

STRATEGIES TO DEAL WITH THE CHALLENGES OF THE PIANO SOLO RECITAL:  
INTERVIEWS WITH PIANO FACULTY MEMBERS AND UNIVERSITY PIANO MAJORS

by

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*To my dear teacher Arnaldo Cohen, who was my guiding light in my musical journey*

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# INTRODUCTION

## The Need and Purpose of the Study

Preparing a piano recital requires an enormous amount of time and effort from an artist. Numerous practice strategies have been discussed in books of piano pedagogues, and documented interviews of established pianists. The main concerns of these practice strategies in existing literature are what methods are effective in practicing, how to use proper technique, or how to organize practice sessions.

To improve the efficiency of practicing, many pianists and piano pedagogues recommend methods such as practicing slowly, practicing with separate hands, quality practice over quantity practice, or having clear goals before practicing. For instance, mental practicing has been addressed many times by W. Giesecking, J. Hoffman, H. Neuhaus, S. Feinberg, J. Bolet, and more. For the list of practice strategies mentioned in the literature, see Table 1.1.

On the topic of piano technique, pianists have an abundance of literature available to them. To name a few, English pianist Tobias Matthay compiled his lifetime knowledge of piano technique with detailed explanation of forearm usage<sup>1</sup>, Russian pianist Josef Lhevinne wrote a short book of piano playing regarding basic ideas about touch and tone<sup>2</sup>, and American pianist Otto Ortmann published an extensive work of piano technique in great detail from the physiological perspective<sup>3</sup>.

Organizing practice sessions refers to how to plan and use practice sessions on the daily basis. Some of the frequently mentioned methods in already existing literature are the importance

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<sup>1</sup> Tobias Matthay, *The Visible and Invisible In Pianoforte Technique: Being a Digest of the Author's Technical Teachings Up to Date* (Oxford: Oxford University Press, 1947).

<sup>2</sup> Josef Lhévinne, *Basic Principles In Pianoforte Playing* (New York: Dover Publications, 1972).

<sup>3</sup> Otto Ortmann, *The Physiological Mechanics of Piano Technique: An Experimental Study of the Nature of Muscular Action As Used In Piano Playing, and of the Effects Thereof Upon the Piano Key and the Piano Tone* (New York: Da Capo Press, 1981).

of practicing in the morning, when the energy and concentration of a pianist is at his best, and dividing practice sessions with short breaks. For example, W. Giesecking recommends several half-hour practice sessions,<sup>4</sup> while J. Bolet mentioned that he does not practice longer than an hour and a half at any one time.<sup>5</sup>

Many of these practice strategies discussed in the literature are useful for the learning period of repertoire. However, I have found that there are very few written documents focused on how to prepare yourself physically or mentally for performing as the concert date approaches, and especially near the performance date. The question of this study was prompted by a comment of H. Neuhaus, one of the greatest piano pedagogues in 20<sup>th</sup> century, in his book *The Art of Piano Playing*.

It occurs to me that it would be very interesting for young pianists to have more detailed information about the way in which prominent pianists prepare for recitals and about their concert work in general. A musical journal (why not our *Sovetskaya Muzyka*?) could send a brief questionnaire on the subject to our own and to foreign pianists. I imagine that many great pianists might wave it aside with a joke or some brief aphorism. But there would probably be some who would reply seriously and in detail. After all, we do publish a series of books in which painters write about themselves and which are extremely interesting. Why not have some about pianists? I think that all professionals and lovers of the piano would be most interested in such books.<sup>6</sup>

Throughout the stages of preparing for a performance, from reading the notes to the performance on the stage, pianists encounter many different kinds of difficulties. For example, at the initial learning period, figuring out proper fingering and pedaling can be a challenge, and at the later period, perfecting the memorization and dealing with stresses coming from the pressure of the performance can be crucial problems to be solved. Accordingly, certain practice methods might be helpful at the initial period of learning a piece, but not as beneficial in later periods closer to the time of performance, and vice versa. As Neuhaus mentioned above, it is quite crucial

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<sup>4</sup> Walter Giesecking and Karl Leimer, *Piano Technique* (New York: Dover Publications, 1972), 48.

<sup>5</sup> Linda Noyle, *Pianists On Playing: Interviews with Twelve Concert Pianists* (Metuchen, N.J. : Scarecrow Press, 1987), 14.

<sup>6</sup> Genrikh Neĭgauz, *The Art of Piano Playing*, trans. K. A. Leibovitch (London: Barrie & Jenkins, 1973), 214-215.

for music students to be aware of challenges in preparing a successful recital, and strategies to deal with those difficulties, especially from the viewpoint of experienced pianists.

When it comes to the live performance, one of the difficulties both artists and athletes face is performance anxiety. In the field of psychology, there are many studies delving into this issue, analyzing the reasons and suggesting coping solutions for the anxiety. But this research was conducted for mostly athletes, mainly by psychologists, not for or by musicians. The only literature about how concert pianists personally cope with the stresses and hardships that come from performing live can be found in a few collections of interviews with concert pianists conducted and compiled by, for example, Linda Noyle, Elyse Mach, Adele Marcus and David Dubal. The current study follows a similar line of these interviews, with more emphasis on specific topics related to the live solo piano recital and preparation before it.

In addition to this, how university music students handle challenges that they encounter when preparing for a solo recital is a meaningful subject for study as well. N. Kong has conducted interesting research on the perspective of university music students on practice in general, but not much study has been done on how university music students are equipping themselves near the time of the performance and on the performance day. Without knowing how to cope with the difficulties coming from live performance in their preparation up to that point, all the work that a pianist does in the practice room might not be fully represented on the stage.

Therefore, the purpose of this study is to examine the challenges that pianists face and practical strategies (physical, mental, and logistical) to deal with those challenges, utilized by both established concert pianists and university piano students for preparing a piano solo recital, and to investigate the common—or unique—problems among pianists, and any similarities and differences arising between these two groups of pianists.

### **Focus of the Study**

To clarify the focus of the study, I categorized the preparation of a solo piano recital into two different phases, the Learning phase and the Concert phase. The interview questions were designed to ask about challenges and strategies specifically regarding the concert phase. Data collected from the interview are interpreted by comparison to existing literature, as well as by comparison of the responses from the two different groups, concert pianists and piano major students.

**Learning Phase:** From choosing repertoire for a new solo recital to the point where the entire program is ready for memorized run-through.

**Concert Phase:** From the end of the learning phase, when the program is ready to be performed, through the day of the concert.

The distinction between these two phases, which can be ambiguous, was made for the sake of clarification for the interview questions of the current study. As pianists equip themselves with more practice and knowledge, they will naturally move forward from the learning phase into the concert phase, and the definition of the boundaries between these two phases may vary according to each pianist. For piano students, the end of the learning phase, or the beginning of the concert phase might be when they can play their program in the studio class in front of teacher and other students before their recital.

Boris Berman drew a similar distinction between the learning phase and concert phase by dividing his book on piano playing and practice *Notes from the Pianist's Bench* into two larger parts, which are "In the practice room" and "Shaping up a performance."<sup>7</sup> The first part explains

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<sup>7</sup> Boris Berman, *Notes From the Pianist's Bench*, 2nd ed. (New Haven: Yale University Press, 2017).

how to learn the piece, and how to overcome technical difficulties and build solid musical ideas.

In the second part he describes the process of preparing for the performance.

Major challenges in the concert phase, assuming that there are few deficiencies in preparation of the program, may involve psychological ones as well as physical ones. Any kind of challenges that could potentially hinder or debilitate the performance were considered to be appropriate data the current study intends to collect. Therefore, the interview questions attempt to look for any psychological defense mechanisms or physical strategies utilized by respondents.

### **Design of Interview Questionnaire**

The interview is designed as a qualitative or semi-structured interview following the definition of Jennifer Mason, who articulated the features of the qualitative interview as an interactional exchange of dialogue, having a relatively informal style, and using a topic-centered approach as a set of starting points for discussion with a fluid and flexible structure.<sup>8</sup>

Each interview question was constructed as a starting point of a conversation on the challenges or difficulties, and solutions for these problems, that an interviewee has during the concert phase. For the purpose of structured interview and systematic data collecting, the questions are arranged into four different time periods in a more or less chronological order: 1) Near the performance, 2) In the dress rehearsal, 3) On the day of the performance, and 4) On the stage. The flexible format of semi-structured interview gave the opportunity for the interviewer to ask follow-up questions to the interviewees so as to clarify the meaning of their comments or to follow the narrative provided by the interviewees “in a highly organic way,” as Mason described.<sup>9</sup>

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<sup>8</sup> Jennifer Mason, *Qualitative Researching*, 2nd ed. (London: Sage Publications, 2002), 62.

<sup>9</sup> *Ibid.*, 64.

The starting-point questions of the interview in the four categories are included in Appendix A. All questions were asked to all participants, and answers to the questions sometimes overlap categories. In order to draw the most genuine response from the interviewees, sample answers to the questions or any cues that could create subconscious bias in responses were purposefully reserved by the researcher as much as possible, and were given only when the interviewees needed more explanation to understand the questions.

### **Recruitment and Procedure of the Study**

Anyone considered by their institution as a full-time student in piano performance qualified for the category of piano majors, and anyone holding a piano department professorship in a university qualified for the category of piano faculty members. Recruitment was carried out through emails explaining the purpose and procedures of the interview with the Study Information Sheet attached. Piano majors' identifiers were removed and their responses are listed as numbers, while responses from piano faculty members are quoted with their name.

Because of the COVID-19 pandemic happening at the time of this study, all interviews were conducted via Zoom, a video conference service provider. After the interviewees agreed to participate, they were given the link to an online Zoom meeting room where the conversation was made and recorded only for the purpose of review by the interviewer. Every pianist who agreed to be interviewed was reminded of their right to confidentiality as scribed in the Study Information Sheet, as well as the fact that the conversation would be recorded.

In total, this study involved 13 piano majors, and 5 piano faculty members at Indiana University Bloomington. All piano majors were graduate students, pursuing master's degrees or higher. The name of the five piano professors at Indiana University Bloomington who participated in this study are as follows: Professor Arnaldo Cohen, Professor Jean-Louis Haguenaer, Professor Norman Krieger, Professor Émile Naoumoff, and Professor André Watts.

## Chapter 1: NEAR THE PERFORMANCE

The first question of the interview was about pianists' challenges and strategies in the process of 'shaping up a performance.' The challenge can be anything, whether physical, mental, or emotional. The second question was about practice strategies in this period compared to the learning phase. For the transcription of responses from the interview, see Appendix B.

Some challenges were mentioned frequently in the responses. First, keeping the freshness and interest in playing while avoiding mindless practice. Second, keeping focus, not only in practicing, but also throughout any run-throughs. Third, avoiding obsession with details. Lastly, dealing with fears and uncertainties about the live performance.

### **Challenge 1. Keeping the Freshness and Interest, Without Mindless Practice**

A few piano majors spoke of the danger of mindless practice, saying, "playing again and again mindlessly, hoping to get better," or, "just playing without thinking." The term "mindless practice" implies the repetition of playing or practicing without one's full attention. According to Eric Jensen, repetition in learning is still considered valuable because it makes the connections in the brain stronger. However, he acknowledged the danger of repetition: "On the one hand, the more we activate a skill or complete the same process, the smoother, faster, and more accurate we get at it. On the other hand, too much of the same thing can be boring to the learner. Excessive practice of a skill can become monotonous, so the repetition has to be interesting."<sup>1</sup>

When comparing conscious practicing to mechanical practice, György Sándor wrote that "Mechanical practice obviously produces some results, but they are achieved in a time-consuming and inefficient way. One never feels sure of the result of purely mechanical practice –one never

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<sup>1</sup> Erin Jensen, *Teaching with the Brain in Mind*, 2nd ed. (Alexandria: Association for Supervision & Curriculum Development, 2005), 38-39.

'knows' the passage, and consequently one easily forgets it. All practicing should be done consciously. One could say that the worst practicing is no practice at all, but I am not so sure about that! Mechanical practicing can form detrimental habits that have to be eliminated sooner or later."<sup>2</sup> He further argued that "The number of repetitions applies only to the basic learning process; additional repetition should enable us to improve the passage interpretatively as well as technically. If the basic foundation is well established, continuous improvement will follow."<sup>3</sup>

In a similar vein, Kirt Saville agreed on the danger of repetition as he wrote, "Recognizing that repetition is powerful teaching tool, one must acknowledge that repetition can also become one of the most significant causes for boredom, frustration, and musical stagnation. Incorrect repetition can create poor habits that are difficult to break, and excessive repetition of any skill can become monotonous, tedious, and boring."<sup>4</sup> The important implication is that practicing with repetition after reaching a certain stage of learning might not have a positive effect on improving the performance.

However, it is practically impossible to avoid repetition in practicing even though the basic learning stage is already completed, because the process of preparing a recital, by nature, still requires multiple rehearsals of the same program. For this study, it is assumed that technical problems are solved and musical thoughts are more or less established at the beginning of the concert phase. Therefore, the challenge of avoiding mindless practice comes from practice sessions that inevitably demand repetition of what pianists have already learned both technically and musically.

This problem naturally brings up the challenge of staying fresh in practicing and interpretation after having completed many repetitions during the concert phase. Participants

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<sup>2</sup> György Sándor, *On Piano Playing: Motion, Sound and Expression* (New York: Schirmer Books, 1981), 184.

<sup>3</sup> *Ibid.*, 185.

<sup>4</sup> Kirt Saville, "Strategies for Using Repetition as a Powerful Teaching Tool," *Music Educators Journal* 98, no. 1 (2011): 70.

mentioned that one of the possible reasons of having trouble with staying fresh is the difficulty of finding or setting goals for further improvement in the concert phase, as a piano major specifically emphasized the state of “I don’t know what more to do.” Jorge A. Blanco-Herrera et al. suggested that the implementation of game mechanisms in the learning process can greatly improve learning and creativity of the learners, since a game model provides players desirable and achievable goals within the boundary of their current ability, followed by instant reward, continuous feedback, and acknowledgement of their progress and achievements, which can create a state of flow.<sup>5</sup>

According to Mihaly Csikszentmihalyi, the state of flow is defined and described as an “optimal experience”<sup>6</sup> that engages people’s attention to their fullest through “deep concentration, high and balanced challenges and skills, a sense of control and satisfaction.”<sup>7</sup> Greatly influenced by this flow theory, Thomas J. Parente proposed a way to find the flow experience in the practice session and to have mindful practice by setting up desirable and achievable challenges in piano practice.<sup>8</sup>

When setting a desirable and achievable goal, it is important to know “the zone of proximal development,” a concept suggested by cognitive psychologist Lev Vygotsky, which is explained as “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers.”<sup>9</sup> In other words, knowing

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<sup>5</sup> Jorge A. Blanco-Herrera, Christopher L. Groves, Ann M. Lewis, and Douglas A. Gentile, “Teaching Creativity: Theoretical Models and Applications,” in *Video Games and Creativity*, ed. Garo P. Green, and James C. Kaufman (San Diego: Elsevier Science & Technology, 2015), 145-56.

<sup>6</sup> Mihaly Csikszentmihalyi, *Flow: The Psychology of Optimal Experience*, 1st Harper Perennial Modern Classics ed. (New York: Harper Perennial, 2008), 39.

<sup>7</sup> *Ibid.*, 83.

<sup>8</sup> Thomas Parente, *The Positive Pianist: How Flow Can Bring Passion to Practice and Performance* (New York: Oxford University Press, 2015), 9-21.

<sup>9</sup> L. S. Vygotskiĭ, *Mind In Society: The Development of Higher Psychological Processes*, ed. Ellen Souberman, Michael Cole, Sylvia Scribner, and Vera John-Steiner (Cambridge: Harvard University Press, 1978), 86.

where one stands in terms of development, and how much more one can improve, is crucial to find the zone of proximal development.

*Strategy 1.1. Listening to Recordings of One's Playing or Others' Playing*

Some responses from piano majors suggested the strategy of recording their run-through of the recital program or sections, and listening to it while taking notes in the score. It is hard to imagine a better strategy than this one in terms of evaluating “where one stands” from the most objective view. Pianist Misha Dichter’s remarks on recording express the benefit of the recording and listening process very well:

There’s a greater precision now that recording again has forced me to listen better to my own playing. Initially, all the things that sounded fine in the practice room sounded quite different in the playbacks; this caused me to rethink many things and has been a very rewarding learning process<sup>10</sup>... I prefer the present because of the reality of the recording age that we live in. I can’t imagine what it would have been like a hundred years ago to have played a concert and realize that that’s the end of it. An artist might think he had played well, but would have no way of checking his reaction. He could continually be deceiving himself because he could not criticize his own work. The same would hold true if he thought he had not played well. The recording would be the evidence. There’s something marvelous about being able to hear yourself and study from your own mistakes, from your own performances, and to hear and to study others on records as well.<sup>11</sup>

Listening to other pianists’ performance, as mentioned in the last part of this quote by Dichter, was commonly suggested by study participants as a solution to the problem of “staying fresh.” Professor Haguenaer spoke of listening to other pianists’ recordings, but with caution: “I like to listen to the recording of pianists that I revere, but I suggest not to listen to same recording too many times. Recording is like a picture, a moment. What you recorded on that day would be different from the recording of today. You don’t want to fall into the devotion to one particular recording, because even for these giants, like Arrau or Rubinstein, it was a moment.”

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<sup>10</sup> Elyse Mach, *Great Pianists Speak for Themselves*, vol. 1 (New York: Dodd, Mead, 1980), 67.

<sup>11</sup> *Ibid.*, 72.

Opinions vary on whether or not listening to the recordings of other pianists is beneficial as a practice tool in the learning phase. Pianist Janina Fialkowska actively took advantage of listening to other pianists' playing in her early stage of learning, as she said: "I would buy all of the recordings of all my favorite pianists and play them, and hear, 'What's he doing here? How does this piece go?' Now you'll find me doing that far less. Actually, about halfway through my practicing of a piece, I am always terribly curious to hear how people that I admire play the piece and compare it with what I'm doing and steal their best ideas."<sup>12</sup>

On the other hand, Vladimir Horowitz preferred to find his own voice and spirit of the music without imitating others.

