The Effects of Attentional Focus on Piano Performance as a Performance Anxiety Intervention – A Pilot Study

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Introduction

- Various studies report performance benefits when a performer directs their attention to the effects of their motor movements (having an **external focus of attention**) compared to directing their attention to the body movements needed to execute said motor movements (having an **internal focus of attention**) (Wulf, 2007; Wulf & Su, 2007; Chua et al., 2021).
- **Music performance anxiety** (**MPA**) is the feeling of persistent anxiety during a musical performance which manifests through a combination of affective and cognitive factors (Kenny, 2011). In competitive situations, MPA is especially heightened, resulting in an internal focus of attention and individuals **'choking under pressure'** (Baumeister, 1984). Choking can be defined as individuals performing at a lower standard than expected due to heightened anxiety under pressure (Mesgano & Hill, 2013). If severe, MPA can have a large impact on the wellbeing of musicians throughout their lives.
- Past literature has rarely combined research on attentional focus and performance anxiety in research, particularly MPA.

Aims

- To investigate whether an **external focus of attention lowers MPA levels during piano performances** by using both quantitative and qualitative methods.
- To propose and potentially implement a **new MPA intervention** in music education.

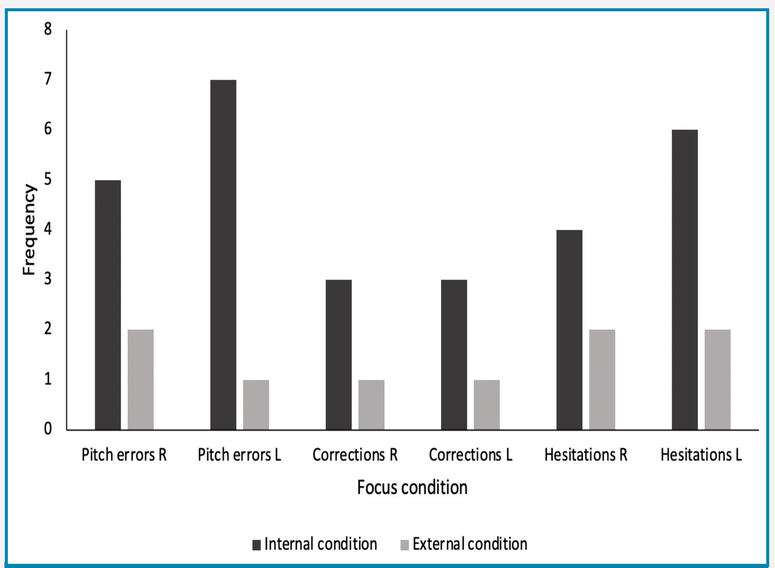

Figure 2. Number of pitch errors, corrections, and hesitations made in each focus condition (L = left hand; R = right hand).

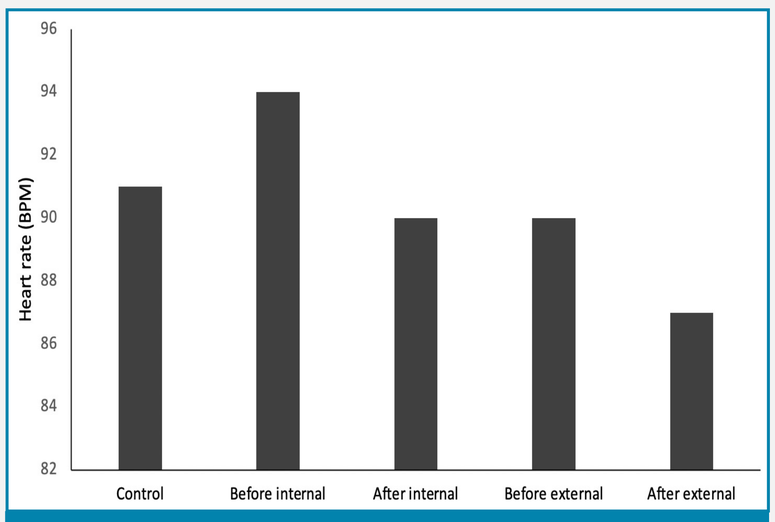

Figure 3. Heart rate of the participant throughout the study.

Methods

- 1 participant with the equivalent of Grade 8 ABRSM certification in piano has participated in the study so far. We anticipate to recruit 20+ participants in total.

