of pre-intervention control was completed, students took part in a group orientation session, where they were briefly introduced to the topics of mindfulness and goal setting and the first week's material was explained and handed in. Students were also informed about the structure of the study and the activities in which they would take part. These group meetings were held every Monday during four consecutive weeks. The purpose of these sessions was to introduce the week's topic and new material.

Each week, participants received two specific materials: a weekly mindfulness handout and the practice format for that week. The content of both materials changed every week, although the structure, especially of the practice format, remained the same.

The intervention consisted of four weeks of individual practice and participants were expected to complete all the exercises that were given. As mentioned before, the general structure of the practice sessions was not controlled to maintain this element as naturally as possible. The duration of each practice session and the number of breaks was also at the participant's will. As part of their practice session, students were expected to fill in the practice formats and apply the mindfulness exercises. Once they were done practicing, they were asked to assess their practice by answering the questions included at the end of the formats.

The intervention phase was followed by post-intervention interviews and questionnaires. Questionnaires were precisely the same as the ones applied as pre-intervention control. Post-intervention interviews assessed the experience of the participants.

My role during the intervention served as both observer and mediator. I directed and informed the students throughout the process of the intervention, provided all material, as well as observed and analyzed all data collection.

3.3   Data collection

Data collection was obtained as ordered below:

1. Pre-intervention questionnaires
2. Pre-intervention interviews with students
3. Daily practice formats kept by the students
4. Post-intervention interviews with students
5. Post-intervention questionnaires

3.3.1   Data analysis

Interviews and practice formats kept by the students were analyzed as qualitative data and questionnaires as quantitative data.

In questionnaire II 'Attitudes towards specific musical learning and practicing activities - Mindfulness, goal setting and self-regulation', two items were reverse coded (items 2 and 4). The Freiburg Mindfulness Inventory had only one item reverse coded (item 14). Summative scores were calculated and shown in the form of bar graphs. Finally, results and tendencies were described.

Post-intervention interviews were transcribed and coded. Firstly, by assigning all relevant statements into four categories: self-efficacy, goal setting, mindfulness and COVID-19 and secondly, by creating sub-categories after finding recurrent statements among participants. Results were drawn from observations of the final sub-categories.

Analysis of practice formats occurred similarly. The formats were coded and categorized in self-efficacy and goal setting. Additionally, within the self-efficacy category, two sub-categories were identified: psychological and physiological states and positive and negative self-efficacy traits. Similarly, within the goal-setting category, one sub-category was identified, namely assessment and future action. Results were obtained from observations of the final sub-categories.

4 Results

This chapter presents the results obtained after analyzing the data collected during the study. Subject 2 did not finish the intervention and, thus, was not included in the results. Subject 3 lost the daily practice formats and, therefore, the data collected with the format could not be analyzed. It is also relevant to mention that from day four of the intervention's second week, measures were taken concerning COVID-19 and the study had to continue and finish under different and unfavorable circumstances.

The following results are of three pre- and post-intervention questionnaires, post-intervention interviews and daily formats.

Questionnaire 1
Attitudes towards specific musical playing and practicing activities
-Self-efficacy

Figure 3

Results of pre and post-intervention questionnaire 1: Attitudes towards specific musical playing and practicing activities -Self-efficacy
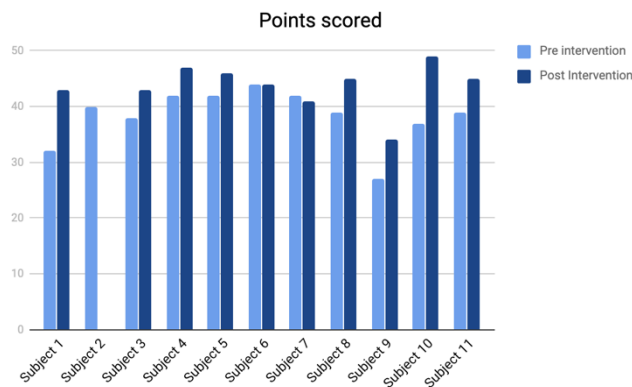
Findings:
- Eight of the ten subjects gave higher points on their post-intervention questionnaire than on their pre-intervention questionnaire
- One subject had less points on the post-intervention than on the pre-intervention questionnaire
- One subject gave an equal score on the post and pre-intervention questionnaire
- Seven subjects had an increase of 5 or more points on their post-intervention questionnaire compared to their pre-intervention questionnaire.
- Two subjects had an increase of 10 points or more on their post-intervention questionnaire compared to their pre-intervention questionnaire.

Questionnaire 2
Attitudes towards specific musical playing and practicing activities
-Mindfulness, goal setting and self-regulation

Results of pre- and post-intervention questionnaire 2: Attitudes towards specific musical playing and practicing activities -
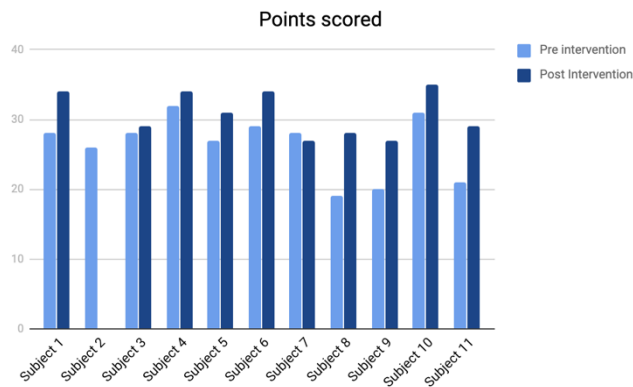*Mindfulness, goal setting and self-regulation*

Findings:
- Nine out of ten subjects gave higher points on their post-intervention questionnaire than on their pre-intervention questionnaire
- One subject had less points on the post-intervention than on the pre-intervention questionnaire. This same subject also had less points on the post-intervention questionnaire than on the pre-intervention questionnaire in questionnaire 1.
- Five subjects had an increase of 5 or more points on their post-intervention questionnaire compared to their pre-intervention questionnaire.
- No subject had an increase of 10 or more points on their post-intervention questionnaire compared to their pre-intervention questionnaire.