I never listen to my own recordings because I don't want to influence myself. As I said earlier, each time I play it is different. The great danger in listening to records is imitation. When Chopin taught and his pupils tried to imitate him, he sent them home and told them to bring something of their own. So many time, people who are studying piano study with recordings, and they are so used to hearing note-perfect performances on record that they want to duplicate the same note-perfect performance in the concert hall. They are not concerned about projecting the spirit of the music because they are concentrating so much on the notes; it becomes an obsession with them. If they make a smudge or something, they think it is a bad performance. A few wrong notes are not a crime. As Toscanini once said, "For false notes, no one was ever put in jail." As I said earlier, imitation is a caricature. It is better not to listen to yourself. Find your own way each time.<sup>13</sup>

The current study cannot provide a satisfying answer as to whether pianists prefer to listen to others' recording in the learning phase versus the concert phase, since it was not specifically asked to the interviewees. However, one piano major did mention that she does not listen to others' renditions of the piece until she has finished learning the piece herself.

### *Strategy 1.2. Rotating Pieces in Practicing*

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<sup>12</sup> Noyle, *Pianists On Playing*, 63-64.

<sup>13</sup> Mach, *Great Contemporary Pianists*, 1:124.

Another interesting way of achieving ‘freshness’ mentioned in the interview responses is practicing with rotation of pieces. A piano major explained his practice method of rotating different programs and its benefit: “If I have chamber recital coming up in a month, I practice those pieces [rather] than my solo piano program that I played for a long time. In this way, I can still keep my finger connected with the keys and working, and find freshness and inspiration from practicing different programs. Then, I can apply the rediscovered freshness and inspiration from the other program to my current solo program.”

Another piano major uses a rotating method within the current program. “I would practice only Debussy for a week, and practice only Chopin for the other week.” With this method, she was able to avoid the exact same repetition of practicing in a row, which could bring mindless repetition of practice in the concert phase.

Another piano major expressed her preference in experimenting with different musical ideas for the bulk of the concert phase, and then set her ideas and make no more experiments or changes starting a week before the performance.

While these piano majors were focused on finding freshness, others had a different view of the concert phase. One piano major’s response was, “Practicing near the performance is mostly a review of what I know,” instead of constantly trying to find something new. One piano major even called the concert phase as a period of “building muscle memory” and keep working on fingers like training, in order to make everything more solid.

## **Challenge 2. Keeping Focus**

Another challenge mentioned in the interview responses was keeping one’s focus, not only in practicing, but also during run-throughs of the whole program. Maintaining focus for a long period of time, especially with full engagement of physical and emotional energy in the run-throughs, can be very different and much more exhausting than concentrating on small parts in

practicing. Several piano majors expressed the difficulty of maintaining focus in the second half of a recital, due to the challenge of keeping focus for a long time.

*Strategy 2. Practicing Playing (Run-throughs)*

This obstacle seems to originate from lack of practicing run-throughs of the entire program, since many students mentioned that their strategy to deal with this challenge is to emulate the concert situation and try run-throughs of the whole program while recording. One piano major even tries to have a mock recital a few times with different audiences, using different pianos, at the same time of day as their upcoming recital. Another piano major said, “I will schedule several run-through sessions including the studio class. My aim is, ideally, to have 5 times of run-through before the real concert.” One piano major said that, starting two days before the recital date, she practices only run-throughs (instead of working on parts and details). Using Grace Hofheimer’s term, these strategies can be called “practicing playing.”

Hofheimer distinguished the ideas of “practice” and “play” separately, by using the following phrase: “Do not play when you practice. Do not practice when you play.”<sup>14</sup> In Hofheimer’s definition, “practicing” refers to working on details, and solving technical and musical problems in each small sections or phrases, whereas “playing” refers to putting all details and small pieces that were worked on back into the whole. Hofheimer explains the necessity of including “playing” as well as “practice” in one’s practice sessions, writing:

No details should be overlooked. When the student has mastered all the details through as much repetition as necessary, there comes a period of putting together as a whole. ... After an isolated problem has been sufficiently worked over and conquered, it should be set smoothly with those measures which precedes and follow it, so that musical line remains unbroken... Technically and musically the parts must be fitted together. Now ensues a period of practice playing, putting together and playing through for continuity regardless of a wrong note or other imperfection which may creep in. During this period,

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<sup>14</sup> Grace Hofheimer, *Teaching Techniques for the Piano* (Rockville Centre, N.Y.: Belwin, 1954), 61.

everyday practice of details and the attainment of mastery over special difficulties must continue along with practice playing so that imperfections are not practiced in.<sup>15</sup> Ignaz Paderewski shares the exact same idea: “It took me half of my life to realize that there are two ways of using the piano. The one is to play, the other is to work! If you use the one, you will never achieve anything.”<sup>16</sup>

In my interview with Professor Watts, he emphasized the importance of being in “performance mode” starting at least a week before the concert. He also considered being in a practice mode and performance mode as different entities that require different mental states. He further explained, “If you can put yourself in the performance mode aggressively with discipline, you have more surety in the concert. Not many people actually do this. They practice and work hard, but they don’t have enough experience of ‘performing.’ Very often, it is quite foreign to them.” A crucial element of getting performance experience, he emphasized, is the discipline of that type of practice, in which one refuses to stop or give up because one does not feel like trying a run-through on that day. Learning through mistakes and flaws from disciplined run-throughs, and finding out what he really needs to do to prepare for the concert, is his main strategy as the concert day approaches.

Menahem Pressler acknowledged the importance of multiple run-throughs and advised on how to incorporate run-throughs in practice sessions: “You should play the whole piece through softly, and then practice it some more, and then play it again a little louder, and then practice it some more, and then play it again with full juice, so that you get three run-throughs in your practice session. And then you take apart the place where you know you are hesitating.”<sup>17</sup>

A similar strategy to Pressler’s was mentioned in one of the piano majors’ responses: “3 days before the concert, I do more slow practicing. I have three practice sessions per day and at

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<sup>15</sup> Ibid., 61-62.

<sup>16</sup> Julia Broughton, *Success in Piano Teaching* (New York: Vantage Press, 1956), 32.

<sup>17</sup> William Paul Brown, *Menahem Pressler: Artistry In Piano Teaching* (Bloomington: Indiana University Press, 2009), 90.

the beginning of each practice, I run-through the whole program and work through under tempo with exaggerated expressions. I do this to train my concentration span for a long time.”

### **Challenge 3.1. Psychological Challenges: Becoming Obsessed**

A few responses addressed psychological challenges during the concert phase. As one piano major described, he feels that he is playing a “mind game – fighting with mental foes.” Being too obsessive in details is one of the frequently mentioned psychological challenges— Professor Krieger stated in his interview response that “as pianists, we tend to become so myopic and so obsessed with every single detail, and that can make us distracted from the final purpose of an artist.” One piano major addressed the exactly same problem of being too obsessed with details and losing sight of the beautiful elements in music.

This tendency of focusing too much on the ‘trees’ and losing perspective on the ‘forest’ becomes very understandable and expectable after considering how much classical musicians’ training emphasizes paying attention to the details, and how much time is spent on learning details in preparation for the recital.

Numerous practice methods suggested by many pianists and pedagogues are designed mostly for the learning phase to learn the details of the score and of the required physical movements. Linda Gruson wrote that “musical practicing may be viewed as a sequence of transitions from controlled to automatic processing in which larger and larger chunks of musical information are built up from more basic subcomponents.”<sup>18</sup> Walter Giesecking also argued that “The pupil should first study a small part thoroughly... the thorough mastering of short parts of a

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<sup>18</sup> Linda M. Gruson, “Rehearsal Skill and Musical Competence: Does Practice Make Perfect?” in *Generative Processes in Music: The Psychology of Performance, Improvisation, and Composition*, ed. John Sloboda (Oxford: Oxford University Press, 2001), 21.

phrase at a time will enable the pupil to bring the complete phrase to a state of greater perfection.”<sup>19</sup>

Nuyi Kong compiled the learning phase piano practice strategies discussed in existing literature for her survey questionnaire, which is listed below.

**Table 1.1. Practice Strategies Listed in N. Kong’s Survey Questionnaire**<sup>20</sup>

<ul style="list-style-type: none"> <li>• Repetition</li> <li>• Slow practice</li> <li>• Hands separately</li> <li>• Isolation to solve troublesome passages</li> <li>• Playing and counting out loud</li> <li>• Singing one part</li> <li>• Blocking</li> <li>• Simplification of texture (playing the skeleton of a passage)</li> <li>• Playing the harmonic structure</li> <li>• Trying out redistribution of notes with the hands</li> </ul>	<ul style="list-style-type: none"> <li>• Practicing in rhythmic variants</li> <li>• Playing with varying tempo shifting accents</li> <li>• Playing passages with other hands</li> <li>• Playing with different dynamics than those written in the score</li> <li>• Playing with different articulations than those written in the score</li> <li>• Starting at the end and working back</li> <li>• Hearing an aural image before playing</li> <li>• Experimenting with different fingerings</li> </ul>	<ul style="list-style-type: none"> <li>• Stopping and preparing for what is coming</li> <li>• Silent practice on the keyboard</li> <li>• “Mistake practice” to gain experience dealing with wrong notes</li> <li>• Mental rehearsal away from the piano</li> <li>• Writing a memorized piece from memory</li> <li>• Aural image of a model performance</li> <li>• Pretending it’s a real performance</li> <li>• Writing a practice journal or log</li> <li>• Writing a lesson journal or log</li> </ul>
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Participants in her survey were asked to choose how often they use each strategy in practicing – often, sometimes, or never. The most frequently used strategies from their responses

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<sup>19</sup> Walter Giesecking and Karl Leimer, *Piano Technique* (New York: Dover Publications, 1972), 48.

<sup>20</sup> Nuyi Kong, “University Students’ Views on Piano Practicing: A Survey of Piano Majors at the University of Oklahoma” (Doctoral diss., University of Oklahoma, 2001), 122.

were repetition, isolation of troublesome passages, and slow practice,<sup>21</sup> which allows pianists to concentrate on the details in the learning phase.

*Strategy 3.1. Connection to Deeper Version of One's Musical Self*

While talking about keeping freshness in playing, Professor Haguenaer also mentioned the hardship of becoming overly obsessed with the piece. For both challenges, he argued the importance of regaining the raw and direct connection with the pieces that he had when he first started learning them. From his own words in the interview:

Oftentimes, there are direct relations to pieces, and some of them might be lost along the way we practice the pieces. It is important to go back to the initial relationship that we built with the piece. I don't mean going back to the very beginning learning process. I like being able to return to the raw connection that I had, or to reconnect myself to the direct love with the pieces that I had. Some of strategies that I use is to improvise, rather than focusing on the program that I was working on. It is taking a detour to connect to my musical instinct. It can be free improvisations or improvisations on the pieces that you are playing. It is good way for me to forget about obsessive relations with the pieces I am playing, and to connect to deeper version of my musical self.

A "deeper version of one's musical self" refers to the self who has love of music and has desire to express that love of music freely without restrictions or pressure. It appears that rediscovery or reconnection to this free musical self in piano playing through improvisations could be a solution to being overly obsessed with details in the music.

**Challenge 3.2. Psychological Challenges: Fear of Uncertainty of the Live Performance**

Another mental challenge addressed in the interview responses is the fear of uncertainty of the live performance, as specifically stated by a few piano majors: "The fear from the possibilities of some random things happening unexpectedly is a challenge," and "The fear and pressure from the random accident is hard to deal with." Live performance is a real-life event in

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<sup>21</sup> Ibid., 75.

time, which cannot be repeated, re-done, or undone. The fact that there is only one chance, and it is hard to predict how the performance will turn out, brings the fear to the performer.

*Strategy 3.2. Accepting the Unexpected and Remembering One's Purpose as a Musician*

Madeline Bruser wrote, “A musician friend of mine once said about performing, ‘You never know what your body is going to do.’ We have to abandon ourselves to what is happening in the moment. We must let the energy in our body be as it is and let our actions arise spontaneously from that energy.”<sup>22</sup> Along the same lines, Professor Naoumoff emphasized the concept of “expecting the unexpected”—that is, embracing the uncertainty of the live performance, being ready to encounter random happenings and trying to adjust or react to them. In the interview, he shared how he deals with the unexpected: “I don’t get upset or distracted when random mistakes happen. When it happens, I adjust on the spot and fix it on the stage, thanks to the perfect pitch. Sometimes when I make a mistake in the exposition, I make same mistake at the equivalent part in the recapitulation, on purpose.”

Professor Krieger suggested his philosophical antidote for these psychological challenges:

I try to get the broader perspective, in which I am only the vessel of art between the composer and the audience. We have to know what we are serving. We should serve King, rather than Duke or the Prince. For us, the composer and his/her message is the King that we have to serve, and we have to deliver the message to the audience. ... Another thing that I try to do before the concert is to be really honest with myself as a musician, and accept myself as a human, as who I am. We cannot really control everything on the stage. Live concert is real, not fake, event that is unexpectable. Because of lots of repetition and analysis that we do in the practice room, it is so easy to be obsessed or depressed by very small details that only we know, and lose the bigger perspective as an artist. Perfection is a limitation. If you put perfection as a goal, you have nowhere to grow. What is perfection? Is it playing all the notes? Is it playing everything that is written? Remove the concept of perfection, then you have open-ended world of sound and ambience. Everything is part of the process, not the end, about who I am today. Tomorrow I will try to do things that didn’t go well yesterday better. As a musician, accepting myself as who I am, and accepting the imperfectness of myself and

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<sup>22</sup> Madeline Bruser, *The Art of Practicing: A Guide to Making Music From the Heart* (New York: Bell Tower, 1997), 230.

uncertainties of the live concert is very important not to get caught in small and greedy obsessions, and it also helps to deal with stresses coming from the concerts. This approach is more meaningful, especially in psychologically competitive world that we are living in, where we have to play at certain technical and musical level in order to prove our worth, since Van Cliburn won the Tchaikovsky competition. We are all gifted and that gift is good enough to honor ourselves, in such a way that we don't try to be anyone else and we don't try to compare ourselves. We just do what we can and be honest musicians. This is not an easy challenge, because nowadays we are surrounded by so many recordings and YouTube Videos. I try to remove all this external stuff out of my mind for [the sake of] my internal world as much as possible.

Professor Watts also mentioned in his response a very similar attitude towards this subject while he was talking about nerves, saying, “You have to remember that you are a musician first, pianist second. So, your job, obligation is first to the composer. And second to you and the piano. If you play the piece, the composers will not be so angry with you about the wrong notes. You have to put your mind on ‘Make music, Be true’.” According to both Krieger and Watts, this mental attitude and approach can help pianists not only to overcome the fear and pressure from the performance, but can also help them play better, with less anxiety.

The attitude of being honest with oneself and accepting the unexpected was also expressed in piano majors' responses. One of them said, “If my actual playing is worse than my expectation, I try to accept the fact. I try to record and listen so that I can come to the truth. Sometimes I have to accept the different difficulties of the pieces, not to be frustrated by my playing. If I can accept the fact that some pieces require much more time to be comfortable with my body, I won't be depressed by my bad playing, because I understand and accept that I just have to spend more time with the difficult pieces.”

#### **Challenge 4. Fear of Memory Slips**

It is possibly safe to say that almost no pianist cannot be completely free from the fear of memory slips. According to John Browning, “Memorizing is a personal process, and each pianist has to find the way that suits him best. No system is perfect, either. Every performer fears memory slips. The best insurance against memory failure is practice, especially when preparing

for an orchestral concert.”<sup>23</sup> In Nuyi Kong’s research, most of the piano majors listed “nervousness, loss of focus, mental doubting (lack of confidence), lack of mental preparation, and lack of concentration as causes” for memory slips.<sup>24</sup>

*Strategy 4: Run-through Practice and Having Multiple Memory Cues*

Since it was assumed for the purposes of this study that memorization of the recital program is already completed in the concert phase, not many interviewees specifically talked about memorization in depth, except a few responses mentioning this challenge briefly. For one piano major, the fear of memory slips was one of the big challenges and her multiple run-through sessions in front of people served as training for overcoming that fear, and as chances to check on the memorization. Professor Krieger said in the interview that having multiple cues of different kinds of memorization, such as visual, aural, tactile, et cetera, helped him to secure the memorization. His memorization strategy is very well aligned with the article written by Roger Chaffin et al., who suggested multiple memory systems that have six different memory types: Auditory, Motor, Structural, Emotional, Visual, and Linguistic memory.<sup>25</sup>

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<sup>23</sup> Mach, *Great Contemporary Pianists*, 1:43.

<sup>24</sup> Kong, “University Students’ Views,” 76.

<sup>25</sup> Roger Chaffin, Topher R. Logan and Kristen T. Begosh, “Performing from Memory,” in *The Oxford Handbook of Music Psychology*, 2nd ed., ed. Susan Hallam, Ian Cross, and Michael Thaut (Oxford: Oxford University Press, 2016), 354-357.

## Chapter 2: IN THE DRESS REHEARSAL

Defined as “a full rehearsal (as of a play) in costume and with stage properties shortly before the first performance,”<sup>1</sup> the dress rehearsal is one of the essential steps that every pianist takes before the live concert. The importance of the dress rehearsal cannot be overemphasized, especially for pianists, who often do not have the luxury of bringing their own piano to the concert hall. The questions asked in this category are about how to take advantage of the dress rehearsal, and if the participants have any plans or goals in their mind for the dress rehearsal. For the interview responses, see Appendix B.2.

### *Strategy 1. Having Someone Listen to the Rehearsal in the Hall and Recording the Rehearsal*

Pianists in the interview reached a unanimous verdict that it was necessary to have someone listening to their sound in the hall during the dress rehearsal so as to check the acoustics of the venue. Research on concert hall acoustics shows that the sound perception of the audience varies greatly according to the properties of each hall (e.g., the shape of the hall, sound field, and early lateral reflections).<sup>2</sup> Some researchers also found that “the variation in music dynamics is perceived differently depending on the concert hall and on the listening position.”<sup>3</sup> Because of these different acoustics of each hall, it is crucial for the performer on the stage to understand each individual hall’s difference in sounds as perceived from the stage, versus from the audience’s seats.

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<sup>1</sup> “Dress Rehearsal,” Merriam-Webster, accessed Jan 11, 2021, <https://www.merriam-webster.com/dictionary/dress%20rehearsal>.

<sup>2</sup> Leo L. Beranek, “Concert Hall Acoustics: Recent Findings,” *The Journal of the Acoustical Society of America* 139, (April 2016): 1548-1550, doi: 10.1121/1.4944787.

<sup>3</sup> *Ibid.*, 1553.

In addition to having another person to listen, recording the dress rehearsal was another strategy stated in several responses. One piano major specifically mentioned using video recording instead of just audio recording, to not only check the sound but also monitor her appearance on the stage. For most of the interviewees who talked about using recording in the dress rehearsal, they were referring to the recording of their full run-through, except for one piano major, who also records some practice sessions in the hall where she tries different approaches to certain passages in order to figure out what works and what doesn't. According to another piano major, when there were discrepancies between the opinions of his dress rehearsal listeners and what he perceived from his dress rehearsal recording, he would favor his listeners' opinion as a better representation of how the sound is heard in reality, rather than the recorded sound.

