

Recording of a Piano and Violin Duo: A Case Study to Explore Challenges and Opportunities of Recording During COVID-19 Pandemic

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Abstract

During crises, performing arts are usually the first discarded activities. This attitude towards performing arts has not changed much during the COVID-19 pandemic. Since the first instance was recorded in December 2019, COVID-19 has had a disastrous influence on the arts industry, causing cancellations and closures at thousands of arts organizations worldwide. However, the practice and recording of performing arts had to adapt to the current circumstances. The increased accessibility of recording equipment made the case slightly different for session musicians and recording artists. For part of my master's final project, I recorded a piano and violin duo at Istanbul Technical University (Istanbul, Turkey) – Center for Advanced for Music (MIAM) recording studio. The pieces were three Hungarian Dances from Brahms and Monti. I analyzed pre-production (e.g., selection of pieces, studio personnel, planned layout), production (recording process), and post-production (delivery) stages to identify difficulties encountered during each stage. I analyzed the process of each stage by comparing and contrasting challenges faced in the aforementioned stages during pre-pandemic and pandemic periods. Based on the analysis, the results identified two main difficulties, distinguished as structural and social challenges. I discuss the results and experiences gained during this project which was done during the pandemic, and I attempt to suggest how these gained experiences can be transferred to the application from sound recording and performance points of view to help artists tackle the COVID-19-related challenges.

Keywords: Impact of COVID-19 on Recording Arts, Recording Journal, Sound Recording Practices

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Introduction

In this research, I recorded a piano and violin duo. The present research consists of all the steps executed to realize a recording. Being able to write down all the technical and practical features of making a record, I believe, is essential to becoming a successful music professional. The record itself can speak for many qualities that it holds; moreover, writing a detailed document about "How the record was done from a technical and practical point of view?" is a good sign that the record is not only done because of luck and similar timbre, or sound stage can be recreated successfully in the future by the recording artist. The first purpose of the research is to complete an entire production session from tracking to delivery and write about technical aspects of the recording process.

Another critical issue was the context when the recording was taking place. The world has been tackling the novel coronavirus (COVID-19), which appeared first in China in December 2019. The virus has rapidly become a growing concern, and the World Health Organization declared a global pandemic in March 2020 (Cucinotta & Vanelli, 2020, p. 1). Since the first instance was recorded in March 2020, COVID-19 has had a disastrous influence on the arts industry of Turkey, causing cancellations and closures at thousands of arts organizations throughout the country and leaving a significant portion of the country's artists unemployed (Eser, Sunam, Akın, Bıçakçı, & Kaplan, 2022, p. 1). Working artists and entertainers are particularly susceptible during natural disasters due to the essence of the arts and culture industry. This situation is not specific to Turkey; as of May 2020, a survey showed two-thirds of artists in the US have trouble sourcing materials (Cohen, 2022). The second purpose of the research is to overview the context of the COVID-19 pandemic due to its impact on the recording process.

Impact of COVID-19 on Recording Arts

The first affected industry is usually the arts and culture in times of trouble (Brooks & Patel, 2022, p. 4). This situation remained unchanged during the COVID-19 pandemic. Consequently, most artists have likely lost part or all of their income, not to mention the institutions they rely on for a living. There is no apparent road back to pre-pandemic employment levels. Artists are facing a double punch of unemployment. Workers in the arts and culture are more likely to be jobless than workers in other occupations. This situation indicates that artists are more likely than others to have lost their primary source of income, even if it was not connected to art. Many artists depend on part-time jobs to sustain their artistic production, and these part-time jobs were also highly affected during the pandemic. Unemployment is especially prevalent among performing artists, with 27.4 percent reporting being jobless, over double the proportion of non-performing artists (14.5 percent) in the US. The disparity is most likely attributable to the fact that performing artists are far more likely to be self-employed. However, it's also possible that working from home is more difficult for performing artists. Still, designers, authors, and even visual artists may be able to continue producing, publishing, or selling their works from afar. This imbalance is, if anything, an underestimation of the pandemic's severity for the performing artists (Marrone, Resetar, & Schwam, 2020). This difference shows that performing artists require more support as performing arts is one of the promptly discarded activities during crises.