Questionnaire 3
Freiburg Mindfulness Inventory

Results of pre and post-intervention questionnaire 3: The Freiburg Mindfulness Inventory
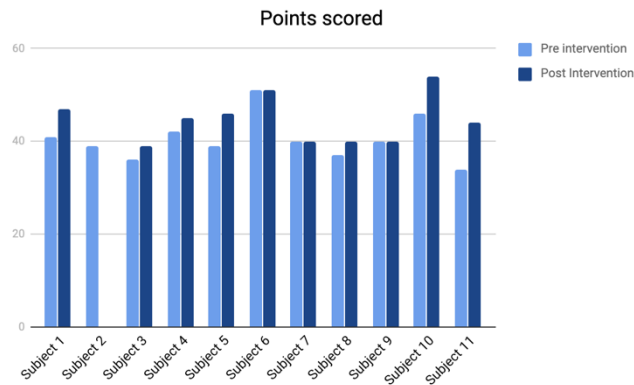

Findings:
- Seven out of ten subjects gave higher points on their post-intervention questionnaire than on their pre-intervention questionnaire.
- Three subjects gave an equal score on the post and pre-intervention questionnaire. This is not the same subject as the equal score in questionnaire 1. Subject 6 also gave an equal score on questionnaire 1.
- Four subjects had an increase of 5 or more points on their post-intervention questionnaire compared to their pre-intervention questionnaire. Subject 1 had an increase of 5 or more points on the post-intervention compared to the pre-intervention on every questionnaire.
- One subject had an increase of 10 or more points on their post-intervention questionnaire compared to their pre-intervention questionnaire. This subject did not have this large increase before.
- Subject 7 did not give herself a higher score on any of the three post-intervention questionnaires compared to the pre-intervention questionnaires.

Post-intervention Interviews

Category: Self-efficacy (Beliefs in one self's ability to achieve practicing and learning)
Subcategory: Acknowledgement of achievements (See Appendix F for a complete view of the statements under the category: Self-efficacy – Acknowledgment of achievements)

Findings:
-   Subjects 1, 3, 4, 5, 6 and 10 indicate that the intervention helped them reach their goals. These statements indicate a positive relation to self-efficacy beliefs. Their statements confirm the trend seen in the questionnaire 1 (See figure 3). On this questionnaire, all mentioned subjects except for subject 6 show a higher score on their post-intervention self-efficacy rating. Subject 6 rates her self-efficacy as unchanged from pre- to post-intervention. The statement given by subject 6 on the post-intervention interview might provide further insight into this result. *"I got aware that I didn't know anything about how to progress, but I think this was at the beginning and I think it's getting better and better." (Statement from post-intervention interview, subject 6).* While parts of the statement indicate a positive development during the intervention, other parts indicate doubt in the subject's own capabilities and sense of self-efficacy. This might be an explanation for the equal results given on both pre- and post-intervention questionnaires. *Category: Self-efficacy (Beliefs in one self's ability to achieve practicing and learning)*

Category: Self-efficacy (Beliefs in one self's ability to achieve practicing and learning)
Subcategory: Recognition of what is needed to achieve a good practice (See Appendix G for a complete view of the statements under the category: Self-efficacy – Recognition of what is needed to achieve a good practice)

Findings:
-   Subjects 1, 4, 5, 6, 10 and 11 indicate a clear understanding of what aspects are needed to have a good practice. This is a clear indication of high levels of self-efficacy.
    This is reflected in the scores given by the participants on their pre and post-intervention questionnaires. On questionnaire 1, all subjects, except for subject 6, gave themselves a higher self-rating regarding their sense of self-efficacy. The same explanation given previously might be valid here as well.

Category: Goal setting (formats and daily practicing)
Subcategory: Difficulties with filling in the format or setting goals (See Appendix H for a complete view of the statements under the category: Goal setting - Difficulties with filling in the format or setting goals)

Findings:
-   Subjects 4, 6, 10 and 11 indicate that filling in the format was time-consuming.
-   Subjects 1, 3, 5 and 11 all indicate that they had difficulties with organizing themselves, filling in the format, or following the format. As with the subjects above, one might assume that this negative sentiment would be reflected in the results questionnaires 1 and 2 or in the practice formats. Nevertheless, this was not the case. Not one subject indicated a negative development in their self-assessment in questionnaire 2. Only subject 11 expressed not to have filled in the practice formats correctly or in time. This was confirmed by observing the subject's practice formats, which were not as detailed as the rest of the participants.

Category: Goal setting (formats and daily practicing)
Subcategory: Statements under the category: Benefits/Assets found by using the format or using goals (See Appendix I for a complete view of the statements under the category: Goal setting-Benefits/Assets found by using the format or using goals)

Findings:
- Subject 1, 3, 5 and 8 indicate that goal setting helps them to perform better during practice sessions. Their sentiments expressed in the post-intervention interview support their self-rating given in the pre- and post-intervention questionnaires 1 and 2. All subjects show a higher self-rating on the post-intervention questionnaires compared to their pre-intervention questionnaires.
- Subject 1, 4, 7, 9 and 10 indicate that proper structure supports them in having a better practice session. Statements of subjects 1, 4, 9 and 10 reinforce the image already obtained when comparing their scores from questionnaires 1 and 2. In both post-intervention questionnaires, all subjects gave themselves higher self-ratings. However, for subject 7, this is not the case. When comparing the pre-intervention questionnaires results with the post-intervention questionnaires results, one can see that subject 7 shows a negative development. To find an explanation for this finding, we have to go deeper into the subject's statements.
- Statement 1: '*I found the planning really interesting.*'
- Statement 2: '*I had to force myself to find positive things in my practice and it was a very good exercise.*'
- Statement 3: '*We need to understand that our practice time is not only the time we take the instrument and blow, but also the time that we spend organizing and reflecting about the practice and that's something that I was still struggling with.*'
  While statements 1 and 2 indicate a positive development in subject's 7 practicing, statement 3 also indicates that the subject was struggling with the implementation of some of the material. This might provide an explanation as to why subject 7 had a lower score in the post-intervention questionnaire 2.
- Subject 1, 4, 5, 6 and 9 indicate that weekly goals helped them in having better practice sessions. For most of the subjects, this statement corroborates their self-ratings in questionnaires 1 and 2.
- Subject 3, 7, 8 and 9 indicate that reflecting on their study and thinking positive allowed them to see themselves more positively. All subjects had a higher post-intervention self-rating compared to their pre-intervention self-rating in both questionnaires 1 and 2, except for subject 7. For the majority of the subjects, the results are in line with their statements indicating that positive thinking and self-regulation improved throughout this intervention.

Category: Mindfulness (Awareness of habits of thought, emotions, body and practicing in general)
Subcategory: Positive outcomes/ Improved practice (See Appendix J for a complete view of the statements under the category: Mindfulness- Positive outcomes/improved practice).

Findings:
- Subjects 5, 6 and 7 indicated that the mindfulness exercises helped increase their awareness and have positive changes within and beyond their practicing. They could also identify small areas of improvement that had been previously unidentifiable. Additionally, subjects 9, 10 and 11 indicated that parts of the mindfulness practice,

such as positive thinking and being self-compassionate, helped them improve their practice by becoming more present, positive and engaged. For subjects 5, 10 and 11, these statements are comparable to the development seen when comparing the pre and post-intervention results of questionnaire 3. However, it is interesting to see that these statements do not reflect the scores of subjects 6, 7 and 9. All three subjects have an equal score from pre- to post-intervention on questionnaire 3. An explanation for this might be found in the statements given by the three subjects.

A first look is given to the statements of subject 6.

