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MODULE 3 - BMPF7326D - Work-based learning project

Investigating the correlation between extraversion levels and music performance anxiety (MPA) in adult amateur and professional singers:
developing personalised coping strategies for effective MPA management in the singing studio

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Project proposal

a. Context

Research suggests personality traits can influence music performance anxiety (MPA) (Burin and Osório, 2017; Chatten, 2019; Smith and Rickard, 2004; Spahn et al., 2024). This study will investigate possible correlations between extraversion/introversion and MPA in adult amateur and professional solo singers. The American Psychological Association defines extraversion as “outward and social-directed concerns and behaviors” and introversion as “inward and self-directed concerns and behaviors”. A secondary aim is to identify possible coping strategies tied to extraversion levels (ELs) to help students manage MPA more effectively based on their personality traits. It will be conducted within my professional singing studio setting; I will have no prior acquaintance with the participants.

b. Justification

While there is literature on relationships between MPA in musicians and specific personality traits (Özdemir and Dalkıran, 2017) and literature on MPA in singers (Ryan and Andrews, 2009), research has never focused on personality traits *and* MPA in solo singers. Findings agree on a moderate negative correlation between extraversion and MPA (Thomas and Nettelbeck, 2013). I aim to explore whether and how this relationship applies specifically to adult soloist singers, a population not previously studied in this context.

c. Intended impact

If patterns between ELs and MPA levels, and coping strategies can be identified, I could introduce specifically selected coping mechanisms to students more effectively based on ELs. If the results are anecdotally promising, coping strategies could be adapted to a larger population, perhaps tested on children and adolescents. Perhaps the personality inventory can predict the prevalence of MPA, as suggested by Smith and Rickard (2004), and the identified coping

strategies based on ELs could be implemented sooner in a student's education as a preventative strategy to reduce manifestations of MPA.

d. Outlined intention

I will conduct a narrative literature review examining existing knowledge on personality traits related to MPA. Data from online participants will be collected and analysed using mixed methods.

The participants, adult amateurs and professional singers, will take two inventories: the K-MPAI-R (Kenny, 2009) to measure performance anxiety and the IPIP-NEO-120 (Johnson, 2014) to measure ELs. Correlations between MPA levels and ELs will be measured using Pearson correlation coefficients. Data will be summarised using descriptive statistics and categorised by dividing participants into subgroups based on their MPA and ELs. This will help determine whether soloist singers exhibit lower levels of extraversion associated with higher MPA, similar to instrumentalists and choir singers (Spahn et al., 2024), or whether their functioning as singers differs from that of other musicians.

Participants affected by MPA will then be invited to answer a survey on coping strategies. I may conduct interviews, if time permits and a gap in understanding data persists. Survey responses will be analysed using thematic analysis (Braun and Clarke, 2006) and/or frequency counts to determine the most common strategies, which may or may not be validated by interviews.

e. Project timeline

	WEEK											
	43	44	45	46	47	48	49	50	51	52	1	2
Literature research												
Information sheets + consent forms												
K-MPAI questions												
Contact potential participants												
Follow-up surveys												
Data analysis												
Interviews (?)												
Introduction												
Literature review												
Methodology/ methods												
Findings												
Conclusion												
Proofreading												

f. Ethics and insider research

Experiencing high MPA myself, I may be drawn to participants with high MPA levels or fascinated by those with low levels. Awareness of this will help lessen subjectivity during data analysis. Although working with unfamiliar singers reduces ethical concerns about personal ties (Greene, 2014; Taylor, 2011), familiarity with the group will persist.

These issues may introduce biases, which can be mitigated by open-ended questions in surveys and interviews, allowing respondents to answer freely without steering them toward specific responses (Dillman, Smyth and Christian, 2014).