Inevitably, recording arts and practices were also affected during the pandemic (Priscila, 2022, p. 6). The shift from large-format recording studios to home or smaller project studios became apparent (Denk, Burmester, Kandziora, & Clement, 2022, p. 1; Howard, Bennett,

Green, Guerra, Sousa, & Sofija, 2021, p. 418). The COVID-19 pandemic is not necessarily a disruption of the music school curriculum but an essential and long-overdue opportunity to redefine how sound recording and music production are studied in a modern environment that prioritizes flexibility. Getting great sound in an ideal recording setup is sensible, but realizing that access to a wide range of state-of-the-art equipment might not exist in industry conditions. Instead, figuring out how to get the most out of a less-than-ideal recording environment is more important to becoming a more versatile recording artist.

Another productive result of the pandemic was the emphasis on remote collaboration (Onderdijk, Acar, & Van Dyck, 2021, p. 1). Recording artists used to have a slightly isolated role in music productions. They were responsible for a smooth tracking process and achieving timbral objectives. But this attitude has somewhat transformed into a more collaborative approach during and after the pandemic. The recording artists started to provide the know-how to musicians stuck at home and teach them how to record their music with limited resources. This challenge created a significant shift in the role of the recording artist in this new collaborative ground (Fram, Goudarzi, Terasawa, & Berger, 2021, p.1).

As the COVID-19 sweeps the world, it is vital that we grasp the socioeconomic implications of the virus if we are to limit or stop its spread (Croucher, Nguyen, & Rahmani, 2020, p. 9). Although the COVID-19 pandemic has interrupted the lives of billions of people worldwide and caused immeasurable damage, it may also act as a catalyst to draw attention to the challenges of the society's most vulnerable citizens (Chen, Zhang, & Liu, 2020, p. 4).

Pre-Production

One of the most crucial aspects of recording music is the principal localization (P. Snapper, personal communication, December 7, 2020). I aimed to create the overall picture from one perspective (King, 2016, p. 4). I used the AB technique for principal localization and capturing the piano. Besides being an extraordinary performance, the reference track we chose had an outstanding timbral balance between the instruments and the room, excellent stereo width, and great separation between the instruments. I had to do some trial and error for such microphone placement, and I realized that if I used an omnidirectional pair and placed it between the performers, there would be less interference among direct signals of each instrument; meanwhile, I would be able to capture violin with minimized bleed when a Figure-8 microphone is placed accordingly as supporting microphones.



Figure 1: The sound stage.

Production

Since I prepared the setup a day before, the session went smoothly. We recorded about 90 minutes of material in total. We first recorded Hungarian Dance No. 1, then Csárdás, and lastly, Hungarian Dance No. 5. We listened to all the takes together and completed the editing on the tracking day. The only problem I encountered was a computer crash. It might be related to CPU overload due to tracking at 96 kHz. We lost half of a take of Csárdás, but the performers were happy to perform again.

Post-Production

The editing process helps us achieve an ideal version of a performance that leads to a compiled and best representation of the completed takes (Toft, 2019, p. 149). Since the performers often performed together with the same repertoire, they had a good grasp of the material and aimed to perform one full take for each piece as expected. However, we had to do some edits to cover some performance issues. There are four edit points in total: two for Hungarian Dance No. 1 and two for Csárdás. We decided on these edits with the performers once we were happy with the main take. There were no edits for Hungarian Dance No. 5; we took one complete take without editing. I have kept all the files in one session. All the edit points were realized on zero-crossings, and both fade-ins and fade-outs were done with equal power slope.

Mixing is defined as the process of balancing, treating, and combining multitrack material into a multichannel format. Mixing is a way of expressing emotions, creative ideas, and performance through sound (Izhaki, 2007, pp. 4-5). Due to pandemic curfews, I had limited access to the studio and preferred mixing pieces at my home studio. I relied on the

loudspeakers for the general balance; however, I used headphones for spot-checks and listening to tails of sounds. I also listened to the final mix versions at the MÍAM studio.