- Statement 1: *'Since one week, I have to say that my ears got way better. I was way more able to deep listen to my sound and what I'm doing.'*
- Statement 2: *'I realized that I know what I want to do, but I'm not certain about the goal. For example, now I focus on the movements, but why am I doing it.'*
- Statement 3: *'I really enjoyed it and I have the feeling that I got more aware of certain things.'*
- Statement 4: *'I had some really amazing moments where it was like "Jesus; finally you understood something about your behavior."'*
- Statement 5: *'I force myself to meditate every day.'*

Statements 1, 3 and 4 indicate a positive development during the intervention period as the subject indicates that her listening improved and her awareness increased. However, statement 2 and 5 might explain why the subject gave herself an equal self-rating before and after the intervention. In statement 2 the subject describes that she sometimes does not know why she engages in certain actions during practicing. In statement 5, the subject describes that she forces herself to meditate every day and during the post-intervention interview expresses that she has been meditating regularly for a long time. This might be a further explanation for the equal self-assessment when comparing the pre- to the post-intervention questionnaire.

An analysis is given on the statements provided by subject 7.

- Statement 1: *'I really liked it. It helped to have the topics structured in weeks'*
- B Statement 2: *'It helped me to structure some things that I already had been thinking about, but I never put words or a structured way off dealing with it.'*
- Statement 3: *'In general, at the beginning of my practice session, I am focused and at the end, I am not that focused.'*
- Statement 4: *'I also found it really interesting putting the meditation into the practicing as part of it. But still, it was sometimes hard for me to understand that this is part of the practice process and it is useful.'*

Statements 1 and 2 indicate that the subject experienced a positive evolution during the intervention and that the mindfulness exercises helped her create more structure in her practice sessions and identify areas for improvement, which were previously unidentifiable. However, when taking a closer look at statements 3 and 4, the subject also indicates negative sentiments. In statement 3, the subject indicates that her focus is diminishing throughout her practice session. Statement 4 describes that the subject found it hard to integrate the meditation in the practice process.

The statements of subject 9 are given below:

- Statement 1: *'It helps me to be more present while I practice, more present with my goals.'*
- Statement 2: *'It was very interesting the fact of the mantra to bring something that you can repeat yourself to go on.'*
- Statement 3: *'Maybe it's me that I have a block to work with the meditation, but that was kind of difficult. It was creating more thoughts.'*

The first two statements given by subject 9 indicate a positive development during the intervention period. However, the third statement given by subject 9 indicates that the meditation was having an adverse effect. This statement might, therefore, explain why the subject's self-assessment is equal when comparing the pre- and post-intervention results of questionnaire 3.

Category: Mindfulness (Awareness of habits of thought, emotions, body and practicing in general)
Subcategories: Increased awareness of one's habits and about the meditations (See Appendix K for a complete view of the statements under the category: Mindfulness- Increased awareness of one's habits and About the meditations)

Findings:
-   Subjects 5, 6, 7, 8, 10 and 11 all indicated that the mindfulness exercises helped them to become more aware of their own habits. This awareness led them to structure their practice sessions better and have better results. The positive development, as described by the subjects, can also be seen in their self-assessment in questionnaire 3. From the questionnaire scores given on the post-intervention questionnaire, all subjects, except for subjects 6 and 7, gave a higher score on their post-intervention questionnaire.
-   Subjects 1, 3, 4, 5, 6, 7, 9 and 11 all indicated that the guided meditations supported them in preparing for a practice session. The main benefits that were mentioned by the subjects are increased focus, increased awareness (being present) and positive thinking. The positive development described in the subject's interview statements is also reflected in their scores in questionnaire 3. Similar to above, all subjects, except for subjects 6, 7 and 9 gave a higher score on their post-intervention self-assessment on questionnaire 3.

Category: COVID-19 situation
Subcategories: Positive influences and negative influences (See Appendix L for a complete view of the statements under the category: COVID-19- Positive and negative influences)

Findings:
-   Subjects 1, 4, 5, 6, 7 and 8 indicate that the situation caused by COVID-19 had a positive influence on their practice sessions.
-   Subjects 3, 4, 5, 6, 7, 8, 9, 10 and 11 indicate that the situation caused by COVID-19 had a negative effect on their practice sessions.
    From these results, one can see that some subjects experienced both negative as well as positive influences from the situation caused by COVID-19. This can be seen from subjects 4, 5, 6 and 7. It is unclear whether or not this situation has a moderating impact on the results of the intervention. In this case, subjects indicating that they experienced a positive influence from the situation caused by COVID-19 might have given themselves a higher score in the three post-intervention questionnaires when comparing to the pre-intervention questionnaires. The contrary also holds. Subjects indicating to have experienced negative influence from the situation caused by COVID-19 might have given themselves a lower score in the 3 three post-intervention questionnaires when comparing to the pre-intervention questionnaires. This might be a partial explanation for subjects 6, 7 or 9 who had an equal or lower score on one or more of their post-intervention questionnaires compared to their pre-intervention questionnaires.

Practice Formats

Six daily formats were taken from week 2 and analyzed to trace self-efficacy traits and self-regulation of goal setting. The section of the format that was analyzed consisted of three self-assessment questions concerning feedback on what went well during the day, goals for next sessions and observations of thoughts and feelings during practicing. Subject 3 lost the practice formats and, thus, will not show on the findings. Some students didn't complete the six formats of week 2 due to the COVID-19 situation and therefore, formats of week 1 and week 3 were taken to complete the amount of six formats per subject.

During week 2 of the intervention, scores were taken from students according to their psychological state before and after their practicing (See figure 6). The statement was the following: *"How enthusiastic do I feel today before/after my practice?"*. The numeral rating scale was from 1 (not at all good) to 10 (very good).

Figure 6

Scores retrieved from practice formats regarding psychological states before and after practicing.

Name	Score before practice	Score after practice
Subject 1	5,9,6	7,9,8
Subject 2	-	-
Subject 3	-	-
Subject 4	8,6,-	8,7,7
Subject 5	6,6,6,6,7,7	5,9,7,7,7,9
Subject 6	10,10,9,3,5,7	10,10,10,3,6,10
Subject 7	7,7,6,7,6,5	8,6,6,6,-,5
Subject 8	7,6,7,8	-,4,8,-
Subject 9	8,7,8	9,7,9
Subject 10	7	8
Subject 11	9,8,8,8,	8,9,8,8

Findings:
- Subject 10 always gave a higher score after practicing, showing a high rate of positive psychological states after practicing. Nevertheless, this conclusion might be relative since participant 10 completed only one of the formats from week 2.
- Subjects 1, 4, 6 and 9 always gave an equal or higher score after practicing.
  Their scores confirm the trend seen in the post-intervention interview statements regarding self-efficacy, in which subjects 1, 3, 4, 5, 6 and 10 indicated that the intervention helped them reach their goals. Subject 3 was not included in the scores regarding his psychological state since his formats were lost. The absence of subject 5 could be explained by the statements given on the days the subject rated a lower score regarding his psychological state:
- Statement 1: (Subject 5) *I'm feeling exhausted as I got stressed with making a recording without preparation*
- Subjects 5, 7, 8 and 11 gave a mix of lower, equal and higher scores after practicing, which also confirms the trends seen in results of the post-intervention interviews regarding self-efficacy, in which only subjects 5 and 11 gave self-efficacy related statements. The possible cause of subject 5 results was given above and the possibility of subject 11 having rated lower in his psychological states after practicing might be due to his statements on the day a lower score was given:
- Statement 1: (Subject 11) *"Being bored mostly."*

Positive and negative self-efficacy traits were also identified in the subject's statements written in the practice formats (See figure 7).