*Strategy 2. Dress Rehearsal as a Mock Recital*

One of the crucial ideas behind most of the responses is considering, or at least pretending, that the dress rehearsal is the real recital. This idea is represented in interviewees' strategy to run through the program if possible. A piano major emphasized the execution of the run-through with 'full energy,' imitating what she will use in the real concert, and another major also used run-through as a mock recital. Some piano majors explicitly stated that they are trying to find their worst version of playing. One of them even purposely tries to replicate the psychological pressure of the real recital, to see how she plays under similar mental pressure. A few other strategies include: trying improvisational interpretations that might happen in the real concert, focusing on stage deportation, and focusing on the beginning of the piece.

*Strategy 3. Dress Rehearsal as a Check-up to Reduce Surprises in the Real Concert*

On the other hand, Professor Cohen articulated another aspect of dress rehearsal as a check-up of the tools that will be used in the real concert. This is a more 'practical' approach to the dress rehearsal, rather than an emotionally involved mock recital, as he explained:

My main objective during a dress rehearsal is to focus on the instrument's characteristics and projection in that particular environment. I find it fundamental to be aware of, for instance, the relation between the 'effort' made and the 'sound produced' in each register of the instrument so that we can better control the desired voicing. The use of the pedal is an art in itself. Another fundamental point is how both pedals react in that particular acoustic and understanding the consequential decisions regarding specific passages. Ideally, the presence of the piano technician would be more than desirable to adjust a few details, such as some hammer voicing, better calibrating all pedals, regulating key actions, etc. All these concerns will undoubtedly prevent negative surprises and, at the same time, will enhance the ability to express, in sound form, an ideal musical 'message.'

According to one piano major, for the performance of compositions like those of George Crumb, preparing required tools for special effects inside the piano, or even checking on her own voice for shouting became very important items on the check-up list.

In addition to the inspection of the instrument and the hall, checking on the performance shoes for pedal purposes was addressed many times. The importance of pedal in piano playing cannot be emphasized enough as Anton Rubinstein expressed, "The pedal is the soul of the piano."<sup>4</sup> Professor Krieger affirmed that wearing a hard-surfaced shoe is vital for the sensitive connection with the pedal, compared to the soft-surfaced one which makes it harder to feel to the surface of the pedal.

Familiarity of the instrument and the venue seems to play a significant role for some pianists. Professor Watts stated the importance of being familiar with the piano and the physical space around him in the hall, which will reduce the 'surprises' in the real concert. Professor Cohen also agrees on the idea of knowing the instrument and getting rid of any potential shock for the real performance. Walking on the stage and around the seats of the audience was mentioned by one piano major as a way to get comfortable with the physical space of the hall. Elaine King and Helen M. Prior argued that familiarity with the environment, that is, the

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<sup>4</sup> Oskar von Rieseemann, *Rachmaninoff's recollections, told to Oskar von Rieseemann*, trans. Dolly Rutherford (New York: Books for Libraries, 1979), 52.

performance hall and the instrument, enables a pianist to plan better, providing “predictability to the temporal sequence as well as the content of forthcoming events.”<sup>5</sup>

When asked about strategies for the dress rehearsal, one condition was inquired of by many interviewees before answering the question: that is, *when* the dress rehearsal takes place. Some of the differences in the responses can be attributed to disparity of dress rehearsal circumstances between recitals given by piano majors and piano faculty members. Solo piano recitals by piano majors usually happen in the performance halls in the school where students can schedule their dress rehearsal a few days before the concert, sometimes multiple times if the hall is available, whereas piano faculty members give most of their recitals outside of the school, as concert pianists, in which the available dress rehearsal time is very close to the day of the concert, even during the day of the performance.

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<sup>5</sup> Elaine King, and Helen M Prior, *Music and Familiarity: Listening, Musicology and Performance* (Burlington, VT: Ashgate, 2013), 273.

## Chapter 3: ON THE DAY OF THE PERFORMANCE

*Virtuosity*, the documentary made of the 14<sup>th</sup> Van Cliburn Competition, included footage of the competitors backstage, right before their performances, and discussed some competitors' routines or their must-do's before the performance, such as always having two bananas, or even wearing a specific color of underwear.<sup>1</sup> Pianists seem to have many different approaches to the topic of the concert-day routine. For example, Alfred Brendel mentioned his simple routine on the day of the performance, which consisted of rehearsal, nap, warm-up and concert<sup>2</sup>, while Garrick Ohlsson said he has no set routine at all.<sup>3</sup>

The time frame of this category spans from the beginning of the day of the recital to the moment right before walking out onstage. Several sub-questions were asked to the interviewees, largely about the topics of routine and of nervousness, as follows: Do you have a routine on the day of the performance? How do you practice on the day of the performance? What do you do in the backstage, right before the concert? How do you cope with nerves (music performance anxiety), if you have them? Where do you think the nerves are coming from?

### 3.1 Routine and Practicing on the Day of the Performance

As shown in the responses (see Appendix B.3.1.), every participant had their own routine or at least a plan about how they construct the day of the performance. Some of them had specific plans for what to do at certain time or what to eat, while others expressed general ideas of what they plan to do, instead of having a strict routine. Both Professor Krieger and Watts argued the

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<sup>1</sup> Christopher Wilkinson, *Van Cliburn: Virtuosity* (The Van Cliburn Foundation and 88 Films, LLC, 2014), online documentary, <https://www.medicivt.com/en/documentaries/van-cliburn-virtuosity-christopher-wilkinson>.

<sup>2</sup> Mach, *Great Contemporary Pianists*, 1:34.

<sup>3</sup> David Dubal, *Reflections From the Keyboard: The World of the Concert Pianist*, 2nd ed. (New York: Schirmer Books, 1997), 286.

importance of flexibility and adaptability of the routine. According to Professor Krieger, changes in body and mind throughout your life mandate the adjustment of systems in the routine. Also, as Professor Watts explained, many variants in life and concert situations (for example, different travel itineraries for each concert) may dictate the availability of certain actions in the routine. Regardless of how pianists describe their schedule of the day of the concert, whether as a routine or not, multiple similar behaviors were observed from most of the responses.

### *Strategy 1. No Coffee*

There was an absolute accord among pianists who drink coffee that drinking caffeinated beverages physically affect the performance in a seriously negative way. Some of the pianists who claimed to be heavy coffee drinkers refrain from drinking coffee at all on the day of the performance, or cut off coffee in the days leading up to the performance. However, no scientific research has been conducted on the effect of caffeine on music performance, while many ergogenic effects were reported in the study of the effect of caffeine in sports.<sup>4</sup>

### *Strategy 2. No Heavy Meals*

Another behavior discovered commonly in the responses is not eating heavy meals before the performance. Most of the pianists acknowledged that they try to eat lightly at least 1 or 2 hours prior to the performance. Dietary plans on the day of the performance largely depend on each individual's diet preferences and sensitivity to certain foods, which differ from person to person, which is why it is important for each individual to know what food works for them, as some pianists suggested in the interviews.

### *Strategy 3. Taking a Nap*

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<sup>4</sup> Matthew Ganio, Jennifer Klau, Douglas Casa, Lawrence Armstrong, and Carl Maresh, "Effect of Caffeine on Sport-Specific Endurance Performance: A Systematic Review," *Journal of strength and conditioning research* 23, no. 1 (January 2009): 323.

Another common strategy mentioned in the responses is taking a nap, especially among the responses of piano faculty members. The length of the nap may vary depending on the individual; however, the general order of events happening on the day of the performance – morning and early afternoon practice, nap, eat before or after the nap, warm up again, and play the concert – is consistent throughout the responses. Ivo Pogorelich described a nap as essential part of his routine. In his words: “No matter how much sleep I get, I always sleep in the afternoon before a concert. The length of the nap varies from one hour to three hours. The only exception to this is when I have to play an early concert, say at five or six o’clock, or when I have to rehearse with the orchestra in the afternoon.”<sup>5</sup> Even though some pianists do not take midday naps, it is safe to say that all pianists, at least from the interview responses, would agree on the restoring power of sleep. Having a good night’s sleep before the concert day, or taking a nap, is considered crucial among pianists for the optimal performance, as supported by the remarks of many other concert pianists, including Claudio Arrau, Alfred Brendel, and Garrick Ohlsson (as transcribed by Elyse Mach from her interviews).<sup>6</sup>

#### *Strategy 4. Saving Energy*

The notion of restoring energy through sleeping before the concert can be well accompanied by the universal inclination of pianists to “save energy” before the performance, as mentioned frequently in the interview responses. This disposition greatly resembles how sports athletes strategize before the “big game.” Warming up and playing the real game are completely different activities that require distinctly different levels of participation in both the physical and mental realms. Although Professor Watts agreed with the idea of saving energy before the

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<sup>5</sup> Elyse Mach, *Great Contemporary Pianists Speak for Themselves*, vol. 2 (New York : Dodd, Mead, 1988), 231.

<sup>6</sup> Elyse Mach, *Great Contemporary Pianists Speak for Themselves*, 2 vols. (New York : Dodd, Mead, 1980-1988).

concert, he strongly disagreed with the intention of saving energy at the first movement or the first piece in a long concert program in order to keep the energy until the end of the concert. He explained in the interview: “For example, some people said that you have to save energy in the first movement of Brahms 2<sup>nd</sup> piano concerto, but this idea of holding back in the performance is a little anathema for me. You don’t hold back in the performance. If you realized that you get really tired after playing it from the beginning to the end, do that more often before you have to go on the stage.”

Even though the participants unanimously avoided the run-through to save energy, there were some differences between each individual in how many hours they practice before the concert. Some of them mentioned limiting themselves to about 2 hours of practice to save energy, while others preferred to work as much as possible until the concert. The notion behind working until the performance is to maintain the state of active fingers which are warmed up enough and ready to be utilized for any difficult passages. In order to achieve this state of warmed-up fingers, some of the pianists who mentioned 1 to 2 hours of practicing as their maximum work on the day of the performance choose to start this practice session when the performance time is near, instead of several hours before the performance.

#### *Strategy 5. Solidifying the Basics*

This concept of saving energy seems to be reflected in many pianists’ approach to practice on the day of the performance. No participant included run-throughs in their warm-up or practice sessions on the performance day, since the run-through involves lots of physical, mental and emotional energy. Rather, every participant stated that they start with practicing at a slow or medium tempo. Some pianists, including Professor Cohen, considered practice even on the day of the performance as “real” practice sessions, in which they actively work and fix things in their playing as if they were practicing on a non-performance day, instead of reserving themselves to mere review or warm-up.

Most of the practice methods mentioned by participants demonstrated the concept of consolidating the basics through slow practicing, hands-separate practicing, or “factual practicing”—a term coined by Professor Naoumoff to describe a type of practice without mood or exaggerations, as if sight-reading, so that the basic elements of music can be reviewed unhindered by emotional or spontaneous drive. Professor Cohen also vigorously emphasized the importance of reviewing basic systems of the movement of fingers and body. As anxiety may generate tension, he pointed out that it is essential to 'self remind' that flexibility might deal with it. He stated that the practice on the day of the concert, ideally, should comprise a summary of the full spectrum of practice methods used in each stage of learning, including slow finger exercises aiming at finger independence and strength to play in a fast tempo. To complete the process, he suggests an overall reading of scores away from the piano to remind us of all musical intentions decided during the learning process, so that one should be sure of what one wants to say.

*Strategy 6. Taking Everything Slowly and Avoiding Being Rushed*

The prevalent attitude of taking things slowly, seen in many pianists’ responses, was not only applied to practice sessions, but also reflected in the way they spend the day of the performance. No participant wanted to be rushed or hurried on the concert day by any means. For several pianists, making the performance day free from any other tasks was one of their most important objectives. This gives pianists freedom to construct the schedule of the day in their own way for optimal preparation until the time of the live concert.

Professor Watts strongly agreed with this idea, since he firmly believed that the performance day should be a very “special” day. On this special day, it is of the utmost importance for him to isolate himself from everything else other than music and to be completely immersed in thinking and practicing music until the live concert begins. This attitude towards the preparation of the concert is reflected in his behavior backstage, which will be presented in the next section of the essay. One piano major also mentioned the idea of treating the performance

day as a special day. His strategy of making the day special comes from external sources outside of music, such as having a longer and more thorough shower than usual, or using cologne or cosmetic products that he normally does not use.

### *Strategy 7. Staying Away from Music*

Some pianists addressed the desire to avoid having any involvement with music, by doing things on the day of the performance that are completely unrelated to playing the piano, such as reading a novel or even watching a show.

## **3.2 Backstage**

Like practicing, which is a very private activity secluded from the outside world, what pianists do before they walk out onto the stage is hidden from the sight of the public. In the interview, pianists were asked what they do backstage in the roughly 5 to 10 minutes before they walk out onstage. For the interview responses, see Appendix B.3.2.

### *Strategy 1. Moving the Body and Breathing*

One main strategy that was mentioned consistently is to move the body, either by walking, pacing, waving, or stretching, instead of standing or sitting still. The objection to sitting down was strongly agreed upon by many pianists.

Focusing on breathing was also favored by many pianists. It seems to be used to acquire a calm state of mind despite the pressuring situation of live performance. One piano major had a specific method of breathing called 4-7-8 breathing. This breathing pattern – 4 seconds of inhaling, 7 seconds of holding your breath, and 8 seconds of exhaling – is designed to help reduce

anxiety, get better sleep, and reduce anger responses, and is used in many meditation and yoga practices.<sup>7</sup>

### *Strategy 2. Talking versus Not Talking*

Respondents were split on the topic of whether or not to talk to people right before the concert. Those who prefer to talk to others before the concert give the reason that by doing so, they can take their minds off the pressure of the live performance and avoid thinking too much about music, which some respondents said can cause anxiety for them during the backstage period.

The reasoning of the respondents who prefer not to talk to others backstage is that one must be fully concentrated on preparation for the concert, and disconnected from the outside world in order to achieve optimal performance, since the live piano performance requires tremendous physical, mental, and emotional energy. It is interesting to note that some pianists utilized distractions right before the concert as a positive tool of avoiding anxiety before the pressuring live performance, while others desire to eliminate as much as possible any kind of distraction until the moment of the live performance.

### *Strategy 3. Keeping the Body and Hands Warm*

A few pianists invest more effort in keeping their hands and body warm by using hand warmers, wearing jackets, or using electric heaters. In sports, utilizing the strategy of passive warm-up – for example, taking a hot shower or wearing heated garments – is becoming popular due to its ability to “maintain elevated core and muscle temperature throughout the transition

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<sup>7</sup> Jenna Fletcher, “How to Use 4-7-8 Breathing for Anxiety,” Medical News Today, accessed February 11, 2021, <https://www.medicalnewstoday.com/articles/324417>.

phase (the period between completion of the warm-up and the start of the event).”<sup>8</sup> Professor Cohen considers this transitional phase very seriously and takes care to make sure that his fingers are warm enough to perform in the best condition. He explained:

I like to feel my hand and fingers warm enough. Depending on the weather, I protect myself from the cold. I always try to know the temperature of the green room in advance so that I can ask for an electric heater. To have a piano to warm up for some 30 minutes can be of great help too. I am ready when I feel the sensation of my fingers being a bit swollen. It seems that thick fingers also help to produce a rounder sound. In short, warming up is a must for any professional that depends on physical strength and accuracy.

#### *Strategy 4. Positive Self-talk*

Lastly, a few pianists utilized positive self-talk to encourage themselves to fight against the pressure and reluctance of going out onstage, and to give themselves courage to execute what they had practiced for months. Even Professor Haguenaer half-jokingly said, “I want to run away,” of his feelings right before a concert. It appears that concert pianists are not exceptions when it comes to the mental pressure that musicians face before a live performance. This will be discussed in more detail in the following section.

### **3.3 Music Performance Anxiety**

Music Performance Anxiety (MPA) is one of the most passionately discussed subjects in the field of live performance. However, the definitions of MPA used by many researchers seem to be not clearly established, sometimes used interchangeably with the terms “performance anxiety” and “stage fright.” According to the American Psychology Association, performance anxiety is defined as “apprehension and fear of the consequences of being unable to perform a task or of performing it at a level that will raise expectations of even better task achievement.”<sup>9</sup> Some

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<sup>8</sup> Courtney J. McGowan, David B. Pyne, Kevin G. Thompson, and Ben Rattray, “Warm-Up Strategies for Sport and Exercise: Mechanisms and Applications,” *Sports Med* 45 (2015): 1523.

<sup>9</sup> “Performance Anxiety,” APA Dictionary of Psychology, accessed February 11, 2021, <https://dictionary.apa.org/performance-anxiety>.

scholars considered the term “stage fright” to be a less dangerous kind of stress than performance anxiety, while some thought of it as an extreme and intense form of performance anxiety that creates sudden fear and can lead to complete failure of performance. However, Dianna Kenny pointed out that the latter definition of extreme anxiety “fails to capture the experience of the majority of musicians whose level of anxiety is less than this or which, though severe, rarely leads to performance breakdown.”<sup>10</sup>

In this document, MPA refers to an isolated anxiety that affects the performer only before and during the live performance of a piano recital. The terms “nerves” and “anxiety” were also used interchangeably with the same meaning as MPA in the interviews and in this document. When asked if they have MPA or nerves, all interviewees acknowledged the presence of nervousness before performing. After that, two questions were asked: Where do you think the anxiety or nerves are coming from? How do you deal with them? For the interview responses, see Appendix B.3.3.

Most of the MPA acknowledged by the interviewees was psychological anxiety rather than the more physical response that falls into the category of stage fright. Some piano majors mentioned that they experienced shaking or trembling in their body or legs on the stage when they were teenagers, but that it does not affect them anymore. The physical shaking from being nervous can be contributed to their lack of experience of performing live in front of the public in their young age, and even then, it did not reach the level of hampering the performance in a severe way.

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<sup>10</sup> Dianna T. Kenny, *The Psychology of Music Performance Anxiety* (Oxford: Oxford University Press, 2011), 48.

### **Inevitability and Unpredictability of MPA**

Two attributes of MPA were addressed in the responses: its inevitability and unpredictability. Even though nobody in the interviews mentioned any complete breakdown in live performance due to nervousness, the anxiety seems to occur for almost every pianist no matter how experienced they are, with the exception of Professor Naoumoff, who stated without hesitation that he has no anxiety before the performance or about the performance.

A piano major described the inevitability and consistency of the anxiety: “I feel like the nerves before the performance seems to get worse and worse as I get older.” Even though the intensity of the MPA and the reasoning behind it might be different for each individual, it surely affects every performer’s mind and makes live performance more challenging.