To address potential emotional distress from revisiting painful MPA experiences, participants will be informed about the questions' nature and allowed to skip or withdraw. They will access mental health resources upon request.

g. Individual learning outcomes

- * Understand the intricacies of conducting practical work-based research while developing comprehensive solutions to successfully execute projects

- * Develop time-management strategies to adhere to a precise schedule while ensuring academically satisfactory research results
- * Understand the relationship between ELs and MPA to design tailored strategies for the students in the singing studio

Project report

1. Introduction

The scope of the research surrounding music performance anxiety (MPA) related to personality traits has not yet specifically addressed solo singers (Spahn et al., 2024). This research aims to understand if extraversion levels (ELs) influence MPA in solo singers, and to identify the coping strategies of singers with high MPA levels. It explores whether these can be implemented in the singing studio based on personality traits. The study was conducted within the setting of my singing studio; I had no prior knowledge of the participants. Extraversion and MPA levels were measured, and participants with MPA scores $\geq 105/240$ completed a coping strategies survey, which was analysed to find possible prevalent strategies. The intended impact is to advance knowledge on extraversion/introversion linked to MPA and improve students' outcomes with managing MPA. Expected individual learning outcomes include understanding how to conduct practical research in a real-world setting, developing solutions to complete a project successfully, and envisioning tailored strategies for singing students with high MPA levels based on their personality, particularly if low extraversion is confirmed to be linked to MPA as suggested by Thomas and Nettelbeck (2013).

2. Literature review

The literature review used academic databases such as the UWTSD Library, JSTOR and Elsevier. In 2024, Spahn et al. conducted pivotal research specifically on musicians' different personality traits related to MPA. Its reference list helped trace back relevant and academically safe, *i.e.* peer-reviewed papers on personality traits in musicians with MPA. MPA is defined by Kenny (2010) as “the experience of marked and persistent anxious apprehension related to musical performance that has arisen through specific anxiety-conditioning experiences” (p. 433). The complete definition (see Appendix A) has been critiqued by Herman and Clark (2023) for being too pathologizing and simplistic. However, their critique is weakened by inaccurate quoting, as they omitted key sections providing context, such as MPA's multifaceted nature. Hence, I will still use Kenny's definition for this report. The American Psychological Association defines extraversion as “outward and social-directed concerns and behaviors”; extraversion

scores, such as measured by the IPIP-NEO-120 (Johnson, 2014), calculate how strongly a person exhibits this trait.

2.1 Personality traits and MPA

Musicians' personality traits have recently gained interest, particularly in understanding how these traits influence musical roles and self-perceptions (Cameron, Duffy, and Glenwright, 2014). Researchers are now narrowing their focus: MPA related to personality traits is of interest with a significant surge in the last decade (Özdemir and Dalkıran, 2017; Rodríguez-Mora and López Díaz, 2020; Herman and Clark, 2023; Spahn et al., 2024). High levels of MPA can negatively impact performance (Rodríguez-Mora and López Díaz, 2020), which may explain the need to understand factors predicting MPA (Smith and Rickard, 2004; Herman and Clark, 2023; Spahn et al., 2024) to develop preventive coping strategies (Chattin, 2019).

Literature seems self-reinforcing, with a consensus among researchers, each one aligning with the conclusions of their predecessors (reviewed below). This lack of challenging contradictions in the field may stem from only a decade of research on musicians' personality traits related to MPA, perhaps insufficient to adopt a broader perspective. Expanding the methodological diversity to include observational studies or physiological measures (*e.g.* heart rate) could provide a more comprehensive understanding of the relationship between personality traits and MPA. Like the reviewed literature, this project relies on self-reported data: these limitations are acknowledged, and results should be interpreted cautiously.

Paradoxically, a recurring critique in the literature is that existing research does not address specific populations, yet researchers often respond by focusing on their own chosen group (Smith & Rickard, 2004; Cameron, Duffy & Glenwright, 2014; Chattin, 2019)—thereby continuing to exclude other specific populations.

2.2 Pioneering literature: little research, same conclusions

Kemp (1981) reviewed the contemporary literature of his time on musicians' personality traits and critiqued population samples' sizes, deeming them “dangerously small” (p. 33). The smallest sample to which he referred is 180 (Cooley, 1961), which would likely be considered adequate by current researchers. For instance, the smallest sample is 37 participants for the

peer-reviewed research by Sadler and Miller (2010). Kemp most likely would not have deemed contemporary literature relevant. Nonetheless, the seven small sample sources he cited were partly thesis and dissertations (Kaplan, 1961; Kemp, 1971; Martin, 1976; Krueger, 1974) and did not all concern the personalities of musicians but also of teachers (Krueger, 1974) and music listeners (Martin, 1976), highlighting the lack of literature of his time. Nevertheless, recent studies lean towards the same conclusions as older literature regarding musicians' ELs. The sole exception is that Kemp (1981) deemed introversion beneficial to musical performance, while all recent research using psychometric scales to measure ELs suggests the opposite (Thomas and Nettelbeck, 2013), for the same definitions of extraversion/introversion. Nonetheless, because older and recent research is not specific to solo singers, a gap in literature persists, especially when considering what I term "the singer's paradox".