Results retrieved from practice formats regarding positive and negative self-efficacy traits.

Name	Positive self-efficacy traits						Negative self-efficacy traits					
	Day1	Day 2	Day 3	Day 4	Day 5	Day 6	Day1	Day 2	Day 3	Day 4	Day 5	Day 6
Subject 1	-	x	-	x	x	x	-		-			
Subject 2	-	-	-	-	-	-	-	-	-	-	-	-
Subject 3												
Subject 4	x	x	x	x	x	x		x				
Subject 5		x	x	x	x	x	x		x	x	x	
Subject 6	x	x		x	x			x	x	x		
Subject 7	x	x	-		x	x	x	x	-	x	x	x
Subject 8	-		x	x	x	x	-	x				
Subject 9	x	x	x	x	x	x			x			
Subject 10	x	x	x	x	x	x			x	x		
Subject 11	x	x	x	x	x		x	x	x			

Findings:

Positive self-efficacy traits
- Subjects 4, 9 and 10 indicated daily positive self-efficacy traits in a period of 6 days. These results correlate with the ones shown in the post-intervention questionnaire 1, where two subjects had an increase of more than 5 points and one had an increase of more than 10 points.
- The remaining subjects indicated 4 to 5 days of positive self-efficacy traits in a period of 6 days.
- Positive self-efficacy traits were related to improvements on their playing, ability to identify actions to achieve goals, positive emotional states (i.e. happiness, security), being connected to the music and their instruments, enjoyment, selection of repertoire, a non-judgmental attitude, body awareness, self-compassion and focused attention (i.e. on the music, on the sound, on intended goals, body sensations). This correlates with the self-efficacy theory, which describes the main sources of self-efficacy beliefs to be mastery experiences, vicarious experiences, verbal persuasion, and emotional and physiological states.

Negative self-efficacy traits
- Subject 7 indicated 5 days of negative self-efficacy traits in a period of 6 days. Subject 7 was the only one scoring less in both post-intervention questionnaires 1 and 2.
- Subjects 5, 6, 7 and 11 indicated 3 to 4 days of negative self-efficacy traits in a period of 6 days.
- Subjects 4, 8, 9 and 10 indicated 1 or 2 days of negative self-efficacy traits in a period of 6 days. These results are in line with those of the post-intervention questionnaire 1, which shows that three of these subjects had an increase of at least 5 points and one subject an increase of over 10 points.
- Subject 1 indicated no days of negative self-efficacy traits in a period of 6 days. Subject 1 also showed a positive increase of more than 10 points in the post-intervention questionnaire 1.

- Negative self-efficacy traits were related to the inability to improve on the skill/goal, feelings of disappointment, frustration, physical pain or sense of disconnectedness, lack and inability to focus, negative mental chatter and discomfort from external events.

Goal setting
- 3 types of statements were detected in statements under the section: Goal observations (Goals for next session). All subjects wrote one of the following statements as a reflection of their self-regulated practice and as future action for the upcoming practice session:
1. Didn't work, change goals
2. Keep doing the same, it worked
3. New goal according to new needs

5 Conclusion and discussion

In this chapter, conclusions according to the findings and the initial hypothesis of this research will be discussed. The discussion will focus on the topics of mindfulness and goal setting and its relationship with higher self-ratings of self-efficacy, followed by my own experience with these practices. Finally, the limitations of this study, proposals for further research and implications for music pedagogy will be addressed.

5.1 Contributions of this study

The hypothesis of this research was that there would be an increase in the subjects' self-efficacy and that this increase would happen as a result of the application of specific mindfulness and goal setting exercises. Positive findings concerning the use of mindfulness and goal setting and its relationship with higher self-ratings of self-efficacy are shown in the results. The increase of the self-ratings from the pre- to the post-intervention questionnaires and positive statements found in interviews and formats indicate that both mindfulness and goal setting are valuable models towards higher self-efficacy for practicing and learning an instrument.

Apart from higher self-ratings concerning self-efficacy, the analysis of the data obtained from this study allows conclusions to be made concerning the improvement on the student's overall practice quality, growth of mindfulness traits, self-regulation and wellbeing. The findings of this research can be linked to Bandura's study (Bandura, Adams, & Beyer, 1977), who found self-efficacy to be strongly related to cognitive processes, the self-regulation of motivation and affective processes.

The results found concerning the use of goals and the practice formats show that the subjects developed better self-regulation skills for practicing. Most of them valued organization and the use of goals and related it with better practice outcomes. This results can be related to the findings of Arielle Bonneville-Roussy and Thérèse Bouffard (2015), who combined the already existing theories of deliberate practice and self-regulation into the concept of "formal practice", a model used to enhance learning and performance.

Furthermore, the higher ratings on all three post-intervention questionnaires and interviews can be linked to the findings of Zimmerman & Martinez-Pons (1990), who found that self-efficacy relates positively to the use of independent learning strategies and stronger links to achievement (Zimmerman et al., 1992). The ratings given by the students after the intervention show that the application of formal and informal mindfulness exercises relates with higher perceived mindfulness traits such as awareness of thoughts, emotions, habits and increased focused attention. This findings are sustained by evidence that relates mindfulness to prolonged states of creative insight and flow (Schooler and colleagues 1993), less fear, fewer task-irrelevant thoughts (Birrer, Röthlin & Morgan 2012), improved emotional functioning and self-regulation (Hözel et al., 2011).

As self-regulation tools were added to the practice formats during the intervention, it was possible to observe how students felt about their practicing. All the questions in the reflection section of the format invited the students to focus on the positive outcomes and future goals regarding their practice.

Positive self-efficacy traits found in the reflections inside the practice formats were linked to better practicing, the ability to identify actions to achieve goals, positive emotional states (i.e. happiness, security), being connected to the music and their instruments, enjoyment, selection of repertoire, a non-judgmental attitude, body awareness, self-compassion and focused attention (i.e. on the music, on the sound, on intended goals, body sensations). This findings

correlate with the self-efficacy theory (Bandura, 1986), and specially with two of its sources - mastery experiences and emotional and psychological states.

The mindfulness exercises designed for this study gave the students new forms for training their mental and physical awareness while practicing strategies to allow more positive thoughts and behaviors to arise. These exercises were put in practice through guided meditations and practical exercises linked to their music practicing. Thus, mindfulness was not an isolated practice; rather, it was applied as part of their instrumental practice.