Another feature of the anxiety is that there seems to be less relation between external circumstances that can trigger the anxiety and the real occurrence of that anxiety. In a general sense, it might be logical to assume that the strength and appearance of the anxiety in a performer’s mind should be proportional to the level of potential pressure expected according to, for example, the importance of the performance in their career, or the size of the hall and of the audience. The more important the venue, the larger the audience, the more anxiety is expected. However, many concert pianists have spoken that it is not always easily anticipatable, as Professor Haguenaer said, “Sometimes I feel fine before the concert, and suddenly feel panic on the stage, and vice versa.” John Browning’s remark described the unpredictability of MPA very well:

Every performance has some of that [nerves], although the exact nature of it is difficult to pin down. It begins to build in the morning and reaches a climax by mid-afternoon. That’s when it’s worst. I don’t have bad nerves, but I often wake up with a tight knot in the stomach which gets tighter as the day progresses. Locale and program seem to have little to do with it. I can be as calm as a quiet sea for a New York concert, but nervous as a cat for a performance in a small town. The reverse is equally true. So, there’s no way to prepare for it or avoid it.<sup>11</sup>

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<sup>11</sup> Mach, *Great Contemporary Pianists*, vol. 1, 50.

### Challenge 1.1. Lack of Enough Preparation

Interviewees listed many different sources of MPA, which can be categorized into several larger themes. When asked the reason or origin of the nerves, the most common answer was the lack of enough preparation. One piano major said, “When I try to play better than I can, when I look for the miracles,” it creates anxiety and even frustration. In a similar vein, a few piano majors diagnosed the problem as having to do with the “uncertainty” about the piece, saying that “if there are some spots which I don’t know well, or I didn’t input any meanings, that gives me nerves.” Another piano major found that anxiety arises when she finds herself stuck in the “experimental state” of searching for musical ideas, instead of having solidified ideas. The high level of preparation necessary for pianists, which is indispensable for the live performance, is well described in William Westney’s comment on the public performance:

Public performance is a potent truth serum, stripping away self-delusions and instantly revealing – in front of the audience – the solidity of our knowledge, our precise degree of mastery. All bets are off when we step onstage, and things usually don’t happen exactly as rehearsed or predicted. What thoroughly integrated learning it takes, both in body and mind, to welcome such accountability with confidence!<sup>12</sup>

### Challenge 1.2. Memory Lapse

The lack of certainty or thorough learning of a piece mentioned by participants could also be one of the influential contributors to the memory lapse, which is another source that prompts anxiety. Both challenges—uncertainty about a piece and memory lapses—can be solved by a similar approach: one must learn the piece thoroughly, in detail, using many kinds of approaches, such as analyzing the music, chunking and practicing small sections and building up to larger chunks, and using rote to increase kinesthetic memory with visual or aural information.<sup>13</sup>

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<sup>12</sup> William Westney, *The Perfect Wrong Note: Learning to Trust Your Musical Self*, 1st original hardcover ed. (Pompton Plains, N.J.: Amadeus Press, 2003), 142.

<sup>13</sup> Jane Ginsborg, “Strategies for Memorizing Music,” in *Musical Excellence: Strategies and Techniques to Enhance Performance*, ed. Aaron Williamson (Oxford: Oxford University Press, 2004), 137.

*Strategy 1. Concentration at Every Moment*

Professor Watts believes that most memory lapses are due to the player's losing focus from the present moment. This may be partly due to a pianist's lack of thorough knowledge of a piece—as a piano major explained, the more detailed knowledge of the piece she attains, the less chance she has to lose focus from the present moment, because there is too much information to process at every moment during the performance.

These ideas are very well aligned with Boris Berman's opinion about memory issues. He argued that memory slip, which he considered as a misnomer, is the problem of concentration, not a memory problem, and this problem can be solved if pianists have very concrete tasks to occupy their mind, "leaving no room to contemplate the possibility of making a mistake."<sup>14</sup>

In the same manner, Professor Watts affirmed that pianists can take advantage of their limited concentration capacity by bringing more concentration to the music that is being played, leaving no room for anything other than music to enter and interrupt pianists' attention:

Try to just deal with what is at hand, and don't let the wrong thinking about the judgement of you influence you and be the big driving force. Think (to the audience) 'Try to be quiet. I'm going to offer you the bar. If you don't like it, you don't have to take it. I don't have time to focus on you. I only have time to offer you (the public) my music.' In the area of amygdala in the brain, it has a limitation on what it can focus on. So, you focus on big time on other stuff, and it forgets to say that 'you should be scared.'

This comment serves as a good example of the flow experience mentioned earlier, where "The clearly structured demands of the activity impose order, and exclude the interference of disorder in consciousness...only a very select range of information can be allowed into awareness."<sup>15</sup> When a performer's concentration is not fully engaged with the music they are playing at every moment, their attention might land on anxiety, or anything else that can create anxiety.

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<sup>14</sup> Boris Berman, *Notes From the Pianist's Bench*, 2nd ed. (New Haven: Yale University Press, 2017), 207.

<sup>15</sup> Csikszentmihalyi, *Flow*, 58.

N. Kong's survey on piano majors at the University of Oklahoma showed that nervousness, relying on one kind of memory, lack of enough preparation, and loss of focus were pointed out as reasons for memory slips, and mental practice, memorizing in structural units, understanding music from the whole to details, score study, and harmonic analysis were reported as strategies to improve memorization.<sup>16</sup> 20 years of distance between her survey and this interview show that pianists now seem to face similar challenges and have been utilizing analogous strategies as those of two decades ago.

In a larger scale, genuine thorough learning of a piece might take multiple renderings of the piece in numerous live concerts. Professor Naoumoff expressed the challenge of the first concert of the concert tour, and how he gets better as he plays more concerts.

When I play the same program multiple times during the tour, the first one is always the worst. It gets better as you play more, and usually the last one tends to be the best one, because I know that this will be the last concert of the program. It would be ideal if you can play every single recital as if it is the last one, but it is practically hard to do that. I realized that the more you play the piece, the more you mess up sections in the concert, the less chance to mess up things in the future concerts, because you pay extra attention to those parts and you gain more confidence by having more experience with the program.

### **Psychological Challenges**

It would be a tautology to say that strategies to deal with MPA should be in accordance with the specific reasons for anxiety that each pianist has. As Dr. John Edward Rack summarized: "If inadequate musical preparation can result in a psychobiological state which includes anxiety symptoms, then such reactive anxiety should be identified by music educators. The presence of anxiety symptoms might indicate needed improvement in performance skills such as concentration, memorization and fine motor control. But when skills are sufficient and anxiety persists, a need for psychological intervention is indicated."<sup>17</sup>

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<sup>16</sup> Kong, "University Students' Views," 74-77.

<sup>17</sup> John Edward Rack, "Performance Anxiety in Student Musicians: A Correlational Study" (PhD thesis, Pennsylvania State University, 1995), 19.

### **Psychological Challenge 1. Fear of Negative Evaluation**

If enough preparation is completed but the anxiety is still present, it betokens the subsistence of psychological factors involved in creating the anxiety. The most prominent source of this kind of anxiety mentioned in the interview was the fear of negative evaluation (FNE). FNE has been commonly researched and considered as a central characteristic of social anxiety disorder, or social phobia, in studies in psychology. As mentioned in one piano major's response, public speaking is one of the typical examples of social anxiety where "a high degree of anxiety displayed by the speaker may negatively affect skill level, or vice versa, in which poor public speaking skills may be one antecedent to anxiety in speech situations."<sup>18</sup> A few studies in the past investigated MPA as a social anxiety.

Some comments from professors in my interviews described the psychological pressure they apply on themselves: "Will my ego be perceived, received, accepted, or not accepted? What will other people think of me? Will they invite me back?" Piano majors expressed similar reasons for being nervous such as "thinking about others' view, thinking about being judged, desire to look good and be accepted well, greed, perfectionism, trying to control everything." Another piano major said, "I think the nerves comes from the fear that you have to show something of your own to other people. It is like public speaking. Most people are not used to public speaking. Nobody wants to be judged."

A study administrated by Craske and Craig with 40 piano students was executed using similar research procedures as would be used in analyzing or assessing social phobias, showing that the researchers consider MPA responses to be similar to anxiety in social situations.<sup>19</sup> In the study, 40 pianists were assigned into two groups – a "Relatively Anxious" group and a

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<sup>18</sup> Stefan G. Hofmann, and Patricia M. DiBartolo, *Social Anxiety: Clinical, Developmental, and Social Perspectives*, 3rd ed. (Amsterdam: Elsevier/AP, 2014), 12.

<sup>19</sup> David H. Barlow, *Anxiety and Its Disorders: The Nature and Treatment of Anxiety and Panic* (New York: Guilford Press, 1988), 548.

“Relatively Nonanxious” group – and they were asked to perform a short solo piano piece from memory twice, once by themselves without audience, and another time a week later in the presence of an audience and video cameras, in which they were told that they were being evaluated by established pianists and professionals in behavior assessment. Behavioral, self-report, and autonomic responses were collected and compared between the two sessions. As a result, in the second session in front of the audience, the relatively anxious group showed substantial declines in self-efficacy ratings with increased levels of anxiety, and the relatively non-anxious group remained stable in self-report measures without augmentation of anxiety (interestingly, however, the heart rate of both groups increased).<sup>20</sup>

In another study conducted on performance anxiety in student musicians in the United States, the students’ responses to anxiety before their juries were examined compared to their performance in private lesson situations. The researchers discovered that the musicians with low anxiety demonstrated significantly lower responsiveness in obsessive worrying, sensitivity to anxiety symptoms, self-doubt and all-or-nothing thinking, but showed considerably higher affinity for self-efficacy – that is, their positive belief in their own abilities – and pleasure in performing.<sup>21</sup>

In both studies above, all participants generally demonstrated anxiety due to the presence of an audience and jury, and additionally due to the thought that the jury’s decision may negatively influence their career. The source of their anxiety can be eventually traced down to FNE, which can influence different characteristics of social anxiety. Leary and Kowalski summarized the four facets of social anxiety, distinct but interrelated, that are “cognitive, somatic, behavioral, and affective.”<sup>22</sup> From the perspective of MPA, the experience of these four attributes

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<sup>20</sup> Michelle G. Craske, and Kenneth D. Craig, “Musical Performance Anxiety: The Three-System Model and Self-Efficacy Theory,” *Behaviour Research and Therapy* 22, no. 3 (1984): 277-278.

<sup>21</sup> John Edward Rack, “Performance Anxiety,” 76-81.

<sup>22</sup> Mark R. Leary, and Robin Mark Kowalski, *Social Anxiety* (Norway: Guilford Publications, 1995), 6-8.

can be easily noticed in the interview responses of this current study: “Will my ego be accepted?” (cognitive), sweaty hands or shaky legs (somatic), “I want to run away” (behavioral), and feelings of nervousness or any other negative emotion that accompanies nervousness (affective). Leary and Kowalski also stated that “The person may or may not act on the urge to flee, but tendency certainly increases,” even though behavioral anxiety prompts a person to seek to avoid the situation that creates anxiety.<sup>23</sup> That is, a pianist may not end up literally running away from the performance, but MPA can make the urge stronger.

### **Psychological Challenge 2. Perfectionism**

A Canadian study which surveyed professional artists, including classical musicians, actors, and dancers, proved that there is a significant correlation between perfectionism and performance anxiety. The study confirmed the association between a higher personal and social criteria of perfection, and increased debilitating anxiety, heightened somatic anxiety, and diminished facilitating anxiety during performing.<sup>24</sup>

Likewise, in interviews for this current study, the word “perfectionism” was specifically stated a few times as another reason for anxiety. If not specifically stated, at least the concept of it was often reflected in the interview responses, as in pianists’ reported obsessions in details of the piece.

Hewitt and Flett suggested that there are different types of perfectionism: “self-oriented perfectionism, other-oriented perfectionism, and socially prescribed perfectionism.”<sup>25</sup> In the interview responses, self-oriented perfectionism and socially prescribed perfectionism were

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<sup>23</sup> Ibid., 7.

<sup>24</sup> Shulamit Mor, Hy I. Day, Gordon L. Flett, and Paul L. Hewitt, “Perfectionism, Control, and Components of Performance Anxiety in Professional Artists,” *Cognitive Therapy & Research* 19, no. 2 (1995): 219-220.

<sup>25</sup> Paul L. Hewitt, and Gordon L. Flett, “Perfectionism in the Self and Social Contexts: Conceptualization, Assessment, and Association with Psychopathology,” *Journal of Personality and Social Psychology* 60, no. 3 (1991): 456-458.

common themes. The obsession with details in practicing or in playing can create a tendency towards a perfectionistic nature in pianists, as Professor Krieger stated: “As pianists, we tend to become so myopic and so obsessed with every single detail.” The interviewees talked about the tendency of demanding perfection from their own playing even in the smallest details, as well as the expectation of perfection from teachers, colleagues, or family members – for example, one piano major mentioned that the “pressure of upholding the image of you as a pianist” is the cause of her anxiety. It is noteworthy that other-oriented perfectionism, which expects and demands other people to appear perfect, has not been apparent in the responses of pianists – that is, no interviewee mentioned expecting the same level of perfectionism from others. This suggests that concern or anxiety about the fear of others’ judgement, especially “the ones that know the pieces and know how I play” – usually teachers and colleagues – may be predicated on the exaggerated assumption of others’ higher demands on oneself. In other words, a pianist might be creating their own imaginary audience who has the same, or even stricter, level of expectation that he puts on himself, which can propose the possibility of association between “maintaining factors of performance anxiety” and a “particularly harsh (internalized) imaginary audience.”<sup>26</sup> Dr. Wan-Yu Hsieh, in an essay on practice methods, stated the necessity of achieving freedom from perfectionism: “We need to learn how to free ourselves from the expectations and demands that perfectionism imposes on us in order to become more confident, fluent, and convincing in our performances.”<sup>27</sup>

It is deducible that FNE originates not only from others, but also from the self, due to self-oriented perfectionism as well as socially prescribed perfectionism. A few piano majors addressed the fear of disappointment as partly rooted in self-oriented perfectionism in themselves: “When you think about how long and how hard you worked on these pieces, you might get more

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<sup>26</sup> Dianna T. Kenny, *The Psychology*, 71.

<sup>27</sup> Wan-Yu Elizabeth Hsieh, “Critical Reflections on Effective Practice Methods: My Journey to Becoming an Artist” (Doctoral Essay, University of Miami, 2015), 144.

pressure from them, because your expectation is heightened by long and hard practice sessions,” or “The greed to not disappoint myself is a big source of nerves.”

The inner emotional conflict caused by the presence of other people in the audience (as mentioned by the interviewees, mostly teachers or parents), can create anxiety reflecting socially prescribed perfectionism. A piano major said, “When I have my teacher in the audience who I respect but didn’t agree with about the ideas on certain pieces, I get nervous. Especially when I play a piece which is very personal to me and there’s someone in the audience who has a strong emotional connection to that piece as well. Or I get super nervous when my parents are in the audience.” Another one said, “The pressure that I should play as I was told by my teacher also makes me nervous.” Professor Cohen mentions that all humans carry an emotional history, including all sorts of experiences, positive and negative. As a result, emotional perceptions of those experiences are inevitable, and these might be responsible for interfering with our psyche during a performance. One classic example is the perception that parents and teachers, for instance, are 'seen' as judges. Consequently, their presence will associate this perception with existing anxiety. It can also work in an opposite and positive direction, for instance, when parents represent the figures of protection and security. In this case, anxiety could be triggered if they were not present. Professor Watts shared a similar story about one of his students:

I had a student some years ago. He was a little bit estranged from his parents, but they came to the town to see his recital. He wrote them that he cannot have dinner with them the night before the recital, but he can meet up after the recital is over. He talked to me about this, and I said, ‘Absolutely, just stay away from them and the recital will be good.’ However, they pressured him and he had to have dinner with them the night before, and it was not a good dinner. On the recital day, I saw him doing the last warm up and he looked insane. He played very badly because he was emotionally so upset.

Although this story does not directly address socially prescribed perfectionism, it demonstrates the destructive influence of a pianist’s emotional conflict with his parents on the day of a performance. Even without perfectionistic elements, the pressure from the people around a pianist, either from those other individuals’ high expectations or emotional stress associated with them, is strong enough to afflict him with anxiety. Charles Rosen has also expressed that

comments from other musicians or critics before the concert can create huge anxiety.<sup>28</sup> An excerpt from a piano major's response wraps this idea very well: "It [pressure] is built up by obviously everything around you: yourself, your teacher, peers, and family."

*Psychological Strategy 1. Having a Stronger Self-image*

Pianists seem to use three main strategies to deal with these psychological challenges that were discussed above. The first is to have an elevated mental attitude with stronger image of the self. A piano major shared his way of dealing with psychological anxiety: "You should treat yourself as a student when you are practicing, but you should treat yourself as a maestro on the stage, you should feel like you are the king of the world." Professor Krieger described very similar mental attitude towards performing: "Like [Isaac] Stern said, you have to be a little bit arrogant in order to stand on the stage. Rubinstein walks and bows like a king on the stage. It is more like an attitude of representing something that is much greater than what we are, rather than an arrogance of the performer. We are representatives of giant composers. If you are a chef and serving food to your customers, you don't bring your food out with a timid or lower attitude. You present and serve them with dignity."

*Psychological Strategy 2. Accepting MPA and the Results of the Performance*

Secondly, the acceptance of anxiety and of whatever happens during the performance is another strategy mentioned in the interview. It is an attitude that acknowledges the inevitability of MPA, accepts the unease, and endures that nervousness during the performance. A few comments from the interviews regarding this strategy include: "You have to get used to the nerves" (from a piano major), and "It is important to put yourself in the performance mode and to see what the

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<sup>28</sup> Charles Rosen, *Piano Notes: The World of the Pianist* (New York: Free Press, 2002), 127-128.

result is, when you put that pressure on yourself. You should get used to knowing that” (Professor Watts).

Professor Watts also mentioned his “positively fatalistic” approach to accepting whatever happens and coping with obsession:

I work a little bit of not obsessing about the stuff that I am afraid of. Sometimes you play difficult pieces that you practice a lot, but it is still difficult, then, try not to work yourself up into a state. Try to be positively fatalistic. ‘It will be how it will be.’ Try to make music, try to focus on the music. The more you focus on yourself, the less likely for performance to be good.