Classical mastering mainly involves level-matching the tracks and adjusting pause times between pieces (King, 2016, p. 223). Mixes were exported with adjusted fade-ins and fade-outs as I already had a clear idea about the track order and breaks between pieces. I measured the .BWF files of the exported mixes with loudness metering plugins. Although I aimed for a balanced material in terms of levels during mixing, the measurement showed me that I might still have to work on the pieces at the mastering stage. Csárdás was quieter than the rest and still had a high peak level. All the pieces had a similar loudness range, except Hungarian Dance No. 1, which was less dynamic. None of the mixes had problems with intersample/true peaks. After considering these issues, another aspect I wanted to address was the "blanketed" feeling of the compilation. I tried to address this issue during the mastering stage and treat each piece accordingly.

Conclusions

Overview of the Sound

A warm violin sound is desired for this project and captured well. The piano is a Steinway Grand D, which is too big for this space as it is meant for concert halls. The piano triggers the room a bit too much, and it causes some muddiness overall. The violin is coming from the left a tiny bit, but it is at an acceptable level. The violin is slightly closer compared to the piano in perspective. Still, in my opinion, it does not create a textural mismatch in this repertoire since the violin is more of a soloist instrument. Some reverberation could be added more; having said that, this might yield artificial results. According to my way of thinking, accepting the lack of reverberation in the room as a strength was a good idea. Nonetheless, the piano sounds a little less defined.

For Further Recording Practices

I would highly recommend creating a budget for the maintenance and tuning of the piano. Also, I would have placed the piano in the center of one of the shorter sides rather than the center of the room to have a more balanced bass response overall. This piano placement creates some piano buildup on the right side of the room and causes the piano to be more prominent in the right channel. The violin level might be a tad high in the main pair, so I would try further placing the violin and ensuring that the violinist is always centering the main pair. I could favor the piano on the main pair by having the main pair slightly facing the piano to have more clarity rather than perpendicular to the floor (R. King, personal communication, January 12, 2022). Another improvement could be made by using nose cones for the DPA 4006 main pair to capture a perfect omnidirectional response for enriching the high-frequency content. Lastly, recording at 96 kHz was to future proof the work; nevertheless, if it is aimed to be uploaded to a streaming service in the near future, the downsampling would probably cause shifts in the overall image. The same applies to the headroom. To have an intricate dynamic range, I kept the masters around -20 LUFS, but if uploaded to a streaming service, significant limiting might be applied to the record, which is not desired.

Overview of the Context

During crises, performing arts are usually the first discarded activities (Brooks & Patel, 2022, p. 4). This attitude towards performing arts has not changed much during the COVID-19 pandemic. Since the first instance was recorded in December 2019, the COVID-19 pandemic has had a disastrous influence on the arts industry, causing cancellations and closures at thousands of arts organizations worldwide (Eser et al., 2022, p. 1). However, the practice and recording of performing arts had to adapt to the current circumstances (Fram et al., 2021, p. 1; Howard et al., 2021, p. 418). In this project, I analyzed the pre-production, production, and post-production stages of making the record to identify difficulties encountered during each phase. I examined the process of each step by comparing and contrasting challenges faced in the stages mentioned above during pre-pandemic and pandemic periods. Based on the analysis, I identified two main difficulties, distinguished as structural and social challenges.

Structural challenges were related to non-interpersonal parts of the project. The first challenge was the number of allowed people in the studio by management. The number of people in each room was also decided to prevent the spread of viruses, which caused a limitation of the project's direction. I decided to solve this issue by internalizing a minimalistic mindset for the whole project. Tracking two instruments for classical repertoire in the main room was ideal for a well-captured live performance. I also avoided having studio personnel and tried keeping the performers as apart as possible on the planned recording layout.

Social challenges were related to interpersonal relations that existed in the project. The primary issue was the absence of face-to-face communication. This human touch brings many opportunities since bouncing ideas with musicians in the same room can be highly productive. Another downside was the lack of interactivity in finalizing the mixes and masters. Although the performers are not experts on these topics, I could not meet with them during the post-production process, and I could only send them final versions for their feedback which was not ideal from my standpoint.

These challenges emphasized the value of providing a ground for collaboration for artists (Bump, Friberg, & Harper, 2021, pp. 1-3; Cai, Fry, & Wagner, 2021, pp. 3691-3692). In times of crisis, states and their institutions might abandon the support for arts and culture. Art production might decline; however, it will not be halted because of no support from officials. We, as music professionals, are confronted that it is feasible to work on different platforms even under constraints with the help of the facilities provided by the university. If similar circumstances occur in the future, the universities should be able to sustain their help and protection for artists and assist the production of art. This project exemplifies how universities can accommodate artists from different backgrounds in challenging situations.