Goal-setting strategies were included in a practice format, which was designed not only for the student to plan and act upon weekly and daily goals but also to reflect and assess their practicing on a daily basis. The model of self-regulated goal setting (Grant, 2012; see figure 1) proved to be a strong scheme and gave the students the tools to be more deliberate with the use of their practice time.

The assessment questions included in the daily formats were all directed towards positive feedback. Assessing through a positive lens links to the mindfulness topic of nurturing positive and valued attitudes and behaviors, which allows the student to focus and acknowledge positive outcomes, reflections and future goals.

The design and creation of the material used for this study proved to be adequate for its purposes. Nevertheless, modifications will be taken into consideration according to the subject's experiences and comments. A weekly version of the format will be developed as well as a wider offer of meditations, including the possibility of doing them without an audio file.

As mentioned in the preface, this research started as a personal endeavor and thus, all material designed for this study was first tried and rearranged according to my own experiences. For a process that lasted over a year, I tried different tools and experimented with them inside and outside the practice room. In my experience, the benefits of using both mindfulness and goal setting strategies are enormous. My performance anxiety has decreased and I have learned to react differently when feeling the arousal of stress responses. I am much more aware of my practice habits, of how I use my body and of my usual mental and emotional states. I have gained the ability to direct my attention to where I want it to be and to realize when it starts wandering away. I am more confident, compassionate and deliberate in my actions, which allows me to practice and perform better.

Regarding goal setting and the use of the practice format, my practice has become much more deliberate and I obtain better results. I feel satisfied when I put my instrument away and I am able to direct my learning actively and assess the progress I make.

The logical step to extend the application of this practices to other musicians and investigate if there would be similar positive effects led me to the initiative of creating material and exercises that could be applied by other music students in a sensitive and simple way. My interest around mental strategies and mindfulness has changed the way I engage with learning and practicing music. I have decided to follow further certifications in mindfulness training in order to be a better qualified teacher in the use of this practices.

5.2   Limitations and further research

Although the findings of this study seem convincing, it is impossible to state that the higher scores on the subject's sense of self-efficacy are purely a consequence of the use of the material given to them. Multiple factors vary within the personal circumstances of each subject and the course of actions taken during the period of the intervention. This variability does not allow me to point only to mindfulness and goal setting as the pure cause of higher ratings of perceived self-efficacy. These results raise questions about what patterns of learning and practicing result in constant higher self-efficacy scores. A more robust study that includes the same hypothesis as this study is needed.

Furthermore, a similar study including a control group could give a clearer picture of how the added material affected the subjects results. In such study, the practice sessions of the control group would be monitored and no extra material would be given to them.

Regarding the topic of performance anxiety, this research could not evaluate if the intervention had an impact on their levels of performance anxiety. Thus, another study would be needed to observe if there is a direct relation between the use of goal setting and mindfulness exercises during practice and the levels of performance anxiety.

Additionally, further research should explore the link between other practice strategies or resources related to learning and practicing with constant higher self-efficacy scores. Lastly and as stated by Ritchie and Williamon (2011), discovering whether enhancing skills or learning behaviors has a direct effect on self-efficacy beliefs about separate tasks (such as practicing and performing) that share skills would bring a new area for investigation within self-efficacy research.

5.3   Implications for music pedagogy

Empirical evidence supporting how various types of self-efficacy affect and predict attainment is valuable to teachers. The material designed for this research has already been used for teaching purposes and the application of these resources was found adequate to apply in both individual and group contexts.

As a teacher myself, I have explored the use of this research's material. As a guest teacher of a music university in Mexico, I explained bachelor students how to improve their practicing by using this research's theories and materials. Students responded positively to the application of the resources given.

There is need for further research to explore how to help students improve their self-efficacy beliefs regarding their learning and practicing with the use of specific materials based on goal setting, mindfulness and other relevant theories. It is also important to include and create applications of such theories for the studio teaching and conservatory curriculum.

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7   Appendices

Appendix A
Questionnaire 1Attitudes towards specific musical learning and practicing activities- Self-efficacy

Name:
Date:

Attitudes towards specific musical learning and practicing activities
- ***Self-efficacy***

Please think of the last practice session you had with your instrument/voice and describe it below:

Practiced material:	
Location:	Estimated practice time:

	Not at all			Very much	
Rate how satisfied you feel about the practice session:	1	2	3	4	5

Directions:
Considering your instrumental learning and practicing activity, please indicate **how much you agree or disagree with each of the following statements below** (Think about the musical works that you are practicing at this moment, including your solo, chamber music and additional repertoire).

Strongly disagree 1	Disagree 2	Slightly Agree 3	Agree 4	Strongly agree 5

Circle the number according to the above 5-point scale.

1 I am capable of playing the music I am practicing at this moment	1	2	3	4	5
2 I practice my instrument regularly on a weekly basis	1	2	3	4	5
3 I practice effectively (successfully producing a desired or intended result)	1	2	3	4	5
4 I plan and organize my practice sessions and act according to it	1	2	3	4	5
5 I can skillfully play challenging material	1	2	3	4	5
6 I can deal with negative thoughts and emotions that may come up when practicing	1	2	3	4	5
7 When I cannot play the music/master the skill I am working on, I can persist with a positive mindset until achieving the desired outcome	1	2	3	4	5
8 I can successfully solve any musical/technical difficulty that I encounter in the repertoire I am playing	1	2	3	4	5
9 I am able to play my repertoire at a fairly high level	1	2	3	4	5
10 I trust the quality of my practice, which is reflected in the result of my playing	1	2	3	4	5
11 I understand and control the factors that lead to a successful practice session	1	2	3	4	5

Appendix B
Questionnaire 2 Attitudes towards specific musical learning and playing activities – Mindfulness, goal setting and self-regulation

Attitudes towards specific musical learning and practicing activities
*   *Mindfulness, goal setting and self-regulation*

Never or very rarely true	Rarely true	Sometimes true	Often true	Always true
1	2	3	4	5

Please indicate

how truthful each of the following statements are *Circle the number according to the above 5-point scale.*

1 I enjoy practicing	1	2	3	4	5
2 I get distracted by thoughts during my practice	1	2	3	4	5
3 I have a clear picture of the structure of my practice session beforehand	1	2	3	4	5
3 When I practice I set clear goals and act upon them	1	2	3	4	5
4 At the end of my practice I feel physical strain/ pain	1	2	3	4	5
5 I feel satisfied with the results I have achieved at the end of a practice day	1	2	3	4	5
6 I use assessment tools (journal, video/audio recording, notes, self reflection) to reflect and asses my learning process during the time I practice	1	2	3	4	5
7 When I am not feeling positive about my playing, I am kind towards myself and I work to see things more objectively	1	2	3	4	5

Appendix C
Mindfulness weekly handouts

WEEK 1

WEEK 2

WEEK 3

Appendix D
Practice formats and Mindful practice guide

Daily practice format week 1

Daily practice format week 2

Daily practice format week 3

Appendix E
The mindful practice guide

Mindful practice guide

Appendix F
Video recall format

VIDEO-RECALL INTERVIEW PROTOCOL

When you watch the video, please try to identify at least 3 moments when...
Write next to the options below the time frame of the video extract that you choose (i.e. 0'35-1'27)

a) You **solved** a difficulty (technical or musical)
b) You were **not able to accomplish** what you intended

c) You showed **trust** in your **practicing skills**
d) You **gave up**

e) You were capable of **analyzing** a problem/difficulty and **set a clear working plan** towards overcoming it
f) You were **not able to identify** the problem and **couldn't tackle** the difficulty

Please write below what you noticed about your practicing. Is there something you didn't see at the time you were playing? Observe your physical, mental and emotional states and write anything that seems relevant.