2.3 The singer's paradox: extraverted but isolated

According to Kemp (1996), introversion is part of musicians' personality traits, except for singers. "Singers are unique" and have an "extroverted and independent temperament" (Kemp, 1981, pp. 33-34). Cameron, Duffy and Glenwright (2014) and Sandgren (2019) concur and demonstrate this: both studies used psychometric scales to assess the participants' personalities. Singers were found to be significantly more extroverted than other musicians.

Current research on musicians' personality traits and MPA often isolates singers from other musicians, either by putting them in a different category (Sadler and Miller, 2010; Sandgren, 2019; Spahn et al., 2024), or by not studying them among the other musicians groups (Thomas and Nettelbeck, 2013; Smith and Rickard, 2004; Rodríguez-Mora and López Díaz, 2020). The reason for this separation is usually not explained, except in Sandgren's (2019) research, which justifies the division by stating that the voice is "part of [the vocalists] physically as well as psychologically", and the "use of words in performance" (p. 466).

Even if singers' higher ELs have been observed, no existing research has focused explicitly on solo singers when examining personality traits in relation to MPA. Studies address various personality traits alone, MPA alone, or both, but primarily in the context of choir singers (Ryan and Andrews, 2009; Sandgren, 2019; Spahn et al., 2024).

Nevertheless, regardless of the type of musicians, the examined literature indicates a negative correlation between MPA and ELs (Thomas and Nettelbeck, 2013, Spahn et al., 2024), *i.e.* the greater the EL, the lower the MPA level. This is unsurprising, as research links introversion with

a higher likelihood of experiencing elevated levels of anxiety (Jylhä et al., 2009; Hassan et al., 2021).

Whilst no study was specifically about solo singers, Rodríguez-Mora and López Díaz (2020) still see an increase in MPA if the musician is a soloist. It might then be inferred this also applies to solo singers. Papageorgi, Creech and Welch (2011) concur and note that “solo performance generate[s] more anxiety compared to group performance” (p. 18).

Several studies advise developing skills and strategies to manage MPA to positively impact performance quality (Hoffman and Hanrahan, 2012; Osborne, Greene and Immel, 2014). Biasutti and Concina (2014) concur but warn that some coping strategies are deemed less useful than others or unuseful. For instance, seeking social support is considered too passive, and avoidance strategies, such as denial, are judged counterproductive.

As mentioned earlier, each study focuses on a specific population that has not been previously explored. Similarly, this research focuses specifically on solo singers.

3. Methodology and methods

I carried out this research within a subjectivist paradigm, which helped understand the unique meanings, interpretations, experiences (Saunders, Lewis and Thornhill, 2009) and strategies each participant attached to their MPA. Subjectivist ontological and epistemological stances for this research may initially appear surprising as the research used mixed methods, often associated with pragmatism (Johnson and Onwuegbuzie, 2004), with its first steps being the collection of quantitative data, often associated with positivism (Maksimović and Evtimov, 2023). Nonetheless, subjectivism still shapes this study. Indeed, the methods for quantitative data collection, the IPIP-NEO-120 and the MPA inventory K-MPAI-R (Kenny, 2009), are self-reported assessments where the participants' answers are likely to be influenced by their own biases (Podsakoff et al., 2003). It seemed important to take this subjectivity into account as the subjective translation of a participant's experience of MPA for the K-MPAI-R, and of their worldview and self-perception for the IPIP-NEO-120.

The self-reported assessments were chosen for their academic credibility. The IPIP-NEO-120 uses the five-factor model (defined subsequently), which bears credibility for being largely used for academic research about personality traits, such as Spahn et al.'s (2024), and the K-MPAI-R

widely used among MPA studies (Barbar, de Souza Crippa and de Lima Osório, 2014; Fernholz et al., 2019; Rodríguez-Mora and López Díaz, 2020; Butković, Vukojević and Carević, 2021).