*Psychological Strategy 3. Positive Self-talk*

Lastly, many pianists utilized self-talk to deal with psychological challenges before the live performance. It is found that interviewees like to use self-talk methods when they feel nervous during the day of the performance or when their desire to avoid a performance situation increases. Here is the list of self-talk examples from the interview:

**Table 3.1. Self-talking as Strategy to Deal with MPA**

Examples from interview responses
<ul style="list-style-type: none"> <li>• Just go out and do it.</li> <li>• Just show what you prepared, not more than that.</li> <li>• Just do it.</li> <li>• What is not working now wouldn’t work on the stage anyway, so just accept it.</li> <li>• It’s okay. One hour will pass really quickly. Don’t stumble over.</li> <li>• It will be only a bad hour and half to spend, after that, it will be over and the life goes on.</li> <li>• Make some pretty sound.</li> <li>• I am playing for my students. I can inspire someone.</li> <li>• Nobody is going to die if you play badly.</li> <li>• It will be how it will be.</li> </ul>

In sports, it is very common for athletes to use psyching-up as a strategy to improve their performance before the game. Dr. Jim Taylor suggested a few strategies for psyching-up in the field of sports, which include high-energy self-talk such as “Keep attacking,” or “Stay pumped,”

and intensity keywords like “Charge,” or “Hustle.”<sup>29</sup> Similarly, a study on mental preparation of elite athletes demonstrated that athletes prefer to use self-talk and verbal cues as personal mental preparation before the performance.<sup>30</sup> Another study conducted by Theodorakis et al. examined the effect of instructional self-talk and motivational self-talk. Instructional self-talk uses verbal cues that trigger special attention to a desired skill and its proper execution – for example, “Elbow straight,” or “Stay low.” Motivational self-talk is usually considered as a type of positive self-talk that enhances confidence and creates a positive mood such as “Hang in there,” or “You can do it,” in the context of different types of sports activities.<sup>31</sup> The result of this study demonstrated that instructional self-talk had a much more significant effect than motivational self-talk on improving tasks that require precision, sophisticated and fine motor coordination, while the motivational self-talk proved its significance in activities that require strength and endurance.<sup>32</sup>

Most of the responses in the interviews fell into the category of the motivational self-talk rather than the instructional one. They appear to help pianists create a positive mindset and make it easier to accept the stressful circumstances, giving them determination to confront the pressure of the live performance, and offering a promise of survival of the event even in the worst scenario. In the study of Roger Chaffin and Gabriela Imreh, where they examined the entire process of a concert pianist learning a new piece, they also discovered that “memory cues” – that is, instructional cues – are actively used and organized within a “highly practiced retrieval scheme.”<sup>33</sup> Roger Chaffin et al. further argued that: “It must be the pianist’s expressive and

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<sup>29</sup> Jim Taylor, “Sports: Psych-up Techniques,” *Psychology Today*, accessed February 21, 2021, <https://www.psychologytoday.com/us/blog/the-power-prime/201005/sports-psych-techniques>.

<sup>30</sup> Steven Nicklaus Hannant, “Mental Preparation of Elite Athletes: A Qualitative Study” (PhD diss., Alliant International University, 2007), 89-90.

<sup>31</sup> Yannis Theodorakis, Robert Weinberg, Petros Natsis, Irini Douma, and Panagiotis Kazakas, “The Effects of Motivational Versus Instructional Self-Talk on Improving Motor Performance,” *The Sport Psychologist* 14, no. 3 (September 2000): 253-255.

<sup>32</sup> *Ibid.*, 265.

<sup>33</sup> Roger Chaffin, and Gabriela Imreh, “Pulling Teeth and Torture: Musical Memory and Problem Solving,” *Thinking and Reasoning* 3, no. 4 (1997): 315.

interpretative goals that serve as retrieval cues, not the [technical] problems.”<sup>34</sup> Pianists’ use of instructional self-talk or verbal cues during the performance can be inferred through some of the responses such as “During the performance... I try to think of the map of the music,” or different types of memory that Professor Krieger mentioned earlier.

*Psychological Strategy 4. Identifying the Reasons for MPA*

Professor Cohen suggested several reasons for MPA from a slightly different perspective than the ones mentioned above. In the interview, he said:

Words such as 'mistake' and 'wrong' can be easily associated with a note played but also equated, in a negative sense, to a 'moral behavior.' Playing a 'wrong' note in front of an audience might mean a moral mistake; therefore, you are a terrible person. One's mind can induce you to perceive a public performance as a transparent reflection of your thoughts and feelings, working as if the public becomes a mirror of yourself, not as a musician but as a person. In several articles published by eminent experts on the subject, words seem to be recurrent, such as father, mother, love, sex, rejection, and guilt. These 'elements' seem to be part of the source related to the performer's fantasies and, therefore, their anxieties. The act of playing in public becomes associated with the idea of presenting publicly the absolute truth of who you are. There is when problems start. How to solve it?

This comment also reflects the characteristics of perfectionistic people, who “were described as setting unrealistically high standards, rigidly adhering to them, and defining their self-worth in terms of their achieving these standards.”<sup>35</sup> As for the solution for anxiety of this kind, Cohen compared the anxiety to a ghost and stated that identifying the ghost is the way to deal with the anxiety. He further explained:

Unconscious fantasies can act like ghosts, and, as such, you will never 'meet' them until they suddenly emerge. For me, the best way of dealing with 'them' is by identifying them, and therefore you will not be caught by surprise. That is the only way ghosts can cease to exist. Awareness seems to be the only lasting solution. Sometimes it isn't easy to find the correct answers without help. That is the job of professionals, like psychoanalysts.

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<sup>34</sup> Roger Chaffin, Gabriela Imreh, and Mary Crawford, *Practicing Perfection: Memory and Piano Performance* (Mahwah, N.J.: Lawrence Erlbaum Associates, 2002), 72.

<sup>35</sup> Roz Shafran, and Warren Mansell, “Perfectionism and Psychopathology: A Review of Research and Treatment,” *Clinical Psychology Review* 21, no. 6 (2001): 880.

This strategy resonates well with Seymour Bernstein's writing, in which he considered "facing anxiety for what it really is" – identifying the ghost – as the best strategy to deal with the nervousness. He said, "Pianists should simply face the problems squarely... That being the case, we must find ways to harness anxiety and direct into positive channels."<sup>36</sup>

*Psychological Strategy 5. Considering MPA as a Positive Element*

Just as Bernstein believed that one should direct anxiety into positive energy, many pianists from the current study also consider anxiety as necessary and even beneficial. Professor Watts shared the best advice that he received for this matter in the interview:

One of the best advice that I ever got was from a teacher of a friend of mine, who told him that "You should be nervous." You are going to go out in front of a couple of thousand people and play. It would be not normal if you weren't nervous. There's nothing wrong with being nervous. When you are nervous about the fact that you are nervous, that's the problem. You are not playing concerts every day. Let it be.

Noa Kageyama holds exactly same opinion on anxiety, writing, "Some of what disrupts performance under pressure is not the situation, or our physical reaction to the stress, but our anxiety about being anxious."<sup>37</sup> To avoid the "threat state" of anxiety, he suggested a strategy of reappraisal of nervous feelings, considering them a required response before the performance, and furthermore as a positive reaction of the bodily system that can *enhance* the performance.<sup>38</sup> From this perspective, anxiety is indispensable for the live performance. Professor Cohen addressed the benefit of the nerves as well as the necessity of the anxiety.

Nervousness is like cholesterol. There are the bad and the good ones. The good ones can help to add a kind of an 'edge' during a live performance. It is proven that adrenaline is responsible for increasing our physical potential. That is the reason why you never hear of athletes breaking world records during their training sessions. World records are broken only during live tournaments when adrenaline is the natural resource that

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<sup>36</sup> Seymour Bernstein, *With Your Own Two Hands: Self-Discovery Through Music* (New York: Schirmer Books, 1981), 273.

<sup>37</sup> Noa Kageyama, "Two Different Kinds of Nerves? How One Type Helps and the Other Type...Not so Much," accessed March 11, 2021, <https://bulletproofmusician.com/two-different-kinds-of-nerves-how-one-type-helps-and-the-other-type-not-so-much>.

<sup>38</sup> *Ibid.*

increases athletes' physical abilities. It is common for musicians to be surprised how fast they have played after listening to their live concert recordings. On the stage, they are not aware of this phenomenon.

Professor Naoumoff and a few piano majors also considered anxiety as an excitement. They considered the feeling of heightened nerves before the performance as a good and hopeful signal. A piano major commented that "Having performance anxiety is not all bad, because you can use it for the emotion." This kind of anxiety can be called facilitating anxiety, in contrast to debilitating anxiety. A study of Raffety et al. acknowledged the existence of facilitating anxiety in performance anxiety and its positive role in helping a person to respond and find more effective solutions to the situation with more adaptive attention.<sup>39</sup> Interpreting the study of Craske and Criag mentioned above, Dianna Kenny proposed that there is a beneficial aspect of slightly heightened anxiety that facilitates pianists' performance.<sup>40</sup>

György Sándor also agreed on the possibility of taking advantage of stress and anxiety that comes from the public performance. He wrote, "If we are able to overcome the negative effects of pressure, tension may turn into an asset by adding that extra improvisatory quality that can make a performance memorable."<sup>41</sup> The perspective of considering anxiety as a positive element for the live performance could be a valid strategy to cope with nervousness, as William Westney wrote:

Finding a way to frame the same physical sensations with different, more encouraging words can ease our fears greatly. Why not think of our hyper-energy, cold hands, and rapid thoughts as symptoms of excitement and anticipation? Most experienced performers will say that they will get nervous before every show, but they often add that they welcome the feeling, finding it essential to the heightened focus and alertness that are hallmarks of vital performing. Undoubtedly, they have, consciously or subconsciously, found a positive conceptual framework for the aroused physical state we think of as nervousness.<sup>42</sup>

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<sup>39</sup> Brian D. Raffety, Ronald E. Smith, and J. T. Ptacek, "Facilitating and Debilitating Trait Anxiety, Situational Anxiety, and Coping With an Anticipated Stressor: A Process Analysis," *Journal of Personality and Social Psychology* 72, no. 4 (1997): 894.

<sup>40</sup> Dianna T. Kenny, *The Psychology*, 62.

<sup>41</sup> György Sándor, *On Piano Playing*, 221.

<sup>42</sup> William Westney, *The Perfect Wrong Note: Learning to Trust Your Musical Self*, 1st original hardcover ed. (Pompton Plains, N.J.: Amadeus Press, 2003), 141.

*Psychological Strategy 6. Getting Help from a Specialist*

Professor Cohen asserted the positive effects for music schools to have mental health professionals to help student musicians to deal with emotional issues, ordinary and common to all of us: “Like in the sports world, the anxieties have nothing or little to do with playing the piano.”

Indiana University Bloomington is providing mental health support by trained professionals, including trauma response, prevention consultations, and counseling sessions for university students through CAPS (Counseling and Psychological Services).<sup>43</sup> Since 2015, CAPS partnered with the Jacobs School of Music to provide a dedicated counselor for the Jacobs student body.<sup>44</sup> However, no piano majors mentioned CAPS as one of their option to deal with mental challenges. The reason for the absence in the interview responses of having professional counseling as a viable option for overcoming anxiety is unknown and requires further study. The only remark related to having a counseling session as a strategy for anxiety was found in one interview with a piano major. She expressed the benefit of talking to a private therapist, as she said, “Recently, I found that having therapy is very helpful to handling the stresses and pressure from the concert. Taking everything out to a random person [therapist] could lift some burdens I had.”

*Psychological Strategy 7. Improvisation*

Professor Haguenaer has his own unique method of achieving freedom from the pressure and obsession that can grow as the concert day approaches:

Playing other pieces that are not on the program or improvising can alleviate some pressure off. I tried this method when I was a student before one of student concerts. Even without thinking, I was playing something else in the green room, and the

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<sup>43</sup> “Counseling (CAPS),” Student Health Center, Indiana University Bloomington, accessed February 22, 2021, <https://healthcenter.indiana.edu/counseling/index.html>.

<sup>44</sup> “Counseling and Psychological Services expanding services on IU Bloomington campus,” Jacob School of Music, Indiana University Bloomington, accessed February 22, 2021, <https://music.indiana.edu/news-events/news/info/2015/08/jacobs-health-center-partnership.html>.

performance was successful. Since then, I try to remember that moment and use that strategy.

## Chapter 4: ON THE STAGE

The time frame in this category refers to when the live performance is happening on the stage. Live music performance, as in any other field like public speaking or sports, contains uncertainty: our subjective and meta-cognitive awareness of our own ignorance about the future.<sup>1</sup> The question asked to the interviewees in this category was about the challenges, either physical, mental, or emotional, that pianists encounter during the actual performance, with their solution to overcome the difficulties. For the summarized interview responses, see Appendix B.4.

### Challenge 1.1. Distraction from the Audience

It was almost a universal agreement among pianists that the distractions from the audience and the self were the main challenges during the performance on the stage. The chief source of the distractions from the audience were noises such as coughing or dropping their belongings. In Andreas Wagener's study, it was concluded that the frequency of coughing from the audience in the concert situation is abnormally higher than how much normal people would usually cough per day, and that coughing is "willful and voluntary to a substantial degree," compared to involuntary actions such as sneezes, hiccups, and yawns.<sup>2</sup> Regardless of the motives behind the willful action of coughing, it is definitely one of the most disturbing noises in the live concert situation, as many pianists mentioned in the interview.

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<sup>1</sup> Eric C. Anderson, R. Nicholas Carleton, Michael Diefenbach, and Paul K. J. Han, "The Relationship Between Uncertainty and Affect," *Frontiers in Psychology* 10 (November 2019): 2, doi:10.3389/fpsyg.2019.02504.

<sup>2</sup> Andreas Wagener, "Why Do People (Not) Cough in Concerts? The Economics of Concert Etiquette," *ACEI Working Paper Series* (December 2012): 5-6.

Peripheral vision can also produce visual distractions to the performer. Professor Cohen recalled a recital where he was greatly distracted by the bright color of an audience member's dress.

During a recital in Italy, there was a lady in the first row wearing a very shiny and 'reflecting' green dress. Whenever I moved to the higher register of the piano, I could see her dress. That drove me crazy, and, in several instances, I lost my concentration. I explained my drama to the organizer during the intermission, who asked her to move from that seat. Fortunately, she was kind enough to understand my plea!

Professor Krieger shared a very similar experience where he was bothered greatly by certain movements of a lady who was sitting in the first row.

I had a recital and there was a woman with beehive hair sitting in the first row. From the very first bar of performance and at almost every bar, she was shaking her head. I could see her shaking her head through peripheral vision, and it bothered me so much. When I start playing Chopin second piano sonata, she was shaking her head again. At the end of the concert, I was so [upset] and wanted to leave the venue right away. But I was told that there are audiences, including many children, waiting to meet me, so I had to greet them, and I saw this woman waiting in the line. I was so ready to tell her how disturbing her movement was during the concert. Finally, her turn came, and she was telling me how much she enjoyed my playing while keep shaking her head. You never know what's going on in the audience, so you have to at least try to be positive, not let any distractions from the audience affect you, and focus on what you are doing.

These experiences show that the influence of visual distraction can be as strong as the aural ones. Professor Krieger's story demonstrates the importance of not making unnecessary distraction or pressure by premature assumption of the reason of certain visual behavior or aural disturbance.

### **Challenge 1.2. Distraction from Within Oneself**

Many pianists also described the distractions from within themselves as well as from the audience. The scope of self-distraction ranges from worries of mistakes or failure, such as "What if I forget everything? What if I stop and can't get back on?" or dwelling on past mistakes, to very random thoughts – not related to music – suddenly appearing in the performer's head. Some pianists mentioned that they can get distracted even when things are going well; for example, Professor Watts said, "You can be distracted by even good stuff. I have played something and it

was going better than ever. The moment when the bullseye of the focus is shifted to something else, either coughing from the audience or my own thoughts, than what I am playing now, I am cooked.”

### **Challenge 1.3. Memorization and Sustaining Focus**

The challenges of memorization and sustaining focus throughout the entire recital, which were discussed in Chapter 1, were addressed multiple times in the responses in this category as well. The problems and solutions presented here were identical to the ones that were mentioned in Chapter 1.

#### *Strategy 1. Concentration at Every Moment*

Strategies for dealing with all the challenges above—distractions from the audience and from within oneself, memorization, and sustainability of focus—converged on the matter of concentration on the task at hand at every moment. Some of the comments of piano majors described detailed methods of attaining better concentration: “I try to focus on small number of things at the moment, such as just focusing on the melody, instead of trying to concentrate on everything,” or “I try to hum or sing in my head much louder, and close my eyes. I try to think of the map of the music.” Similarly, Professor Cohen said, “I tried to deal with these problems by trying to internally sing what I am playing, anticipating all musical ideas and carrying them without 'mental' interruptions.” Above this, a piano major emphasized that concentration is “sheer mental power” at the moment of playing. It is interesting to note that one piano major tries to practice his concentration under purposefully distracting settings that he creates for himself. In his words: “I also try to practice a few short difficult passages while watching completely musically unrelated YouTube videos, to simulate a distracting situation and test my concentration.”

Very similarly, Barry Green suggested an exercise where you ask your friend to sit behind you and make random noises with an alarm clock, a hair dryer, or a radio, at random

times, while you are performing.<sup>3</sup> To cope with external and internal interferences, Green proposed to “remain aware of it [distractions or nerves], to ‘allow’ it rather than to fight it,” so that you can “bring your focus back to the music.”<sup>4</sup> The purpose of the exercise is to practice being aware of the distractions and recovering from them quickly.

Professor Watts recognized the challenge of being present at every moment and explained a way to examine whether or not one has succeeded in maintaining good concentration. He said, “It is hard to ‘be present now.’ This is one of the biggest challenges. You should be able to recall how you played everything when you have been focused every moment, whereas it gets a little bit fuzzy to remember how you played when your focus wasn’t present.”

## **Challenge 2. Maintaining Proper Tempo**

Another frequently mentioned challenge on the stage is to maintain a proper tempo. Professor Cohen explained the different state of being on the stage: “As already said, on top of the influence of the adrenaline, our mental stability might change as we are in a special emotional “context.” On the stage, I feel I am in a different dimension. Sometimes, to count and sing internally at the same time might help to stabilize the pulse.” The challenge of adjusting to the different sense of timing on the stage, which usually results in rushing in performance, was pointed out in the interview responses. A piano major described this experience: “Because of nerves, perception, especially of the tempo, is different on the stage than in the practice room. It is easy to play much faster than what I used to play in the practice room, because my sense feels the tempo slower.” Sándor attributed this phenomenon to a pianist’s perception of time in relation

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<sup>3</sup> Barry Green, and W. Timothy Gallwey, *The Inner Game of Music* (Garden City, N.Y.: Anchor Press/Doubleday, 1986), 118.