Appendix G
Statements Under The Category: Self-efficacy – Acknowledgment Of Achievements

Acknowledgement of achievements	• And I felt for the very first practice that it was working very well and I felt like great I am sure this material is going to save me and it did, it really helped me in very few sessions to get the whole program ready. (Subject 10)
	• The intervention helped the subject to focus and feel confident to reach the targets within the time limit. -> Due to confidence, targets were reached.
	• It was super efficient and super calm. (Subject 10)
	• So it's full concentration like circle one. (Subject 10)
	• With the confident feeling and the material, high levels of efficiency and concentration were reached.
	• Subject indicates improvement from before to after the intervention.
	• I got aware that I didn't know anything about how to progress, but I think this was at the beginning and I think it's getting better and better. (Subject 6)
	• Statement shows progress during the intervention.
	• Subject indicates improvement from before to after the intervention.
	• Thanks to you, even though I am not practicing that much. The time I am using for practicing is very effective because I have everything written down and I always know what I'm doing and in this sense I think that I have made a lot of progress with a lot of stuff during these few weeks. (Subject 5)
	• Clear goals and structure help the practice session to become effective and efficient.
	• I was super surprised after the first week when I had my goal that actually without thinking, well obviously I was thinking about it but I had the feeling that after a week it got actually much better without trying so hard. (Subject 5)
	• Clear goals setting helps efficient and quick improvement.
	• Subject indicates improvement from before to after the intervention.
	• In times where it was hard to find motivation It was a way to motivate myself, to achieve the goals with good results. (Subject 4)
	• Subject indicates that the intervention supported the motivation and achievement of results.
	• Goal setting wise I think, I realized that actually a lot of things have changed ever since the start of the research project. I remember that one of the goals was to change my posture and the way I am using my face as I play and I realized that it has changed a lot for the better. (Subject 3)
	• Subject indicates that he has achieved his goals due to the intervention.
	• If I look at where I was 5 weeks ago compared to now I would say generally, the goals I want to achieve for example being able to play the extreme high stuff with not much difficulty. Those have been reached. (Subject 3)
	• With both statements, subject indicates that he has improved from before to after the intervention.
	• Because this week for example I practiced really well. (Subject 1)
	• Subject indicates that her practice was positive.
	• Actually I improved some things that I wanted to improve for a long while for example my wrist. (Subject 1)
	• Subject indicates improvement from before to after the intervention.

Statements Under the Category: Self-efficacy – Recognition of What is Needed in Order to Achieve a Good Practice

Recognition of what is needed in order to achieve a good practice	• Because I know I can do it but sometimes it's just self-doubt that gets in the way. (Subject 11) • Subject indicates that self-doubt causes bad practice. • I just thought I'm going to make this process in the most open-minded way and that gave me so many good things. (Subject 10) • Subject indicates that an open-mind to the intervention facilitated the process. • I started to really have just one weekly goal for example this week I was focusing on not repeating, like stupid repetition and I have the feeling that already after 1-week it was way better than before. (Subject 6) • Subject indicates that a clear goal helped her improve. • Generally influenced my practice in a very very good way because first of all I have this tendency of very often end up just playing around. In this sense it really made me organized. I started going point-by-point on what I have scheduled. My performance time started being more scheduled. So in this sense it improved a lot. (Subject 5) • Subject indicates that clear goals and structure help achieve the goals. • I have the feeling that my practicing is much more organized and I know what I do and I know what I search for and it helps me to discover a lot. (Subject 5) • Subject indicates that clear goals and structure help achieve goals. • I discovered how to be more concentrated and that I can achieve goals faster than I did before if I am more organized and if I know more specifically what I have to work on and where. (Subject 4) • Subject indicates that goals and clear organization helps achieve the goals. • Yesterday something in my mind changed And I started to practice differently. I understood somehow how I should really work and to understand myself better when I am motivated or when I'm not in the mood. I learnt better how to understand myself when I'm practicing and choose the best moment of the day or just identify which mood I have that day so I know what I should practice : more intonation, more musical stuff so how could I be more useful during that day. (Subject 4) • Subject indicates that self-understanding helps her to study better and achieve her goals. • There was a moment when I was feeling really sad and I didn't want to practice and then I started practicing with a goal and I felt like yes I can make it. Also at the beginning I was setting a goal that was keeping my feet in the ground and filling them with my back and after a 5 days or so it felt really natural being with my feet on the ground and this was a problem I had for a long while. (Subject 1) • Subject indicates that a clear goal helps her to focus and achieve her goal.

Appendix I
Statements Under the Category: Goal Setting- Difficulties with Filling In the Format or Setting Goals

Difficulties with filling in the format or setting goals	Time consuming	• The very first day I felt like it was taking a lot of time. soon realized that it didn't took so much time and it really paid off (Subject 10) • Just sometimes I'm just lazy and I didn't fill in the format on the day itself and I did it on the days after (Subject 11) • With the formats, I knew that this was super important to write it down also for myself but I was super lazy (Subject 6) • At the beginning I used to be stressed because it takes 30 minutes that I have to wait before I practice. (Subject 4) • Subjects 4, 6, 10 & 11 indicate that filling in the format was time consuming.
	Struggle with formats and organization	• I guess trying to schedule my practice sessions wasn't really my thing, even after 3-weeks I found it a little bit of a hassle. (Subject 11) • I'm too used to just doing whatever I need to do to be doing without any fixed timing. Or I am just stubborn (Subject 11) • I think that it was a challenge in terms of organizing mostly because I'm a really messy person. So it was a really big challenge and I still have the feeling that it kind of is but then on the other hand it was really helpful. (Subject 5) • I think the most important thing is that I stop whenever my body tells me (Subject 11) • The organizing thing was the most difficult one. (Subject 5) • Consistency wise there were moments that it was really consistent but there were days still when it was terrible. (Subject 3) • It is very troublesome to write down before practice what I want to practice. Instead of day to day it works much more from week to week (Subject 3) • I know I have to be very specific in writing down but in my mind I know what it is and then from there I judge how I'm feeling today and if I'm feeling extremely strange I shouldn't play a concerto. Also, if I write it down and if I see my plan but I feel very tired then it doesn't work I think. For me having it microstructure might not work. (Subject 3) • At the beginning it was really hard for me to be organized and write it down (Subject 1) • Subjects 1, 3, 5 & 11 all indicate that that they had difficulties with organizing themselves, filling in the format or following the format.
	Struggle Goal setting	• It was really difficult also to have one goal for one piece. That's why I split it up (adding more than one goal per piece) at one point when I was super motivated and I really wanted to do it really right. (Subject 6) • Also it was difficult to really locate the problems to find what is a problem and how can I go to make it better. This is still so difficult for me to really give it a name. Sometimes I could really locate it but I didn't know what to do. (Subject 6) • I really enjoyed it. It was challenging and sometimes I was really stuck with the goal-setting. I didn't know how to do it but I think this challenge was really good (Subject 6) • Subject 5 indicated that she struggled with identifying problems and setting goals for improvement.