A five-factor model is a psychological framework for understanding personality. It proposes that five broad dimensions encompass most of the variance in personality traits (McCrae, 2020). These traits (openness to experience, conscientiousness, agreeableness, neuroticism, and extraversion) are considered stable over time and across various cultures, forming the core structure of personality (pp. 129-134). While a paid version of a five-factor model inventory is widely used in academic studies, an open-source version was employed for evident affordability. The IPIP-NEO is available with 50, 120 or 300 questions. Participants filled out the 120-question version, which balances breadth and efficiency. The IPIP-NEO-120 requires approximately 20 minutes, and participants were also asked to complete the K-MPAI-R, which takes an additional 10 minutes. To ensure participant engagement and minimize the risk of attrition, a recognised concern in psychometric testing (Hoerger, 2010), it was important to balance the questionnaires' lengths with the need to include enough items to ensure accurate and robust results.

Kenny, who designed the K-MPAI-R, granted consent for its free use in this research.

3.1 Participants' tasks

Participants were recruited through Facebook groups. A link led individuals to my studio's website, where a dedicated page detailed the information for the participants, outlining the study's aims and objectives. I did not share the research with my current students to minimize bias in interpreting results. As an insider, bias was already present (Taylor, 2011), and knowing the singers may have influenced my interpretation. The research sought adult participants, excluding minors, due to the additional ethical precautions required, which would have been too time-consuming. The focus was on soloist singers of all genres and included both amateurs and professionals. Singers who exclusively perform in choirs were not invited to participate, as this demographic has already been studied (Smith and Rickard, 2004; Rodríguez-Mora and López Díaz, 2020).

Participants first completed the IPIP-NEO-120 inventory on its webpage. They then copied the anonymised results link and pasted it into the second questionnaire, a Google Form version of the K-MPAI-R with additional demographic questions. This marked the start of data collection. Before proceeding, participants checked a box to consent to participation and data collection.

Following ethical standards, they could skip any non-K-MPAI-R questions, withdraw at any time, and request data deletion.

57 participants entered. Five were excluded for providing a wrong link to their IPIP-NEO-120 results, totalling the sample at 52 participants.

Responses to both inventories were analysed using descriptive statistics and Pearson correlation coefficients, as employed in similar studies. Two-tailed Pearson correlation p -values tested the null hypothesis that MPA levels and ELs are uncorrelated, against the alternative hypothesis of correlation. The aim was to examine whether any significant positive or negative relationships existed between the variables.

26 participants scored higher than 105 on the K-MPAI-R, a clinically relevant cut-off score distinguishing significant levels of MPA, indicating that these individuals may experience MPA severe enough to impact their well-being or performance (Kenny, 2016). 20, who had agreed to participate further in the study, were invited to fill in an eight-question survey about their MPA coping strategies. Five responded.

Responses to this final survey were analysed using thematic analysis (Braun and Clarke, 2006), which was selected to identify common approaches employed by individuals with significant MPA levels. Thematic analysis was deemed appropriate as it emphasizes participants' perspectives, aligning with the chosen paradigm, and provides detailed insights (Christou, 2022). This approach facilitated a deeper understanding of the significance of the reported coping strategies.

The analysis was sequential in its first phase, as the coping strategies survey was only sent to selected participants based on their K-MPAI-R scores. The approach then became iterative, with survey responses analysed first independently, then through the lens of a specific relationship identified while analysing the K-MPAI-R scores related to extraversion scores (cheerfulness and MPA may be correlated, see below "4.2 Cheerfulness").

During the early planning stages, interviews were considered a possibility to understand more about "the meaning the participants hold about the problem or issue" (Creswell and Creswell, 2018, p. 296). They were not used, as this would have required conducting numerous and time-consuming interviews to identify patterns, and surveys appeared sufficient to achieve this objective.

4. Findings and discussion

4.1 Descriptive statistics

Descriptive statistics (see Table 1 below) summarise and provide an overview of the key characteristics of the dataset. Similar studies reported a moderate negative correlation between ELs and MPA (Thomas and Nettelbeck, 2013; Rodríguez-Mora and López Díaz, 2020; Spahn et al., 2024), which this research supports. This research rejects the null hypothesis (MPA levels and ELs are not correlated) in favour of the alternative (they are correlated).