<sup>4</sup> *Ibid.*, 117.

to his heartrate – that is, the tempo of whatever a pianist is playing increases in relation to the acceleration of their heartbeat onstage.<sup>5</sup>

*Strategy 2. Finding the Sensation of the Proper Tempo through Run-through Experiences*

The same piano major who mentioned this challenge suggested his strategy: “Playing in front of people before the recital can help. If I feel I am playing quite slow on the stage compared to the sense of tempo in the run-through in the practice room, it is good. So, I aim for this kind of sensation on the stage in terms of good tempo.”

**Challenge 3. Unfamiliar Instrument and Different Concert Venue**

Since most pianists cannot afford the luxury of bringing their own piano to the concert venue, it is an inevitable fate for almost all pianists to be forced to play unfamiliar pianos every time they perform in a different concert hall. Under these circumstances, a few comments on the challenges of dealing with bad pianos or bad halls were to be expected. A piano major said, “It is difficult to deal with a bad piano in the hall, which doesn’t allow me to express what I want. It is challenging and frustrating when the situation, bad piano or bad hall, is blocking me from focusing on expression. I just try to do my best.”

*Strategy 3. Accepting the Situation*

Professor Watts gave a practical and psychological strategy to deal with this challenge: “When you encounter the bad piano, don’t try to fight it. You will never win. It is not going to change for you. What you can do is to try to find one small thing that is really good on the piano, and to think positively. You have to try not to spend your time just [complaining] about stuff. The more you do that, the less you are going to play well. It also helps to think about the fact that the

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<sup>5</sup> György Sándor, *On Piano Playing*, 221.

sound from the piano of the hall is the sound that the people who are coming to this concert hall are always hearing. So, try to accept it and make friends with the instrument.”

#### **Challenge 4. Physical Discomfort Onstage**

A few responses brought up the problem of physical discomfort from perspiring due to stage spotlights or concert attire. A piano major said, “Sweaty hands became my new challenge. I usually keep my fingers close to the keys, but I had to do it more in order not to lose control on the keys when my hands get sweaty, and it changes my touches and tones... Even if my mental power is really strong, facing physical obstacles are not easy things to solve, especially during the performance. But on the stage, I cannot stop, so I try to keep going whatever happens.”

The trouble with concert attire, especially the concert shoes, was addressed almost exclusively among female pianists.

#### *Strategy 4. Choosing One’s Attire Carefully*

Some strategies regarding trouble with concert attire included: “I don’t wear high-heeled shoes, because it makes a sound when my legs are shaking,” and “What kind of shoe I wear is very important. I wear flat shoes, never heels which make me feel like my feet are floating in the air. It is quite distracting when the shoes step on the dress. So, I always arrange my dress between pieces. The shoe shouldn’t have decoration in the front, because it interrupts the use of pedal.”

Regarding other physical discomfort, such as sweaty hands, respondents did not seem to have a specific solution or strategy beyond just doing one’s best.

#### **Challenge 5. Initiating the Very Beginning of the Recital**

Lastly, initiating the very beginning of the recital was mentioned as a challenge by several interviewees. A piano major said, “Walking on the stage towards the piano for the first piece, bowing to the audience and starting the very first note is challenging for me.” Another said:

“It is really hard to start and play the first note. The fear and unwillingness to play the first note is a huge burden for me.”

*Strategy 5. Simulating the Beginning of a Recital and Strategic Repertoire Selection*

The piano major who addressed the challenge of walking towards the piano at the beginning of the recital specifically ensures that during the dress rehearsal, she goes through all the motions of initiating a recital: walking to the piano from backstage, bowing, sitting down, and starting the first few measures of the first piece.

The piano major who mentioned her difficulty with starting a recital and playing the first note shared her strategy: “That’s why I try to choose pieces that have easy openings, usually with loud dynamic.”

## CONCLUSION

In general, the responses from piano majors and piano faculty members were in accordance with existing literature regarding pianists' concert preparation, as well as with various psychological studies on performance in music and sports, but were able to present more detailed information about how each individual pianist deals with the challenges of the solo piano recital in their own way. It is interesting to note the resemblances between performance in piano and in sports, especially in terms of dealing with the performance anxiety, even though the topic of how sports strategies may be applied to piano playing requires further study.

Many similarities were observed between the two groups of pianists – piano majors and piano faculty members – in the challenges that they mentioned and strategies that they used. One of the possible explanations for these similarities can be attributed to the fact that the piano majors interviewed are almost all students from Indiana University Bloomington, where all the interviewed piano faculty members are also teaching at the time of this study. It is reasonable to assume that this lineage of education leads to strategies being shared from teachers to their students. There are very few discordances between the two groups in the most frequently mentioned challenges and main strategies for those challenges, which demonstrates a significant degree of shared knowledge among pianists.

Major differences among the two groups appear to be the amount of experience, and different perspectives about the challenges. Piano faculty members have accumulated decades of experience of live performance and had acquired large amounts of data about difficult situations that pianists can encounter in the live concert setting. They were able to share many particular episodes of certain troubles that they went through, and solutions to the troubles as discovered through their own experiences or by interacting with other established musicians. Piano faculty members credited many other musicians, whom they had worked with in their career, including

pianists, violinists, cellists, and conductors, as the source of strategies for their challenges, while most of the piano majors' knowledge was derived from their own experience and their teachers' advice.

Although some practical strategies between the two groups are identical, such as an emphasis on slow practice on the day of the performance, the responses from piano faculty members displayed more tendency to incorporate philosophical approach to the problems; for example, being true to the music, or understanding the role of pianists between the composer and the audience. This type of response was rare in the responses of piano majors. However, it could be a hasty generalization to interpret the shortage of philosophical ideas in piano majors' responses as their lack of opinion on this subject.

Minor differences among interviewees in recognizing difficulties and their adaptive solutions are ascribed to differences in each individual's experiences, personality, and environment. It is of utmost importance to understand these differences not within the dichotomy of better or worse, but within the frame of diversity that embraces the differences of individuals in the absolutely equal standing. As addressed in the purpose of the study, it is not the objective of the current research to propose the "best" way, nor to adjudicate the value of responses. Being a minority in expressing peculiar challenges or utilizing unusual strategies does not invalidate that experience in any way.

Some pianists expressed that, as they have been using certain strategies, they became very familiarized with them, and feel uncomfortable if they do not use those strategies. For instance, the approach to how much pianists practice on the day of the performance varied. One group of pianists prefers to practice just to the level of warm-up, whereas another group of pianists has to practice as much as possible until the moment they walk onstage. Neither group's strategy is better than the other, since each pianist tailors their own solutions according to their specific circumstances and experiences. There are multiple individual truths in this world of various individuals.

Many limitations were present in this study. First, a small number of samples makes it difficult to draw generalizable knowledge from the responses. Second, all the piano major participants were graduate students who are pursuing master's or doctoral degrees. Third, some of the strategies mentioned in the interview have few supporting sources of scientific evidence, compared to the amount of well-studied strategies in the field of sports, and providing that evidence was out of the scope of this study. A few suggestions for future studies might include:

- 1) Studies with a similar approach as the current study, but with a much larger number of participants from both the piano student group and professor group. The use of an anonymous survey might be able to reach more people, compared to requesting an interview, which can impose pressure for participants to talk to an unknown interviewer.
- 2) Since the current study had only graduate students, studies with a similar approach as the current study with a strong focus on undergraduate students and younger piano students can widen the spectrum of data available.
- 3) Studies that investigate the changes of the same pianists' approach to the challenges and strategies of piano performance throughout several years or decades – for example, conducting interviews with high school piano students and interviewing the same pianists when they are at the end of their doctoral degrees – can shed light on the development of young piano students' pianism and their performance psychology.
- 4) Some strategies mentioned in this study's responses, for instance, having no caffeine, not having heavy meals before the concert, and taking naps, were mentioned several times, but the effect of those on performing musicians have not been studied enough. A scientific approach to study these strategies of pianists, as has been done with athletes, can fill gaps in the knowledge of piano performance.

- 5) There are many similarities both in playing the piano and playing any kind of sport, as both professions require live performance in front of the public. However (similarly to the point above), studies are not conducted about music performance as much as it is done for sport psychology. Studies that apply the approach of sport psychology to music performance can be administrated for not only pianists, but also all classical musicians.
- 6) Even though there are counseling services provided for students in Indiana University Bloomington, no piano majors mentioned these services in their responses. While this may be partially due to reluctance to share about an interviewees' more private matters, it would be meaningful to examine the reason behind the absence of professional therapist or counseling services in pianists' lives.
- 7) Since the aim of the current study was set solely on the piano solo recital, it would be interesting project to delve into the problems and challenges that musicians encounter in ensemble playing, such as playing within a chamber group or playing with the orchestra.

## APPENDIX A: INTERVIEW QUESTIONNAIRE

1. Near the performance:
  - What are your challenges in the concert phase, and how do you (mentally or physically) deal with them?
  - What are the challenges in practicing in the concert phase? How do you practice?
  
2. In the dress rehearsal:
  - How do you take advantage of dress rehearsal? Do you have specific plan or goal in your mind for dress rehearsal?
  
3. On the day of performance:
  - Do you have a routine on the day of the performance?
  - How do you practice on the day of the performance?
  - What do you do in the backstage, right before the concert?
  - How do you cope with nerves (music performance anxiety), if you have them? Where do you think the nerves are coming from?
  
4. On the stage:
  - What are your main challenges during the performance on the stage, and how do you deal with them?

## APPENDIX B: SUMMARIZED TRANSCRIPTIONS OF THE INTERVIEW

Note: Some of the interviews were conducted in Korean and translated into English.

### Appendix B.1. Challenges and Strategies Near the Performance

Piano Majors	Response
1	Temptation of playing (run-through) again and again mindlessly, hoping to get better, without real practicing is a huge danger in this period. I record my run-through and listen to the recording with the score, and find the spots and practice them.
2	Feeling musically stuck is another challenge. I need distraction from practicing. I like to talk to people, or listen to others' playing. Resting well, and run-through the program in the middle tempo helped me.
3	It is easy to forget about the score, and just playing without thinking. Most of the time, I tend to run-through without details. I try to play in front of people more often, and try to record myself.
4	It is challenging to keep my attention at the second half of the program when I run-through. The fear and pressure from the random accident is hard to deal with. I try to emulate concert situation, and I record run-throughs.
5	The challenge occurs when I find no more freshness in my playing. I do score practice without piano, which reminds myself of what is written. I like to practice something else which is not on my current program. If I have chamber recital coming up in a month, I practice those pieces [rather] than my solo piano program that I played for a long time. In this way, I can still keep my finger connected with the keys and working, and find freshness and inspiration from practicing different programs. Then, I can apply the rediscovered freshness and inspiration from the other program to my current solo program.
6	I tend to lose interest in the pieces that I am playing. I have good sight-reading and learn the pieces quite quickly. So, for the easy program, I don't learn too early. I try to learn it close to the performance so that I can stay interested until the concert day. I like to rotate pieces in my practice sessions. I would practice only Debussy for a week, and practice only Chopin for the other week.
7	It is hard to deal with the suffering from waiting until the concert date. After I learned the piece, I don't know what more to do. I call this period 'ADHD period.' I try to just build muscle memory. Let's just make it very solid. More like finger training.
8	Keeping focus for a long time is difficult, and the fear of memory slip is a big challenge. I try to learn the piece at least a month, or a month and half before the concert. And until the concert, I try to play for other people a lot in different pianos, with different audiences, and at the same time [of day as] my recital. Yoga, meditation, 5-5 breathing, and getting therapy sessions help me. 3 days before the concert, I do more slow practicing. I have three practice sessions per day and at the beginning of each practice, I run-through the whole program and work through under tempo with exaggerated expressions. I do this to train my concentration span for a long time.
9	It is challenging for me to find the balance between keeping the basics and looking for something new. At least a month before the recital, I try to start experimenting with the sound. It makes huge difference when you practice in the place where you can experience the acoustics and listen to it while practicing. But I realized that I shouldn't try to experiment more than a week before the recital.

10	I try to not to be too comfortable, and not to do mindless practice. Maintaining interest is difficult. I play in a very slow tempo in a few sections, not the whole piece. Once in a while, I record sometimes the whole thing or a few sections, and listen to it. I listen to others' playing for freshness.
11	Keeping balance with life, between practicing 3 to 4 hours a day and working or taking classes, is challenging. If I have a month before the concert, I try to balance with refreshing physical touch and managing the workload. I will schedule several run-through sessions including the studio class. My aim is, ideally, to have 5 times of run-through before the real concert. Mind game, fighting with mental foe, is another challenge that I face. If my actual playing is worse than my expectation, I try to accept the fact. I try to record and listen so that I can come to the truth. Sometimes I have to accept the different difficulties of the pieces, not to be frustrated by my playing. If I can accept the fact that some pieces require much more time to be comfortable with my body, I won't be depressed by my bad playing, because I understand and accept that I just have to spend more time with the difficult pieces.
12	The fear from the possibilities of some random things happening unexpectedly is a challenge. I tend to speed up my tempo. I record and listen to it, not right away, but a day later. I have to play badly in front of people at least once so that I can check my worst version of playing. Practicing near the performance is mostly a review of what I know.
13	I don't have a piano or keyboard at home, so it is difficult for me when I cannot find available practice rooms at school. - I like to be 'ready to go' a day before the concert. I practice lightly until a week before the concert and I use the last week as a build-up period for the performance.
Piano Faculty	Responses
Cohen	For a professional concert pianist, ideally, a recital program should be ready much before the performance date. After all the work in detail on every part of the piece, reaching your limits in terms of understanding the scores in physical, intellectual, emotional, administrative ways, it is essential to 'digest' all these components by experiencing them in several live performances. The pieces have to become alive by imprinting on them your 'unique and personal label.' Your fingers, body, and mind need time to achieve that. To know a piece better doesn't mean only solving technical or administrative issues. When you've lived with the work long enough and played it many times, your body and mind already acquire the knowledge of what to expect during the performance and understand with more confidence how to project and express your musical ideas. You learn all this through experience and, in short, by playing in public. It is essential to become familiar with the atmosphere of the performance situation. For example, Sviatoslav Richter arranged and tried out many small recitals before the performance in the most important venue. When you play in front of others, you develop a better sense of self-assessment. In my experience, awareness of my mistakes has been an excellent tool for my development. So, be friends with your mistakes.  It is very challenging to substitute for other pianists at last-minute notice. In my career, I replaced many pianists. Sometimes I had to 'relearn' a concerto that I didn't play for a few years within one or two days. I felt that those were unique chances offered by my managers. Sometimes not wisely. How did I do it? Practice as many hours as possible, take the first flight the next day, go directly to the hall, check the piano, practice to my physical limits, go to the hotel, change the attire, and play the concert. Of course, you must be physically healthy, but the brain is responsible for all this to happen. This little magic box is the main one responsible for identifying and solving your problems and optimizing everything you need to do.
Haguenauer	It is important to keep the freshness in relation to music, the connection that we have with the piece when we started learning the piece.

	<p> Oftentimes, there are direct relations to pieces, and some of them might be lost along the way we practice the pieces. It is important to go back to the initial relationship that we built with the piece. I don't mean going back to the very beginning learning process. I like being able to return to the raw connection that I had, or to reconnect myself to the direct love with the pieces that I had. Some of strategies that I use is to improvise, rather than focusing on the program that I was working on. It is taking a detour to connect to my musical instinct. It can be free improvisations or improvisations on the pieces that you are playing. It is good way for me to forget about obsessive relations with the pieces I am playing, and to connect to deeper version of my musical self.</p> <p> I also like to play the pieces that are not on my program. The pieces are already in my hands, ones that I played in previous concerts. It gives me room to play the piano without pressure, since you don't have to play those pieces.</p> <p> I also record myself days or weeks before the concert. It can be depressing to listen to it, but it is useful.</p> <p> I like to listen to the recording of pianists that I revere, but I suggest not to listen to same recording too many times. Recording is like a picture, a moment. What you recorded on that day would be different from the recording of today. You don't want to fall into the devotion to one particular recording, because even for these giants, like Arrau or Rubinstein, it was a moment.</p> <p> Not on the day of, but a week or weeks before the concert, I listen to the playing of pianists I love and revere.</p>
Krieger	<p> As pianists, we tend to become so myopic and so obsessed with every single detail, and that can make us distracted from the final purpose of an artist. Memorization is challenging. I try to prepare well far before the concert. Ideally you want to internalize the pieces way earlier than the concert.</p> <p> I try to get the broader perspective, in which I am only the vessel of art between the composer and the audience. We have to know what we are serving. We should serve King, rather than Duke or the Prince. For us, the composer and his/her message is the King that we have to serve, and we have to deliver the message to the audience. ... Another thing that I try to do before the concert is to be really honest with myself as a musician, and accept myself as a human, as who I am. We cannot really control everything on the stage. Live concert is real, not fake, event that is unexpected. Because of lots of repetition and analysis that we do in the practice room, it is so easy to be obsessed or depressed by very small details that only we know, and lose the bigger perspective as an artist. Perfection is a limitation. If you put perfection as a goal, you have nowhere to grow. What is perfection? Is it playing all the notes? Is it playing everything that is written? Remove the concept of perfection, then you have open-ended world of sound and ambience. Everything is part of the process, not the end, about who I am today. Tomorrow I will try to do things that didn't go well yesterday better. As a musician, accepting myself as who I am, and accepting the imperfectness of myself and uncertainties of the live concert is very important not to get caught in small and greedy obsessions, and it also helps to deal with stresses coming from the concerts. This approach is more meaningful, especially in psychologically competitive world that we are living in, where we have to play at certain technical and musical level in order to prove our worth, since Van Cliburn won the Tchaikovsky competition. We are all gifted and that gift is good enough to honor ourselves, in such a way that we don't try to be anyone else and we don't try to compare ourselves. We just do what we can and be honest musicians. This is not an easy challenge, because nowadays we are surrounded by so many recordings and</p>