Statements Under the Category: Goal Setting- Benefits/Assets Found by Using the Format
or Using Goals

Benefits/Assets found by using the format or using goals	Goal setting benefits / Better practicing	• It helped me a lot because I was not thinking a lot about how to practice and although I had it in my mind it helped me a lot when I was writing it down because I could develop more ideas. (Subject 8) • I realized that is something I'm going to continue doing because it really helped me. (Subject 8) • Made me realize that somethings in your practice you cannot leave so it needs to be there in order to be effective. (Subject 3) • Goal setting helped me keep on track. (Subject 3) • Now I am going to go on doing this because I think setting clear goals was really important for me. (Subject 1) • I think having a clear goal was the thing that was more helpful for me because I could really focus on it (Subject 1) • It was helpful to have some performance material. It is nice to be aware that you also have to perform. (Subject 1) • It also helps me finding a direction in my practicing because I had this tendency of going up with my entire body so I'm not entirely grounded so having the structure In my practicing kind of takes me back to the ground in a metaphorical sense. (Subject 5) • Subject 1, 3, 5 & 8 indicate that goal setting helps them to perform better during practice sessions.
	Structure and organization	• I really engaged with the material and it has really helped me a lot. It gave me organization (Subject 10) • Also to organize your practice was nice (Subject 9) • I also found the planning really interesting. (Subject 7) • It's very visual because you have everything in one paper.(Subject 4) • I think for me the part of being really organized was really helpful because I am not really organized and this helped me a lot to keep going (Subject 1) • Subject 1, 4, 7, 9 & 10 indicate that proper structure supports them in having a better practice session.
	Benefits of weekly goals	• Especially with the weekly goals they were really useful. (Subject 9) • Also this weekly goal was amazing for me. (Subject 6) • The weekly goal is something very useful which I hadn't done before at all. I think it gives a sense of direction but also a point of reference to where you are so it's super nice. (Subject 5) • It was very helpful in the way that every week I had to focus on something different which I have never done before. (Subject 4) • One thing that was really helpful that I never did before was the weekly goals. (Subject 1) • Subject 1, 4, 5, 6 & 9 indicate that weekly goals have helped them in having better practice sessions.
	About the reflection section inside the daily format	• Filling the whole sheet every day and having to focus on the positive things like the last three questions are about positive things. I had to force myself to find positive things in my practice and it was a very good exercise. (Subject 7) • During the second week in the practice journal you asked how enthusiastic we were before and after our practice. That was also interesting because it made you think about what was changing or what remained the same or which were the parameters that changed the parameters of my practice or my engagement. How little things can change your day or your practice in a positive or negative way. Maybe to work to be more consistent, to be less distracted by external factors and to be really present when you're practicing. (Subject 9) • The material was always very positive, like the questions you wrote were very positive and it made me realize I'm not very positive towards myself, so I really had a problem writing down nice things about myself or my practicing. So maybe I discovered something about me. (Subject 8) • As positive: writing things down, the ability to reflect on what I just practiced, not just rating how good or bad it was but being fully aware of, if it's bad, why was it bad and what can I do, and then I could realize that I could've done this or that. (Subject 3) • We need to understand that our practice time is not only the time we take the instrument and blow, but also the time that we spend organizing and reflecting about the practice and that's something that still I was struggling with. (Subject 7) • Subject 3, 7, 8 & 9 indicate that reflecting on their study and thinking positive helps them to see themselves in a more positive way.

Appendix K
Statements Under the Category: Mindfulness- Positive Outcomes/Improved Practice

Positive outcomes/ Improved practice	• It was relevant trying to be positive and keeping negative thoughts away. Catching myself giving negative thoughts also that it doesn't become a cycle. (Subject 11) • I really engaged with the material and it has really helped me a lot. It gave me mental peace (Subject 10) • So I didn't have the negative feeling of: I have to be productive, I have to be efficient. it was more like: this is a process and I am going to make the process as rich as possible. (Subject 10) • Connecting with the body, it really makes me feel much more present, super engaged when I become in contact with my senses with my body. It really doesn't leave any space for other things in my mind.(Subject 10) • I now feel I would like to spend more time on the topic of the week one because it's really gave me so much. (Subject 10) • It can help me to be more present while I practice, more present with my goals. (Subject 9) • It was very interesting the fact of the mantra to bring something that you can repeat yourself to go on (Subject 9) • I really liked it. It helped to have the topics structured in weeks (Subject 7) • It helped me to structure some things that I already had been thinking about but I never put words or a structured way off dealing with it. (Subject 7) • Since one week I have to say that my ears got way better. I was way more able to deep listen to my sound and what I'm doing. (Subject 6) • So I had those experiences of truly experiencing something, for example watching a concert in YouTube (Subject 5) • I have the feeling that the exercises about self-compassion or observing my thoughts, it all kind of gently pushes me into being very observant and starting noticing very tiny things about my playing and myself. I know it goes with small changes but I have the feeling that It's thanks to what I'm doing with your intervention. (Subject 5) • Thanks to the intervention I'm starting to acknowledge that and see that but it is a very big challenge to actually do something about it so in this sense I think it is a difficulty . (Subject 5) • Subjects 5,6 & 7 indicated that the mindfulness exercises helped them better structure their study sessions and identify small areas of improvement that had been previously unidentifiable. • Subjects 9,10 & 11 indicated that parts of the mindfulness practice; positive thinking and being self-compassionate helped them improve their practice sessions.