	Mean	Median	Standard dev.	Minimum	Maximum
K-MPAI-R scores (/240)	110.86	105.5	37.67	33	180
ELs (%)	56.4	55	16.08	26	92

Table 1

Indeed, with a correlation of -0.38 (p -value = 0.004) and according to Cohen's (1988) guidelines, the results demonstrate a moderate negative relationship between ELs and K-MPAI-R scores, meaning that more extroverted individuals tend to have lower levels of MPA. Nonetheless, it is crucial to exercise caution when interpreting correlation coefficients, as rigid cutoffs—such as those proposed by Cohen—may oversimplify complex relationships (Schober, Boer, & Schwarte, 2018). Figure 1 below shows the scatterplot of ELs for the 52 participants. Although it reveals a slight downward trend, there is no distinct linear pattern. Some regions deviate from what a strict best-fit line would predict, especially in the 50-150 range of K-MPAI-R scores, where ELs appear both higher and lower than expected under a perfectly linear relationship.

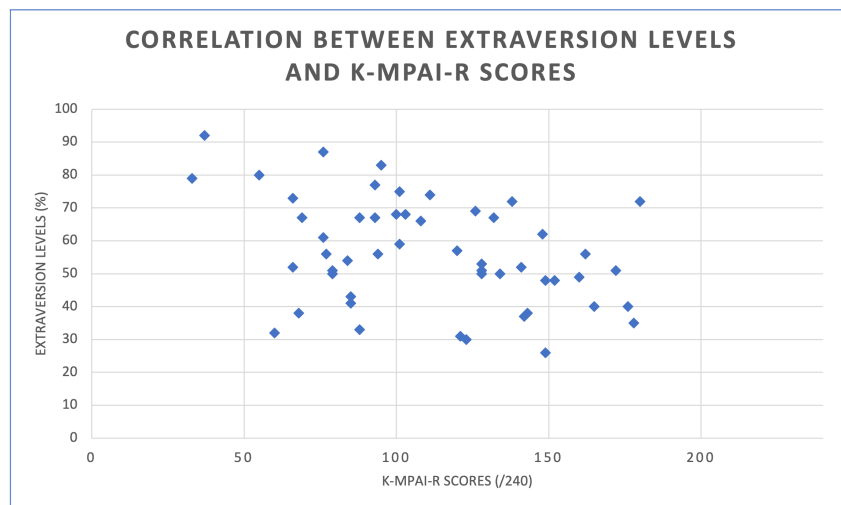


Figure 1

Nonetheless, it seems important to indicate that this research used a quite small sample, even if it is as important as other research mentioned above for similar peer-reviewed studies (Smith and Rickard, 2004; Sadler and Miller, 2010). It is also essential to mention that this study's population was comprised exclusively of singers, contrary to the reviewed literature. Sandgren (2019) mentions two important facts: first, "studies have found higher levels of extraversion among vocalists" (p. 467). Secondly, she cites Vaag, Bjørngaard and Bjerkset (2016) to express that there exists a "higher prevalence of anxiety and depression among musicians and in particular vocalists" (p. 468). Therefore, singers would be more extroverted *and* anxious. This could explain why the K-MPAI-R—which takes into account "Proximal somatic anxiety and worry about performance," "Depression/hopelessness", and "Anxious apprehension"—and the ELs did not show a strong correlation, but a moderate one.

The second survey also gathered information about the participants, such as age, biological gender, gender identity, and whether or not the person was a professional singer. The IPIP-NEO-120 ELs are calculated using a mean score for six personality components evaluated during the inventory. Those are friendliness, gregariousness, assertiveness, activity level, excitement-seeking, and cheerfulness. The K-MPAI-R divides results into categories such as "parental empathy" or "anxious apprehension". The complete list of categories can be found in the descriptive statistics Tables 2 and 3 below.

	Mean	Median	Standard dev.	Min.	Max.	Range
ELs (%)	56.4	55	16.08	26	92	66
Friendliness (%)	54.86	53	27.8	0	100	100
Gregariousness (%)	43.9	44	28.63	0	100	100
Assertiveness (%)	60.15	69	25.28	0	100	100
Activity level (%)	58.76	62	22.47	6	94	88
Excitement seeking (%)	52.07	50	21.18	19	100	81
Cheerfulness (%)	68.4	69	19.78	31	100	69

Table 2

	Mean	Median	Standard dev.	Min.	Max.	Range
K-MPAI-R scores (/240)	110.86	105.5	37.67	33	180	147
Proximal somatic anxiety and worry about performance (%)	43.58	43.18	20.49	9.09	84.84	77.75
Worry/dread (Negative cognitions) (%)	52.88	55.2	21.91	6.25	100	93.75
Depression/hopelessness (%)	42.14	40.62	19.38	6.25	100	93.75
Parental empathy (%)	43.5	43.75	23.96	0	100	100
Memory (%)	33.81	33.33	25.91	0	91.66	91.66
Generational transmission of anxiety (%)	59.4	61.11	28.25	0	100	100
Anxious apprehension (%)	42.41	44.44	22.93	0	88.88	88.88
Biological vulnerability (%)	60.89	66.66	34.57	0	100	100