	<p>YouTube Videos. I try to remove all this external stuff out of my mind for [the sake of] my internal world as much as possible.</p> <p>Memorization could be helped by having multiple clues of different kinds of memorization, such as visual, aural, tactile, emotional, and etc.</p>
Naoumoff	<p>The challenges would be expecting the unexpected on the stage. Being too creative in interpretation is the problem that I have I don't get upset or distracted when random mistakes happen. When it happens, I adjust on the spot and fix it on the stage, thanks to the perfect pitch. Sometimes when I make a mistake in the exposition, I make same mistake at the equivalent part in the recapitulation, on purpose. I do "factual practice" that I learned from S. Richter.</p>
Watts	<p>You will be never really ready. But even if it isn't, you have to make a mental decision. You have to decide that, for the moment, working on this piece is over. Otherwise, you don't really put yourself in the frame of performance. Then, you have to find a practice time when you will play either this piece or this entire program as if it was the performance in front of thousand people. This takes a certain discipline.</p> <p>Once you've decided to play a [mock] recital and picked a day, preferably at the same time, you cannot stop, or fix during the run-through. The day before, or the week before, it is important to put yourself in the performance mode and to see what the result is, when you put that pressure on yourself. You should get used to knowing that. You have to listen to everything, and make a note of that, especially things that didn't go well. Then, you have to really think and examine what are the things that I did not so good.</p> <p>If you can put yourself in the performance mode aggressively with discipline, you have more surety in the concert. Not many people actually do this. They practice and work hard, but they don't have enough experience of 'performing.' Very often, it is quite foreign to them.</p> <p>You have to remember that you are a musician first, pianist second. So, your job, obligation is first to the composer. And second to you and the piano. If you play the piece, the composers will not be so angry with you about the wrong notes. You have to put your mind on "Make music, Be true."</p>

## Appendix B.2. Strategies for the Dress Rehearsal

Piano Majors	Response
1	<p>I try to test the improvisations in the interpretation on the spot. In the real concert, you have moments where you want to play in slightly different way than you were practicing before. I want to try these things out in the dress rehearsal.</p> <p>I always ask people to listen to me in the hall. I try to get to know the feeling of real concert as much as possible.</p>
2	I focus a lot on the stage deportation, how to walk on the stage, how to bow, how to sit, and how to begin the very first note. I practice a lot on how to prepare the very first note well, the beginning of the piece. I check the sound of the piano in the hall, and practice technically difficult parts or sections that are difficult to memorize. I ask people to come and listen my dress rehearsal.
3	I focus on how the piano works, how it sounds in the hall.
4	I bring someone who has good ear to listen to the acoustics. I focus on different voicings of the piano in each register. I clap to see how reverberant the hall is. I run-through the program if I have time.
5	I try the piano, pedal and acoustics. I try the important parts if there is enough time. I check the position of the piano as well, because it matters quite a lot for the sound for the audience. I have someone sit in the audience and listen to my playing. I also record my dress rehearsal, but when the discrepancy happens between people's comment and recorded audio, then I follow people's opinion.
6	I have to test the hall at least a few days before, if possible. If it is on the day, I would just test the hall and the piano. I would try the parts instead of [running] through the whole thing. I try to have people in the audience to listen to me. I try to record my dress rehearsal, but usually don't want to listen to them. I also try to feel comfortable with the hall. I walk around the hall, on the stage and in the audience, so that I could feel familiar with the venue.
7	I don't find last minute dress rehearsal is useful. It should be at least 3 days before the concert. I like to run through the whole program, to test my concentration span during the concert. And then fix the parts later. I always have someone to listen to my run-through, and try shoes for the pedal.
8	I focus on sound check in the hall. Also, I like to sit down in the audience to really get the feeling of the hall. I try to run through my program once.
9	I want to test how bad I can play under pressure as well as the acoustics. I try to imitate the real concert situation, to simulate the closest experience to the concert. I try to think of the worst scenario and thoughts that might occur on the real concert day, such as "What if I make a huge mistake? What if people think that I am not prepared? What my teacher will tell me if I play badly?" in order to play under the similar mental pressure as in the concert day. My entire goal of the dress rehearsal is to find my worst playing possible. I am happy if I find problems in my playing, because I know that I will practice on those problems really hard until the concert, rather than a successful run-through which can easily make me arrogant, and make me play worse in the real concert.
10	<p>I have someone in the hall. I check acoustics.</p> <p>I prefer to run through the whole thing with full energy if the dress rehearsal is a few days before the concert. If it is on the day, I save energy. I like to video record dress rehearsal to monitor myself, not only sound but the appearance as well. After I play the dress rehearsal, I put tabs (some sticky notes) on the score so that I can review those spots.</p>
11	I try to do full run-through, as a mock recital. I have teacher or friends in the hall to listen to my run-through.

12	I check the acoustics. It is beneficial to have the dress rehearsal at least two to four days before the concert, if possible. I record everything, not only run-through, but also practicing in parts, and I listen to the practicing as well, in which I can check what works and what doesn't. It is also useful to play in a different hall, if possible.
13	I don't care that much about the piano sound, because the sound that I hear in the dress usually becomes very different in the real concert with the audience. I test my shoes for pedal, but don't particularly check attire. I check how the hall looks like, and imagine myself in that hall. It is quite helpful to be comfortable with the venue.
Piano Faculty	Response
Cohen	My main objective during a dress rehearsal is to focus on the instrument's characteristics and projection in that particular environment. I find it fundamental to be aware of, for instance, the relation between the 'effort' made and the 'sound produced' in each register of the instrument so that we can better control the desired voicing. The use of the pedal is an art in itself. Another fundamental point is how both pedals react in that particular acoustic and understanding the consequential decisions regarding specific passages. Ideally, the presence of the piano technician would be more than desirable to adjust a few details, such as some hammer voicing, better calibrating all pedals, regulating key actions, etc. All these concerns will undoubtedly prevent negative surprises and, at the same time, will enhance the ability to express, in sound form, an ideal musical 'message.'
Haguenuer	It depends on how much time you had in dress rehearsal. If you can run through the whole thing, that's great. If it is the same day of the performance, it is dangerous to give all in the dress rehearsal. Checking on practical things, such as middle pedal, if I have to use it, or repetition of keys. If you have extra time, try to play something else that is not on the program. It feels nice and refreshing. A fresh breath.
Krieger	I like to run through in the dress rehearsal if time allows. But I cannot practice too much on the day of the concert [if the dress rehearsal is on the day of the performance]. If I have dress rehearsal in the morning, I play 2 hours in the dress rehearsal and go back to the hotel, check the inventories [of what to do in the music], and rest until the evening concert.
Naumoff	I play powerful sections first and move on the soft ones. Start the loudest sound to the softest one.
Watts	For evening recital, I usually asked for 10 or 11am to 2pm for the dress rehearsal at the hall. Very often, I don't get to go through all of the program. However, getting familiar with the instrument is very important. You want to reduce the surprises. Even if it is subconscious, you want to feel the physical space. I would like to know how it feels and how it sounds on the stage.

### Appendix B.3.1. Routine and Practicing on the Day of the Performance

Piano Majors	Responses
1	I have to sleep well and eat well but don't eat right before the concert. I like to warm up in the slow and medium tempo. I focus on adjusting my touch according to what I hear so that my fingers and ears are connected well on the stage. I don't play pieces [at] tempo. I want to save my energy and inspiration. My body and brain should be well rested and restored to be really active and engaged on the stage.
2	I don't think about music if possible. I should sleep well and have a nice shower. I like to have warm soup, and a banana. I don't eat that much. I do slow practice with musical intention, practice difficult parts a little bit and move on. Stretching helps.
3	I try not to be hungry. I keep my eyes on my energy level. I just warm up my fingers and don't practice heavily. I try to take it easy. I try difficult parts in <i>a tempo</i> . I don't drink coffee at least not before the concert.
4	I never drink coffee and tea. I only eat snacks and fruits, and don't eat too much, not a full meal. I wake up late and finish make up earlier. I do slow practice and save energy.
5	If a recital is at noon, I wake up early, eat, warm up a little bit, and go to the hall and play. If a recital is in the evening, I wake up without alarm, and just go to the hall and try the piano if the dress rehearsal is in the morning. I take a nap after the rehearsal, and practice a few important sections in a slow tempo, which is the slow motion of fast passages just under tempo, not too slow, if necessary, not more than 1 hour. If the program is technically demanding, I might try maybe once at the real tempo, but I think it is quite a risk to play at the real tempo on the day of the recital. I eat lightly.
6	I wake up late and [try to] be chill, listen to music, practice a little bit, walk around, and look for ways to calm down. I don't eat too much 2, 3 hours before the concert. As a vegetarian, handling blood sugar is super important. I like to eat bananas, and longer lasting meals such as oats and peanut butter. I never had a real routine. I try to lower my energy level because I am usually quite hyper. Make my mind at peace. Nap doesn't work for me. I try to do everything slower, while inside of me is going crazy. No matter how long I played the piece, I try to calm myself down. But controlling mind is easier than controlling physical. It is hard to deal with being physically frozen.
7	I don't have a routine. I practice the beginning part of each pieces and the fast parts in slower tempo. I practice through the score for memorization. I try to memorize with brain rather than fingers. I eat rice, and have to take medicine to calm my nerves.
8	I sleep 9 hours. If concert time is later in the day, I wake up late. I leave the concert day empty, and turn off my phone. I want to take everything slowly and try to be alone. I don't eat that much. I practice 1 hour maximum and play through sections.
9	If I have concert at noon, I practice until late at night the day before, and warm up 1, 2 hours on the day of the performance. If the recital is in the evening, I have to practice 6 hours [the day of] until the recital. I don't run through. I try to keep my fingers active and try to be in the playing mode until I go on the stage. I have to build up the momentum and burst it out physically and emotionally on the stage. Some people say that you don't practice too much when the concert is near, but I practice as much as possible to the day before the concert and to the moment of the concert.
10	I cancel everything, make the day free from other schedules. I don't practice that much, probably maximum 1 hour. I practice without too much energy. I don't want to be scared of random mistakes happening right before the recital. I don't like to delay the performance time, so I start the recital at exact time when it should be.
11	I regularly drink coffee, but after many trials and errors, I realized that only one sip of coffee can make me physically shaky. So, I avoid any tea or coffee on the day of the performance. No spicy food. I don't eat food that makes me feel physically bad. I have a very specific food plan which is extremely important. Everyone should know themselves well, what food is good or bad for them. Generally, I practice 2 to 3 hours in the earlier part of the day as a real practice session, and do whatever that can relax

	<p>myself, such as having hot shower, sometimes a little nap or even watching a television show. About 2 hours before the concert, I start getting ready for the performance, ironing shirts, preparing shoes, making myself look spotless, and arrive at the hall a little bit early about one and a half hours before. I try to avoid any kind of rush. If somebody is rushing me, I will get really angry.</p>
12	<p>In recent 3, 4 years, I start practicing 3 hours before the concert time on the day of the performance. I do 2 hours of practicing under tempo, without run-through and without full energy, and get ready for the concert. I should sleep well the day before. I used to look at the score until I walk onstage, but I realized that it creates more anxiety for me. I do think about general musical thoughts but I consciously try not to think about details of music or anything else, because what is played on the stage is governed by the subconscious part of my brain anyway. I try to be positive, and just tell myself, "Make some pretty sound!"</p> <p>I eat lightly and finish eating 1 hour before the performance.</p>
13	<p>I practice a lot on purpose to get exhausted when I get to the concert time. I feel like I can control better in this state, and it usually went well. I don't like to wander around regarding what to practice on the day. So I set what I will be practicing on the day of the performance and don't practice those spots from a few days before the concert. And practice those spots on the day. I don't eat too much, and not right before. I like to give myself a special treat as if a recital is a special day, such as having a longer shower, using cologne that I usually don't use, or using BB cream that I don't normally use, in order to boost my mood of the day. No coffee on the day.</p>
Piano Faculty	Responses
Cohen	<p>Everyone is different, and everyone has different approaches to the performances. Some pianists like Vladimir Feltsman don't play at all on the day of the performance, while some pianists, like Evgeny Kissin, practice hours. Some people prefer not to play too much because they don't want to waste emotional energy in the rehearsal. When you play with great emotional intention many times, the freshness and improvisatory approach might get lost by repetition. Each one has to find their method based on each one's personality and abilities.</p> <p>The schedule on the day of the performance depends on the repertoire, where I am, how I feel. If I am playing Chopin studies, I must go to the hall in the morning and spend at least 4 hours. For many years, I practiced for 3 to 4 hours, from 9 or 10 am to 2 or 3 pm on the performance day. Sometimes I could spend 5 to 6 hours. After that, I would go to the hotel and take a nap. There is nothing better than a two-hour sleep for your system to renew itself. Many times, I would wake up not feeling like playing a concert. A hot shower is fantastic for relaxing muscles and feeling more flexible. I want to make my body, hands, and fingers warm enough. Depending on the season, I wear gloves not to expose myself to the cold at all. Depending on the temperature of the green room, I ask for an electric heater to keep my hands warm. If there is no piano for me to warm up, I prefer to arrive in the hall just a few minutes before I have to go on the stage so that I can keep warm. I 'learned' all this through my experience, i.e., what would be the best physical conditions for me to play. This routine doesn't apply to everyone.</p> <p>On the day of the performance, I really 'practice.' I work. Anybody's playing is the result of their practicing. It is vital to administrate well the practicing time. I must already know where the most challenging passages are and the correct strategies to deal with those issues. I go through the program to check that everything goes according to plans. Sometimes, even on the day of the performance, I have to concentrate more on some passages, which pose more problems than others. It is fundamental to be aware of where real 'dangers' are. You can only find that through experiences, your own mistakes. Sometimes, it works as if you are running a marathon and place 'flags' in your brain to help you with the awareness of the terrain. Where to</p>

	<p>make an effort and where to relax. All this because this might be a 40 kilometers long journey.</p> <p>My practicing begins at a slow tempo, teaching finger's joints to move in a more articulated way, gradually adding speed, and acknowledging that the finger's joints should articulate less when reaching a fast pace. Practicing on the day of the performance should summarize the entire learning process. It is like a miniature of your practice model, reminding yourself how the system of your body should work, from slow tempos to fast tempos.</p> <p>I prefer to stay in hotels within walking distance of the performance venues, even if the hotel is not the best ever. I don't fancy being in a car on the day of the concert.</p>
Haguenauer	<p>I don't have a routine. Having some sleep is very good. I like to do physical exercise every day, and I like to do it also on the day of the performance. It is stretching and yoga-like exercises. Headstands are really good. It is good for the body and soul. I also enjoying reading some novels on the day of the concert. It doesn't have to be related to music.</p> <p>I tend to do too much, so I try not to practice too much on the day of the performance. It's too late to practice a lot on the day. Play slowly, one hand at a time for particular passages that I am worried about.</p>
Naoumoff	<p>I take a big nap, at least 2 hours, on the day of the concert, even though I hate naps. S. Richter told me that he practices 2-3 hours close to the concert. He does 'factual practice' where you play with no mood, nor exaggeration. Just practice the facts of the notes. Open the score, play it factually, not very musically, as if sight-reading, while mentally observing your playing. When you do this, your sense and awareness of listening is heightened. I do follow Richter's approach to practice close to the concert. But I do this 'factual practice' a day or two days maximum before the concert. I test my shoes and how comfortable the outfit is. An hour before the concert, I bring the score with me, read it like a book, and check what to think at certain places.</p>
Krieger	<p>I can't fall into any kind of routine that remains the same. A routine has to have flexibility and adaptability according to the changes of our own body and mind. Our body and mind change constantly over time. So be honest with yourself and know yourself.</p> <p>If I have dress rehearsal in the morning, I play 2 hours in the dress rehearsal and go back to the hotel, check the inventories [of what to do in the music], and rest until the evening concert. I always play my best when I have enough time to rest my muscles. I need to feel fresh.</p>
Watts	<p>I would plan my day separate from music making so that there is not a lot of stuff. Having another schedule on the day of the performance is not a good idea, not even a good practice. You are going to be tired when you have to perform. You should be different on the day of the performance. The performance day is special. Ideally, I would play every note of the program on the day of the performance but I wouldn't give 100% energy before the concert. I want to get close, and see how it feels and how it will be in the real performance, but I don't want to wear and exhaust myself down physically and emotionally.</p> <p>Saving energy before the concert is a good idea but I don't agree with saving energy at the beginning part of the concert. For example, some people said that you have to save energy in the first movement of Brahms 2nd piano concerto, but this idea of holding back in the performance is a little anathema for me. You don't hold back in the performance. If you realized that you get really tired after playing it from the beginning to the end, do that more often before you have to go on the stage.</p>

[After dress rehearsal in the morning,] I go back to the hotel, eat something, and then lie down. I like to take a nap in the afternoon if it's an evening concert. When you take a nap, try not to run through music in your head. Naptime is not for music. It helps you get control of your thinking. You have to use the force of concentration and will later in the concert. If the concert is at 11am, I would wake up at 5am. I want to be awake and don't want to be rushed. And get up early enough so I'm relaxed. Usually, I have an electronic keyboard of some kind in the room. I warm up a little there, go to the hall, and warm up on the piano in the dressing room.

You have to find out how the food thing works for you. You have to be careful if you are a performer. You cannot become too locked or overly attached into the rituals, because things change, things happen. Sometimes you have to travel hours and arrive at the concert venue a few hours before the concert, which makes taking a nap impossible. You cannot say that I cannot play the recital because I didn't take a nap. For me, if I haven't gone through every note of the program on the day of the concert, I'm uncomfortable. I just want to check the memory. I don't have to play up to speed necessarily. Some yes, some no. This is the kind of thing that you have to find out what, if anything, you can do to make yourself psychologically more comfortable. I don't believe in a heavy-duty practicing and especially over-repetition of a difficult passage. It's too late and it will only make you more scared. It should've been fixed last week, but anyway, it is not the end of the world. Even though it goes not so good, you will live.