Appendix L
Statements Under the Category: Mindfulness- Increased Awareness of one's Habits and About the Meditations

Increased awareness of one's habits	• Now I'm at a stage where this (self-critic) shouldn't be something that is happening during my practice anymore because I need to start performing and recording. (Subject 11) • When I get ready for a concert I always do it from the point of view of being a student. Now I am not a student anymore and I feel more free to feel differently about preparing a concert. When I was exploring the sensations in the body and the presence I realized that there are many other ways to make music or to get ready and that kind of work very well for me. To realize that I am free now to be free. I maybe didn't understand what many teachers tried to tell me with: Be more of yourself, we want to see you in the music. That wasn't really clear until I experienced the preparation of this concert. (Subject 10) • In general, at the beginning of my practice session I am focused and at the end I am not that focused (Subject 7) • I realized that I know what I want to do but I'm not certain about the goal. For example now I focus on the movements but why am I doing it. (Subject 6) • I really enjoyed it and I have the feeling that I got more aware of certain things. (Subject 6) • I had some really amazing moments where it was like "Jesus, finally you understood something about your behavior". (Subject 6) • Sometimes I'm used to working on some exercises and I never thought about what I wanted to do with those exercises. It helped me a lot to think about why I wanted to do them. (Subject 8) • I'm still sometimes not really sure of what I do but I start to get some kind of structure out of it (Subject 5) • I started being more conscious with what I want to achieve with every exercise that I do. (Subject 5) • I'm learning how to be more compassionate. I started seeing those moments because of the entire intervention and being more in contact with myself but I think that this is something that is very difficult to change. (Subject 5) • Subjects 5,6,7,8,10 & 11 all indicated that the mindfulness exercises helped them to become more aware of their own habits. This awareness led them to structure their practice sessions better and have better results.
About the meditations	• This week I seriously did the meditations and I think the one on the floor wasn't that much helpful but the imagery for musicians really helped me set up for the performance. It really helped me calm down a lot. Just positive reinforcement. (Subject 11) • Maybe it's me that I have a block to work with the meditation, but that was kind of difficult. It was creating more thoughts (Subject 9) • I also found it really interesting putting the meditation into the practicing, as part of it. But still it was sometimes hard for me to understand that this is part of the practice process and it is useful. (Subject 7) • I force myself to meditate every day. (Subject 6) • The meditation you gave us are different than what I usually do. I usually do a meditation that ends up with a visualization and yours were more like about staying here and now. (Subject 5) • I like the body scan because it helped me focus on myself and then when I started to practice I felt that I was already concentrated. It helped me calm myself to start practicing without anxiety but with more calm and being more reasonable with what I want to do and what piece I wanted to start practicing. (Subject 4) • I think it is very important that while doing the meditation, while it's good to be aware of your body you must also be fully aware that some things are not in your control. The difficulty is to train that faith and I realised that through meditation apart from the sense of calming yourself down there is also a sense of telling yourself to live that faith to have that message in your mind to kind of trust yourself. (Subject 3) • But I think that for a daily practice is very nice to have the audios, especially the performance imagery. I will keep it in my list of things to do before an audition or an exam (Subject 1) • About the meditation I already had done it before so no it was helpful but not that helpful because it was not new for me. (Subject 1) • Subjects 1,3,4,5,6,7,9 & 11 all indicated that the meditation exercises provided in the mindfulness exercises supported them in preparing for a practice session. The main benefits that were mentioned by the subjects are increased focus, increased awareness (being present) and positive thinking.

Appendix M
Statements under the category: COVID-19- Positive and negative influences

Positive influence	• Now I have a window which is nicer than in the conservatory and that's helping me a lot. (Subject 8) • I think it's nice to have this moment to reflect and also set other goals with the instrument and maybe explore other things that otherwise you wouldn't have time for. (Subject 7) • I am used to practicing at home so it was not such a big change. (Subject 6) • I started taking more care of myself. I sleep more, I take more care about what I eat, I try to eat healthy, I try to organize everything better than I actually did before. I meditate a lot apart from what I had to do for your intervention and I think that it kind of helps me be more in contact with myself and also not using social media so much. (Subject 5) • Even though it has been a super stressful time for me I had a lot of unusual very good experiences in terms of my relationship with myself.(Subject 5) • It helped me a lot with what we were doing with you because I had to write down everything I should practice every day and organize my week as I used to do before. So it was kind of helpful because I had some goals to achieve every day at least. (Subject 4) • I can use this time to practice more and do stuff I have never done before. So everything I'm doing is more useful and I do it without stress. (Subject 4) • it was really hard for me because I had this audition, But then I came with this (practice formats) and it helped me a lot (Subject 1) • I didn't practice a lot of hours perhaps 2 1/2 or 3 but it was like with a timer set 20-minutes of "this" and being really organized with myself has really helped me with the situation (Subject 1) • Subjects 1,4,5,6,7 and 8 indicate that the situation caused by COVID-19 has had a positive influence on their practice sessions.
Negative influence	• I think it's quite tough because right now I'm trying to prepare for auditions and suddenly there's everything that is just uncertain (Subject 11) • So it's just very hectic (Subject 11) • The practice room situation is very difficult. especially for me in Singapore because it's very hard to practice in a small space for a horn. It's just very constricting and the air here it's very humid. I'm sweating the whole time. (Subject 11) • Was quite anxiety inducing. So much uncertainty and not knowing what's going to happen. (Subject 11) • It has been huge. I was in Spain doing a project for a week. Three hours before the concert we got a message from the concert hall saying that the government had cancelled all events. That was a big down for me not only because all the work we did but also economically. (Subject 10) • The fact that I don't have any goal. (Subject 10) • It took away a lot of motivation that hasn't come back yet. (Subject 10) • So that made it difficult for me to keep practicing. (Subject 10) • It was really hard to go through practicing in this period. (Subject 9) • At the beginning I couldn't study because the conservatory closed and my instrument was there. (Subject 8) • I decided to come back to Spain and once I arrived here I had problems with my motivation. (Subject 8) • I just don't feel like doing anything (Subject 8) • Also the fact that my grandma passed away. That happened a couple of days before we started the intervention. (Subject 8) • Here, I haven't been able to print the format and this has also had an impact because I realized that typing on the computer was not the same. (Subject 8) • It has been hard because suddenly you don't have these short-term goals. (Subject 7) • Also because It's difficult to put yourself in front of the instrument and keep practicing in a structured way. (Subject 7). • At the beginning I realized that my mind was wandering way more because I was not structured at all (Subject 6) • In the very beginning I was very stressed. (Subject 5) • Then I had to face the situation of being in my room just by myself. (Subject 5) • Then I felt very weird about practicing at home because I don't do that normally so I am still feeling kind of uncomfortable and I don't practice as much as I would at school. I feel like I am disturbing people. (Subject 5) • It was a bit difficult because I thought that I have the whole day to practice and then I prioritized other stuff because at that point I didn't have a goal that I needed to achieve in a week or two weeks (Subject 4) • I was all the time watching the news and talking with people from Spain and friends of how they were and some friends that are working at the hospital. I was more there mentally than here.(Subject 4) • I've been stuck in one place for too long physically. It's crazy and I think it affected my subconscious mind (Subject 3) • Also the issue of jet lag and I don't get good quality sleep. (Subject 3) • Subjects 3,4,5,6,7,8,9,10 and 11 indicate that the situation caused by COVID-19 had a negative effect on their practice sessions.