Table 3

Relations between all the data categories mentioned in Tables 2 and 3 were calculated with a Pearson correlation coefficient (see Appendix C). Relationships between categories within each inventory were also analysed but yielded no relevant insights, as the subcategories lack strong individual correlations with MPA or ELs.

Except for the correlation between cheerfulness and MPA, examined subsequently, no correlation was considered strong. Two correlations were found to be moderate: the relationship between ELs and MPA, as previously discussed, and the relationship between friendliness and singers categories (professionals versus amateurs). The latter demonstrated a moderate negative correlation of -0.36 (p -value = 0.011), suggesting that professional singers would have higher friendliness levels than amateurs. Correlations were calculated with a binary categorical variable (*i.e.* Professional = 1; Amateur = 2).

Women did not experience more MPA than men, a key finding contrasting with trends reported in prior MPA studies, which often identify higher MPA levels in women (Kenny, 2011; Butković, Vukojević and Carević, 2021). Descriptive statistics for women's K-MPAI-R scores are as follows: Mean (SD) = 112.42 (35.64), Med = 108. For men's scores, Mean (SD) = 109.94 (40.26), Med = 107. I do not attempt to invalidate decades of research by experts in highly specialized fields with this independent study's findings. The difference may stem from the small sample size. On this point, Brysbaert (2019) critiqued underpowered research in psychology studies, where sample sizes were so small that the results could not be reliably inferred: this may be the case here.

Another key finding was consistent with current research: professionals experience MPA as much as amateur singers, which aligns with literature stating that MPA affects both professional and amateur musicians, but for various reasons. Kenny (2011) suggests that professionals may also experience high levels of anxiety because failure in their profession can feel like a personal failure, as well as the competitive nature of music performance environments that is highlighted as a universal factor contributing to MPA. Professional musicians face constant evaluations, auditions, and expectations, which can perpetuate anxiety despite their experience. Burin and Osório (2017) concur and state that MPA is highly prevalent among musicians regardless of training. The descriptive statistics for amateurs' ($n=28$) K-MPAI-R scores are as follows: Mean (SD) = 110.71 (40.98), Med = 100.5. The descriptive statistics for professionals ($n=20$) K-MPAI-R scores are Mean (SD) = 107.9 (34.25), Med = 105.05. Both amateurs and professionals have relatively large SDs compared to their means, suggesting an important variability in MPA scores within each group, meaning that individual differences in K-MPAI-R scores are quite pronounced in both groups.

4.2 Cheerfulness

The personality trait of cheerfulness highlights a noticeable difference in its relationship to MPA.

Cheerfulness, as a component for calculating ELs, had a Pearson correlation coefficient of -0.60 (p -value = 0.000002) when compared to K-MPAI-R scores. According to Cohen's (1988) guidelines, this indicates a strong negative relationship between cheerfulness and MPA.

This would suggest that inherently more cheerful persons experience less MPA. Perhaps reverse reasoning, *i.e.* finding ways to enhance cheerfulness in individuals, may help reduce MPA levels or symptoms. While I am not assuming that levels of cheerfulness cause levels of MPA, this may be a potential direction for further investigation. Further elaboration will follow the thematic analysis.

4.3 Thematic analysis

This thematic analysis draws from the responses to an eight-question survey of five participants with K-MPAI-R scores exceeding the 105 cut-off point, focusing on coping strategies. It follows Braun and Clarke's guidelines (2006). This aligns with my subjectivist paradigm, as thematic

analysis enables deep exploration of the unique meanings and interpretations made by participants (p. 81). Participants were asked, *inter alia*, about their coping strategies before, the day of and during a performance. Questions and full answers from the participants can be found in Appendix D.

The thematic analysis was first conducted simultaneously with the inventories' answers analysis, with an inductive approach, meaning that the cheerfulness factor was not considered at the time. Then, the answers were analysed a second time, deductively, with the perspective of cheerfulness being negatively correlated with MPA, where I sought whether elements of cheerfulness could be identified in the participants' responses.