### Appendix B.3.2. Strategies in the Backstage

Piano Majors	Response
1	I try to talk to people about something else than music, such as food, in order to be mentally engaged, active and alive, and I feel less nervous.
2	I put hand cream if my hands are dry. I stand and walk around. I never sit down. I bring my score but I actually never look at it. I try to be positive, and tell myself “Just show what you prepared, not more than that,” and “Just do it!”
3	I try to empty my mind, and I tell myself that it will happen anyway, so just accept it. I do some stretching.
4	I drink water and do very slow stretching. I also do 4-7-8 breathing by Andrew Weil, which is helpful for lowering the heartrate.
5	I eat s banana. I just try to calm down and clear my thoughts. If I have enough time, I may choose to read the score and go through the markings.
6	I try to breathe calmly. I don’t want to have people coming to the backstage before I play.
7	I do some light exercises such as stretching, shaking my wrists, and light jumping. I like to drop my arms down. I also drink water.
8	I talk to people and try to laugh. I constantly move or walk around, and try not to think about music.
9	I massage my hands. I tell myself that “It’s okay. One hour will pass really quickly. Don’t trip.”
10	I pray a little bit that I can keep going if a disaster happens. I use hand warmers. I walk around quickly to keep my energy [alive]. I do some stretching if I remember to do it, and “Just go!” I don’t want to give myself time to think.
11	What I actually need is to be comforted by conversations with others. I don’t want to keep working and get tired. A little bit of talking makes me calm before the concert. I pace around, breathe, and do light stretching. I cannot stay still. I have to walk around, use the bathroom, keep myself warm and talk to myself. I also have to have the score with me in case I want to check something.
12	I use the bathroom, wear my jacket to keep my body warm, use hand warmers, and avoid talking.
13	I keep standing, breathe calmly, and stretch thoroughly. I drink lots of water.
Piano Faculty	Response
Cohen	<p>I like to feel my hand and fingers warm enough. Depending on the weather, I protect myself from the cold. I always try to know the temperature of the green room in advance so that I can ask for an electric heater. To have a piano to warm up for some 30 minutes can be of great help too. I am ready when I feel the sensation of my fingers being a bit swollen. It seems that thick fingers also help to produce a rounder sound. In short, warming up is a must for any professional that depends on physical strength and accuracy.</p> <p>I prefer to be alone in the green room. If there is piano, I will warm up my fingers, for example, with F Major section in Rachmaninoff-Paganini Rhapsody, Moszkowski studies, Chopin Study Op.10 No.2, or some octave exercises. That’s the one reason why I ended up playing many times the F major Moszkowski study as an encore because I often warmed up my right hand with it. Sometimes it helps to do some physical stretching for flexibility of the body.</p> <p>During a hectic concert season, I would often find myself warming up in the green room with a different concerto or piece than the one I had to play on that evening. For instance, before the concert with Beethoven Concerto No.4, I was warming up with the Brahms Concerto No.1, which I must play two days later. Or, during five performances in a row of Mendelssohn Concerto No.1, I used the time in the green room to learn a contemporary piece that I had to play later in the season.</p>

Haguenauer	I talk to myself: "It will be only a bad hour and half to spend, after that, it will be over and life goes on."
Krieger	(Missing response)
Naoumoff	I talk to people backstage, technicians, and staff. There is no need to isolate myself before the concert.
Watts	I don't like to talk to people. I avoid that. I don't like banter or to be causal. I can do that an hour or even a half hour before, but not 5 to 10 minutes before the concert. I do think about breathing. When I was younger and healthier I did some deep knee bends. When I was in my twenties and thirties, I did yoga like one to two hours before the concert.

### Appendix B.3.3. The Origin of the Anxiety and Strategies to Deal with It

Piano Majors	Response
1	<p>First of all, obviously, nerves have lots to do with how much you are prepared. But if I assume that I am well prepared, the rest of the nerves come from thinking about how others value me. When you think about how long and how hard you worked on these pieces, you might get more pressure from them, because your expectation is heightened by long and hard practices.</p> <p>I remember one phrase that I like to remind myself of: “You should treat yourself as a student when you are practicing, but you should treat yourself as a maestro on the stage, you should feel like you are the king of the world,” which is very good way to deal with nerves.</p>
2	I get nervous from the mistakes in practicing right before the concert. Then, I try to think simple, and try not to look at the audience. When I bow, I look at the middle of the air in the hall, not the faces of the audience.
3	Excitement can cause nerves. We eventually want to enjoy our music and share it with other people. If I consider the nerves as excitement, it is easier to embrace it. Another source of nerves is the pressure from the fact that we are presenting ourselves to be judged by others. The occasion matters for nerves; for example, university recital and competition outside of the school give different nerves.
4	I don't get nervous because of the fear of playing badly. I think that part of the nerves comes from excitement, like when you are riding rollercoasters. For me, the desire to show everything I prepared and the greed to not disappoint myself are big sources of nerves. The pressure that I should play as I was told by my teacher also makes me nervous.
5	I think the nerves are inevitable, so I try to live with it. I think the nerves come from the uncertainty of the piece. If you know the piece well, nerves will decrease. The more things to pay attention in music during the performance, in other words, the more work that I put on each bar of music, the less nerves that I will get on the stage. For this, score analysis and mental practice is very helpful because it activates the brain to know the piece better and doesn't let fingers go without thinking. When you don't know what to say, when your fingers are moving without thinking, it is easier to encounter nerves. In my opinion, having performance anxiety is not all bad, because you can use it for the emotion.
6	<p>I get nervous a lot when there is an emotional conflict with the piece or the people in the audience. When I have my teacher in the audience who I respect but didn't agree with on the ideas in certain pieces, I get nervous. Especially when I play a piece which is very personal to me and there's someone in the audience who has a strong emotional connection to that piece as well. Or I get super nervous when my parents are in the audience. Or when you [think there might be an] audience who might not accept my playing.</p> <p>I have to know everything about the piece. I have to put meaning on every part of the music. If there are some spots which I don't know well or I didn't input any meanings, that gives me nerves. I used to not know this before, and I [would] just go and play. I realized that even when you are nervous, you can handle the performance if you know every corner of the piece and what you want to say clearly. Even though you stumble a little bit, you can move on.</p>
7	I get nervous when I am not ready but want to play well. I keep moving and stretch arms. I eat chocolate.
8	I think nerves come from the judgement of others and disappointment in myself, coming from high expectation. I try to push these things away by telling myself that “I am playing for my students, I can inspire someone.”

9	<p>Nerves come from the fear of stopping in the middle of the performance, the fear from the mistakes from the past, which I didn't solve yet. I get nervous when my ideas about the pieces are still in the experimental state and not clearly settled down.</p> <p>When I get nervous or distracted, I try to listen to music in my head, and connect my hands to my ears. I threaten myself that I better play well, otherwise I will be punished by my teacher later. I try not to show physically that I am nervous to the audience. Sometimes I use visible gestures to hide my nervousness. I realized that it interrupts the audience's engagement when the performer's nervousness is shown to the audience.</p>
10	<p>I think the nerves comes from the fear that you have to show something of your own to other people. It is like public speaking. Most people are not used to public speaking. Nobody wants to be judged. There is pressure of upholding the image of you as a pianist. It is built up by obviously everything around you: yourself, your teacher, peers, and family. And of course, if you are feeling unprepared [of the recital program, you get nervous].</p> <p>You have to get used to the nerves. Making more decisions on the spot right before the concert is dangerous, so try to avoid it. When I feel shaky hands or legs, I try to focus on my teeth. Usually it gets better in the second half of the performance because I was kind of over the shock [of the anxiety].</p>
11	<p>I think the nerves is coming from perfectionism and the fear of failure in front of the people that I consider the most important, the ones that know the pieces and know how I play.</p> <p>I feel like the nerves before the performance seems to get worse and worse as I get older. I don't think I have a method to deal with anxiety. There are two kinds of anxiety: mental and physical. For the mental one, I just have to tell myself, "Just go out and do it." I remind myself that if I have sanity, I know that I have no choice here but to play, and I cannot run away from the stage now after spending months on preparing the concert. I have to shut my brain off.</p> <p>The slightest physical discomfort makes me nervous as well. For the physical anxiety, if I am playing demanding pieces that make me sweat, I prepare a handkerchief and cold water so that I can use them between the pieces.</p>
12	<p>Nerves comes from these things: thinking about others' view, thinking about being judged, desire to look and be accepted well, greed, perfectionism, trying to control everything. When nerves enter, I try to focus on my music, not on details, but on the big picture.</p>
13	<p>Nerves is very unexpectable. I think it comes from the desire to look good, and when I try to play better than I can, when I look for the miracles, which would bring more frustration. So, I tell myself, "What is not working now wouldn't work on the stage anyway, so just accept it."</p>
Piano Faculty	Response
Cohen	<p>In our civilization, the word 'mistake' may bring attached to it a moral connotation. So, it is not difficult to understand why musicians may unconsciously equate a wrong note or a mistake during a performance as a 'moral mistake.'</p> <p>One classic example is the perception that parents or teachers are 'seen' as judges. Consequently, their presence becomes connected with the existing anxiety and can cause emotional instability during the performance, generating possible 'mistakes.' Again, the word 'awareness' is the only solution so, become friends with your ghosts is the best way to make them disappear.</p>

	<p>It becomes evident that a fantastic pianist has to be a wonderful person, and a bad musician, a terrible person, does not represent reality. Once this truth is understood, the original problem inevitably will diminish.</p> <p>Being anxious can have a positive influence on performance. The love for music added to the desire to play well and succeed can be of great importance for the success of the performance. Added to the production of adrenaline by the body, this approach generates a win-win situation. Usually, one doesn't acquire that in a practice room.</p>
Haguenaer	<p>I think nerves come from losing concentration. I had less trouble with memorization, so memory slip has not been my concern. Improvisatory self helps me to be more free from the fear of memory slips, also with the help of perfect pitch. Being able to improvise on the keys around more or less the right pitches can help me better to deal with the fear of memory slips.</p> <p>Nerves are unpredictable. Sometimes I feel fine before the concert, and suddenly feel panic on the stage, and vice versa. This is something I don't know how to address. Playing other pieces that are not on the program or improvising can alleviate some pressure off.</p>
Krieger	<p>There can be many different kinds of nerves. It could come from the guilt of not preparing enough, or from the orchestra and conductor in the case of concerto performance. Egotistic reasons and self-centeredness bring lots of unnecessary stress and nerves. "What will other people think of me? Will they invite me back?" These thoughts are not necessary, because it is not about myself, it is about the music and the message. We tend to make things much bigger than they actually are.</p> <p>For nerves, I pray. I try to remind myself of a bigger perspective as a musician: This is not about me. It is service to the world, and I am just a vessel. It helps to remove self-centeredness and to not take it too seriously. But at the same time, like I. Stern said, you have to be a little bit arrogant in order to stand on the stage.</p>
Naoumoff	<p>I don't feel nervous before the concert. I feel the excitement. I rather have off-stage fright with administrative things, such as filling out papers.</p>
Watts	<p>I think the nerves come from psychological insecurity. "I am not really good enough." "Will my ego be perceived, received, accepted, or not accepted?" If you are prepared, the more you think about only the music, the less nervous you will be.</p> <p>For the nerves, you really have to remember to breathe. If you really pay attention to your body when you are nervous, you will realize that your breath is very shallow. When your body is in shock or in tension, it doesn't breathe deep enough.</p> <p>Some nerves are good, and some are bad. It's, on the one level, excitement. When it increases to another level, it says psychological. And everybody is a little different about that. It is useful to remind yourself that nobody is going to die if you play badly. You have to remember that you are a musician first, pianist second. So, your job, obligation is first to the composer. And second to you and the piano. If you play the piece, the composers will not be so angry with you about the wrong notes. You have to put your mind on making music and being true. If you have the blessing of having concerts, that experience helps.</p>

#### Appendix B.4. Challenges on the Stage and Strategies for Those Challenges

Piano Majors	Response
1	Memorization and keeping my focus are challenging. I think losing concentration comes from not knowing the music enough and the lack of engagement with the music. So, I try to learn and know the pieces better, and engage myself more when I perform.
2	It is hard to play without too much thought, and it is challenging when I start dwelling on mistakes that I made on the stage. I have to expect these distractions from myself and from the audience.
3	When I first started playing in front of people, like more than 10 years ago, my body was physically shaking on the stage. That's not the problem now. Maintaining concentration on the stage is challenging, especially if the preparation was not optimal. Because of nerves, perception, especially of the tempo, is different on the stage than in the practice room. It is easy to play much faster than what I used to play in the practice room, because my sense feels the tempo slower. Adjusting to that perception on the stage is difficult. Playing in front of people before the recital can help. If I feel I am playing quite slow on the stage compared to the sense of tempo in the run-through in the practice room, it is good. So, I aim for this kind of sensation on the stage in terms of good tempo.
4	<p>It is difficult to deal with a bad piano in the hall, which doesn't allow me to express what I want. It is challenging and frustrating when the situation, bad piano or bad hall, is blocking me from focusing on expression. I just try to do my best.</p> <p>Feeling too comfortable on the stage is dangerous, because I could be easily distracted. In my recent concert, I felt very comfortable on the stage and had a confidence that I can do anything. Then, I had too many random thoughts on the stage, and my performance was not very engaged.</p> <p>It gives me lots of stress when I thought I expressed well, and the audience seems to not notice my expression. I try to monitor myself with an objective ear by recording, playing in different places, and asking people to listen.</p>
5	<p>Possibility of having a memory slip is hard to deal with. Even though it happens, I try to keep playing and never stop.</p> <p>I try not to let the audience to notice my mistakes. The distractions from the audience, such as noises that they make, are challenging. When this happens, I just try to concentrate more. It is sometimes useful to practice piano in a distracting setting. I had a piano in the living room where family members are watching TV, and I had to practice there. I also try to practice a few short difficult passages while watching completely musically unrelated YouTube videos, to simulate a distracting situation and test my concentration.</p>
6	<p>My short attention span is challenging to deal with. It is hard for me to keep stamina and focus when you play long program. To deal with this, I try to focus on a small number of things at the moment, such as just focusing on the melody, instead of trying to concentrate on everything.</p> <p>Recently, sweaty hands became my new challenge. I usually keep my fingers close to the keys, but I had to do it more not to lose control on the keys when my hands get sweaty, and it changes my touches and tones. It is literally a physical problem and it is very hard to deal with.</p> <p>Another example is when I am using hard contacts and start crying [tearing up] because something is in my eyes. When these kinds of physical problems happen, I cannot think about anything else. Even though mental power is really strong, facing</p>

	physical obstacles are not easy things to solve, especially during the performance. But on the stage, I cannot stop so I try to keep going whatever happens.
7	It is really hard to start and play the first note. The fear and unwillingness to play the first note is a huge burden for me. That's why I try to choose pieces that have easy openings, usually with a loud dynamic.
8	It is challenging to keep focus and not to speed up. Distractions from the audience are also a challenge. To overcome these, I try to hum or sing in my head much louder, and close my eyes. I try to think of the map of the music.
9	I feel hot and sweaty under the spotlight, which is difficult to deal with. I don't wear high-heeled shoes, because it makes a sound when my legs are shaking.  Walking on the stage towards the piano for the first piece, bowing to the audience and starting the very first note is challenging for me.
10	Memorization and keeping the focus in the second half of the recital are challenging. At the moment of playing, I think it is just sheer mental power. The way to overcome these challenges is to work the pieces out in details as much as possible. The more detailed work I do, the less chance to lose the concentration because there will be tons of information that I can follow in each bar, every second.
11	The voice in my head talking fear into my ear is challenging. "What if I forget everything? What if I stop and can't get back on? What if I stop?" Some people said that they feel much better once they start playing, even though the waiting before the performance was giving lots of nerves to them. But I have to be on my toes until the very end. I have to make sure that I am really focused and that focus includes me not freaking out during the piece. I found that, because it is such a fragile state that you are in when you are performing, it can all fall apart...if I psyched myself out in that moment, no matter how many times I've played correctly and well. If I don't freak out in that moment, a little slip might have not happened. So, I constantly talk to myself "Don't freak out, don't think about it, and just do it." It doesn't matter how you feel, you have to focus. You can't let this feeling stop you from focusing. That's the worst.
12	Trying to listen to my sound with my ears helps me to calm my nerves. Trying to stay present helps concentration. It is challenging when some random thoughts arise during the performance. Sometimes it worries me when I suddenly play well.  Memory slip on the stage is still scary, and the distraction from the audience dropping things or coughing.  What kind of shoe I wear is very important. I wear flat shoes, never heels which make me feel like my feet are floating in the air. It is quite distracting when the shoes step on the dress. So, I always arrange my dress between pieces. The shoe shouldn't have decoration in the front, because it interrupts the use of the pedal.
13	It is hard to deal with the desire of giving up, "Ah, I just want to stop playing now." Constant and endless uncertainty of the performance is another huge burden for me. But I just have to bear it. There is no other solution.
Piano Faculty	Response
Cohen	The big challenge of a public performance is that we cannot predict 100% how it will turn out. We are not machines, and unexpected 'things' might happen. One can say so much even with grammar errors. Missed notes also can be the carrier of beautiful, emotional messages. We can always say yes or no to our fantasies. Awareness of musical elements like harmonic and melodic progressions can be pretty helpful on many occasions.  Distraction from the audience also can keep you away from your music. The great paradox for a professional musician is that the more you detach yourself from the public, the more emotion you will give to them.

	<p>When you are on stage, you may distance yourself from the “normality” of your senses because you are in a different kind of emotional context. On the stage, it seems that you are in an extra ‘dimension.’</p> <p>Again, the remedy for all of these distractions and nervousness is to be close to the music: sing ‘internally’ what you are playing, feel the modulations, the melodic lines, hold the music ‘hands’ tight until the end. On top, try to be generous to yourself and don’t forget that music is a language where you say whatever you want and the public listens to whatever they wish. So, don’t worry with what you say. You are safe! I believe that all these ideas are what people call ‘concentration.’</p>
Haguenauer	<p>Playing on a difficult piano, or in bad acoustics can be challenging. (Staying alive on the stage is challenging.) People’s coughing can be disturbing. This kind of thing that you will never be able to expect before. But you have to be ready for this kind of thing, by playing in front of others many times. Having a chance to run through the whole program with performance pressure more than once before the concert is very beneficial.</p>
Krieger	<p>Adjusting to the piano and the acoustics of the hall is challenging. It is important to have the concept of “giving.” We are giving the gifts out to the audience. Even though we trip over a little bit, you have to go on and deliver the gifts.</p> <p>Distractions from the audience can be disturbing.</p>
Naoumoff	<p>When I play the same program multiple times during the tour, the first one is always the worst. It gets better as you play more, and usually the last one tends to be the best one, because I know that this will be the last concert of the program. It would be ideal if you can play every single recital as if it is the last one, but it is practically hard to do that. I realized that the more you play the piece, [and] the more you mess up sections in the concert, the less chance to mess up things in the future concerts, because you pay extra attention to those parts and you gain more confidence by having more experience with the program.</p>
Watts	<p>During the performance, distraction is the biggest challenge. Distraction in totality. You can be distracted by coughs from the audience. Or, you can be distracted by even good stuff.</p> <p>It is hard to “be present now.” This is one of the biggest challenges. You should be able to recall how you played everything when you have been focused every moment, whereas it gets a little bit fuzzy to remember how you played when your focus wasn’t present.</p> <p>Another important thing in performance is that you have to put yourself in a correct state of listening when it’s time for the performance. During the performance, don’t make judgements about your playing. Just listen carefully and recognize whether it’s getting too fast or too slow, too loud or too soft, so that you can have a modicum of control, but don’t allow what you might allow in the practice room. Your critical hearing needs to be present in the performance, but it’s a different kind of hearing and you need to make sure of that. You have to listen carefully, but shouldn’t react to the mistakes on the stage, for example, by making bad faces when it didn’t go as you wanted.</p>

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