In this study, we, as performers and the recording artist, experienced that supporting arts and artists in various ways during difficult times is achievable. I initially hoped to reach this objective when starting this project, and I believe we managed to create presentable results for the future. Recorded music can be shared upon request via personal email.

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References

- Alvarez-Cueva, P. (2022). Music to Face the Lockdown: An Analysis of COVID-19 Music Narratives on Individual and Social Well-Being. *Social Inclusion*, 10(2), 6–18. doi:10.17645/si.v10i2.4894
- Brooks, S. K., & Patel, S. S. (2022). Challenges and Opportunities Experienced by Performing Artists during COVID-19 Lockdown: Scoping Review. *medRxiv*. doi:10.1101/2022.02.23.22271390
- Bump, J. B., Friberg, P., & Harper, D. R. (2021). International collaboration and COVID-19: what are we doing and where are we going? *British Medical Journal*, 372. doi:10.1136/bmj.n180
- Cai, X., Fry, C. V., & Wagner, C. S. (2021). International collaboration during the COVID-19 crisis: autumn 2020 developments. *Scientometrics*, 126(4), 3683–3692. doi:10.1007/s11192-021-03873-7
- Chen, J. A., Zhang, E., & Liu, C. H. (2020). Potential Impact of COVID-19-Related Racial Discrimination on the Health of Asian Americans. *American Journal of Public Health*, 110(11), 1624–1627. doi:10.2105/AJPH.2020.305858
- Cohen, R. (2022). COVID-19's impact on the arts. *Americans for the Arts*. <https://www.americansforthearts.org/node/103614>, date accessed 2022.06.08
- Croucher, S. M., Nguyen, T., & Rahmani, D. (2020). Prejudice Toward Asian Americans in the COVID-19 Pandemic: The Effects of Social Media Use in the United States. *Frontiers in Communication*, 5. doi:10.3389/fcomm.2020.00039
- Cucinotta, D., & Vanelli, M. (2020). WHO declares COVID-19 a pandemic. *Acta Biomed.*, 91(1), 157–160. doi:10.23750/abm.v91i1.9397
- Denk, J., Burmester, A., Kandziora, M., & Clement, M. (05 2022). The impact of COVID-19 on music consumption and music spending. *PLOS ONE*, 17(5), 1–21. doi:10.1371/journal.pone.0267640
- Eser, S., Sunam, A., Akin, A., Bıçakçı, H., & Kaplan, A. (2022). The impacts of processes of digitalization on the reception of contemporary art in Turkey during COVID-19. *Cultural Trends*, 1–18. doi:10.1080/09548963.2022.2035191
- Fram, N. R., Goudarzi, V., Terasawa, H., & Berger, J. (2021). Collaborating in Isolation: Assessing the Effects of the COVID-19 Pandemic on Patterns of Collaborative Behavior Among Working Musicians. *Frontiers in Psychology*, 12. doi:10.3389/fpsyg.2021.674246
- Howard, F., Bennett, A., Green, B., Guerra, P., Sousa, S., & Sofija, E. (2021). 'It's Turned Me from a Professional to a "Bedroom DJ" Once Again': COVID-19 and New Forms of Inequality for Young Music-Makers. *YOUNG*, 29(4), 417–432. doi:10.1177/1103308821998542

- Izhaki, R. (2007). *Mixing Audio: Concepts, Practices, and Tools*. New York: Routledge.
doi:10.4324/9780080556154
- King, R. (2016). *Recording Orchestra and Other Classical Music Ensembles*. New York: Routledge. doi:10.4324/9781315721040
- Marrone, J. V., Resetar, S. A., & Schwam, D. (2020). The Pandemic Is a Disaster for Artists. *Rand Corporation*. <https://www.rand.org/blog/2020/07/the-pandemic-is-a-disaster-for-artists.html>, date accessed 2022.06.08
- Onderdijk, K. E., Acar, F., & Van Dyck, E. (2021). Impact of lockdown measures on joint music making: Playing online and physically together. *Frontiers in Psychology*, 12. doi:10.3389/fpsyg.2021.642713
- Toft, R. (2019). *Recording Classical Music*. New York: Focal Press.
doi:10.4324/9781351213783

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