During the first analysis, five themes were generated: Mastery, Avoidance, Mindset and mental preparation, Body connection, and Uniqueness. They translate the coping strategies that came up in the questionnaire and are sorted from the most mentioned to the least mentioned.

4.3.1 Mastery

This theme highlights how voice mastery through practice and voice education helps the participants feel prepared for a performance. This relates to literature as enhanced knowledge—such as technique—has been shown to reduce anxiety by increasing confidence and perceived control over performance situations (Barbar, de Souza Crippa and de Lima Osório, 2014). This reflects the personality trait of conscientiousness that translates into diligence and preparation (Özdemir and Dalkıran, 2017).

The theme appeared in every participant's responses. According to their answers, mastery ranges from knowledge about singing to "practice". Singing knowledge includes "technique", "breathing", a deep familiarity with the songs, knowledge of vocal health and knowledge of singing with a body as a whole, with Participant 2 mentioning "light stretching" as a preparation for the day of the event. Four participants stated the importance of practice in their coping strategies used in days leading to the performance, with Participant 3 affirming practice is helping them to "feel confident."

The "knowledge" theme falls under the umbrella of preventive coping strategies. For example, Participant 5 explained "drinking lots of water", and Participant 3 explained "avoiding excess dairy," proving their education on what can help their voice operate at full capacity. This last example also falls under the theme of avoidance, discussed below.

4.3.2 Avoidance

Avoidance, mentioned by all participants, captures the use of strategies to reduce exposure to factors inducing anxiety, whether cognitive (avoiding thoughts), environmental (avoiding triggers), or interpersonal (avoiding eye contact).

Participant 1 said that thinking about performing “makes it worse”; Participant 3 indicated that letting “your mind go blank” helps, along with rejecting thoughts about the performance, as locking them outside the mind. On the thoughts-avoiding topic, alcohol was mentioned by two participants, who stated that drinking helped them reduce their anxiety on the day of. Biasutti and Concina (2014) consider alcohol as an avoidance strategy without explaining why. I would argue that this may be because alcohol permits avoiding confronting stressors directly (Danielson et al., 2024). Participant 3 also uses alcohol, believing it benefits their voice (“one-two bourbon hot toddies beforehand if available”), and Participant 5 mentioned that they “may have one or two drinks” before going on stage. While Participant 5 asserts it is helping them on scheduled concert days, even right before the show, Participant 3 also mentions alcohol as another coping strategy for unplanned performances, listing “drunk karaoke” as one of their most effective MPA coping strategies. Participant 5 seemed to concur and suggested “hav[ing] a drink” if they were to advise someone on reducing their MPA, while also acknowledging that they are a “bad influence”.

Participant 4 explained “avoid[ing] potential anxiety triggers,” which suggests that they know their character sufficiently to be aware of their stressors and avoid them on the day of. Avoidance of “eye contact”, was pointed out by two participants, with Participant 5 directly stating that they “look above the audience”, and Participant 4 mentioning that “closing eyes when possible” helped them to lower anxiety during a performance.

While these different types of avoidance connect in their role of reducing anxiety for the participants, it is worth noting that avoidance has been deemed unuseful as a long-term coping strategy by Biasutti and Concina (2014) as it does not resolve the source of anxiety, and can contribute to poor preparation. Perhaps the participants would concur on low effectiveness as none of them mentioned avoidance on their list of most useful strategies.

4.3.3 Mindset and mental preparation

As mentioned by all participants, being mentally prepared thanks to mental work seems to be as important as practice, and an active preparation on its own, linked to “mental health work”. In

these strategies, participants cited visualisation by “mentally downplaying the event” and “positive self-talk”, both useful before the performance.

Mental logical reasoning was also addressed, with Participant 4 reasonably mentioning “the magnitude of possible consequences” and arguing “that none of them will result in one's life physically ending”. Participant 3 encourages tweaks of mindsets as anxiety can be used “as a fuel if we change our mindset around it”. This is explained by the Yerkes-Dodson Law, positing that performance improves with increasing arousal up to an optimal level, beyond which additional arousal leads to a decline in performance (Kenny, 2016). The participants' high MPA levels indicate that they may exceed this optimal zone and raise questions about their strategies' effectiveness. While these may be unhelpful, I could argue that their absence could result in significantly worse outcomes. This may be elaborated in further research.