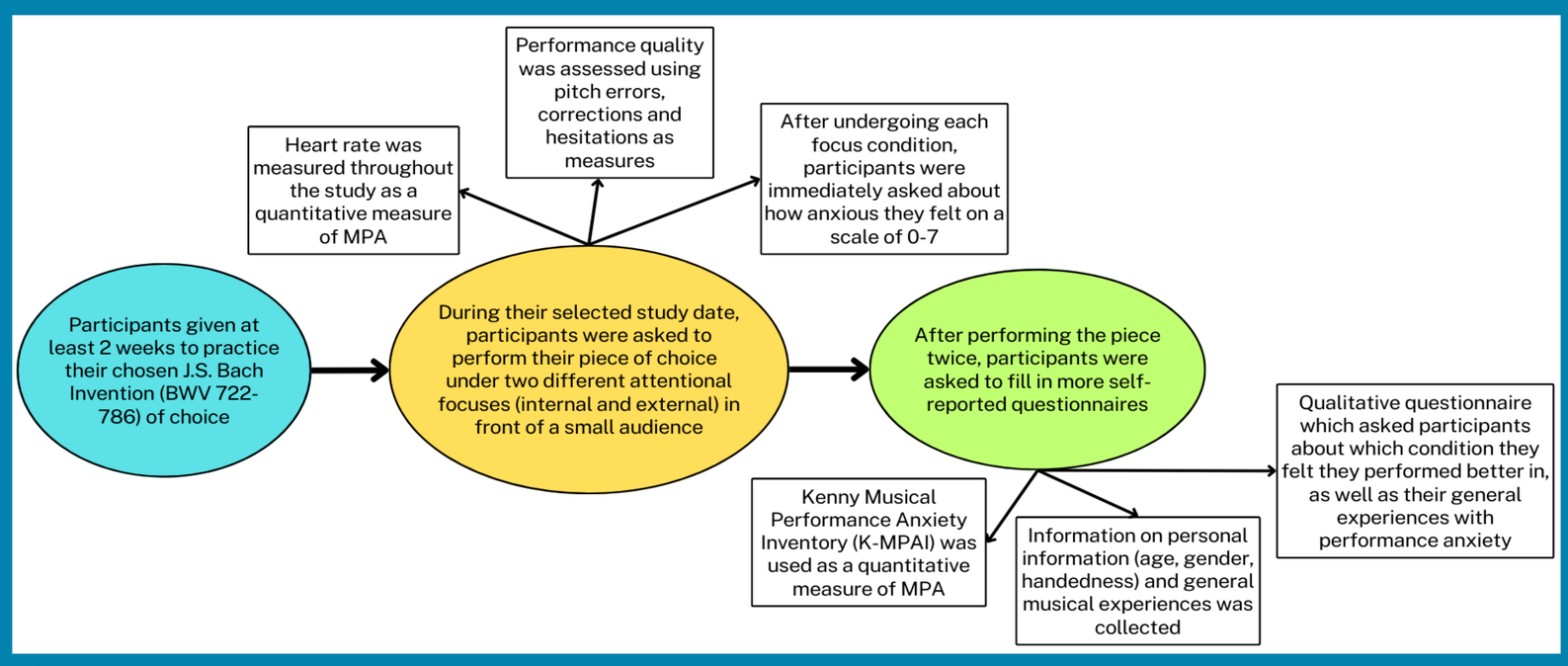

Figure 1. Diagram representing the procedure and the measures used in the study

Initial findings

- Statistical analysis is yet to be conducted given the limited sample size. However, there are general trends within the pre-existing raw data which supports that an external focus of attention lowers MPA levels.
- The number of **pitch errors, corrections, and hesitations** the participant made in each hand (i.e., measure of performance quality) was **lower in the external condition** compared to the internal condition as shown in Figure 2.
- A **higher starting BPM** was recorded **before playing in the internal condition** compared to the external condition as shown in Figure 3**.**
- Participant stated feeling more anxious after the internal condition than after the external condition.
- Raw data points towards an **internal focus of attention evoking a higher level of MPA.**

Reflections

- It is too early to draw a conclusion from this pilot study conducted. However, **the study demonstrates that there are grounds to support an external focus of attention as an effective MPA intervention.**
- Several factors ranging from choice of piece to when the study took place may have limited the sample size and hence, the robustness of the study itself. These limitations will be taken into consideration when we expand upon this study in the future.
- This study acts as a step towards providing a definitive intervention for MPA.

Acknowledgments

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