4.3.4 Body connection

Two participants mentioned “body connection”. Participant 1 explained how they see their “entire body [as] the instrument, not just the vocal folds” and listed body awareness as one of their preferred coping strategies. The subject was discussed as a preparation during practice, as well as a way to calm down during a performance, focusing the thoughts on the body. Participant 4 even mentioned that they “only” focused on “body connection” during a show.

4.3.5 Uniqueness

Finally, two participants acknowledged the uniqueness of their condition. Participant 1 balanced their inputs by mentioning what “works for [them]”, highlighting a possible inadequacy for other singers. Participant 2 elaborated, stating that “the root of performance anxiety differs according to each person's circumstances”, summing up by saying that “self-care” might be a solution, which seems prudent as all of the participants seemed to seek coping strategies effective for them, avoiding those previously tried without success. While this research aims to find if coping strategies depend on ELs and while broad recommendations can provide a starting point, participants' inputs help see that strategies may need to be adapted to individualities.

4.4 Cheerfulness in the participants' answers

Data was revised using a deductive approach, which arose from analysing the correlation coefficients between components of the two inventories. Specifically, I aimed to identify elements aligning with a “forced theme” of “Cheerfulness”.

None of the participants reported positive experiences when anticipating the performance. Participant 1 stated how “thinking about it makes it worse”, which precludes positive “thinking ahead”, as all performance-related thoughts on the day of are rejected. Participants explained how “the anxiety and panic obliterate the technical”. They did not address how they presumably obliterate the potential joy of singing. Participant 3 even mentioned “black[ing] out during performances”, not taking “in the crowd or external stimuli”, being foreigner to their environment or emotions during a performance. Responses revealed that anxiety drains some participants’ potential, to the point that the joy of singing is eclipsed by anxiety. This aligns with Kenny’s (2011) findings, who states that anxiety can deprive musicians of “joy in performing” (p. 13).

Despite this, detecting hints of cheerfulness in the participants’ answers was still possible, consistent with their IPIP-NEO-120 results, as their cheerfulness levels scored greater than zero (see Table 4). Participant 4 mentioned “cracking jokes” to cope with general MPA. Participant 5 cited “danc[ing]”, “smiling,” and “laughing” to manage MPA during a performance. Participant 3, who expressed how anxiety “can also be a sign of excitement”, is the only person who acknowledged how shows also bring positive emotions by stating that they “also love the feeling” of performing.

Some participants also seemed to recognise self-confidence as an objective. Participant 3 mentioned doing “lots of practice so that [they] feel confident” and listed “working on self-confidence in general” as advice for singers experiencing MPA. Participant 1 also listed “feeling confident” as one of the most effective ways to cope with MPA. As positive emotions “undo lingering negative emotions” (Fredrickson, 2001, p. 224) and as confidence is linked to positive affects (Lyubomirsky, King and Diener, 2005), perhaps working on cheerfulness could also help build confidence as a foundation to manage MPA more effectively, if causality is involved. Further study is needed to determine whether this relationship reflects correlation or causation.

	K-MPAI-R score (/240)	EL (%)	Friendliness (%)	Gregariousness (%)	Assertiveness (%)	Activity level (%)	Excitement- seeking (%)	Cheerfulness (%)
Part. 1	128	50	19	19	37	94	75	56
Part. 2	152	48	44	19	75	75	44	31
Part. 3	143	38	44	31	69	12	19	56
Part. 4	176	40	31	19	37	50	44	56
Part. 5	178	35	12	6	69	44	50	31
Part. 6	37	92	100	100	100	81	69	100

Table 4

Of particular interest is that a sixth participant was sent the coping strategies survey by mistake: his MPA levels were lower than the stated threshold. Participant 6 scored the second-highest in extraversion, and the lowest on the K-MPAI-R, with cheerfulness levels at 100%. Comparing his answers with the other participants' responses was informative, as he stated “rarely feel[ing] anxious”. He still held a perspective for all the questions, despite them being designed for people experiencing MPA. For instance, one of the ways to help him relax before a performance is to “walk around” the audience, “creating a first connection”, while other participants were more focused on themselves and their anxiety. Most of his answers involved connecting with people by “engag[ing] with the musicians and people throughout the gig”, and “continu[ing] building connection”. Regarding the question on coping strategies to lower MPA levels during a performance, he mentioned “play[ing] hard (*i.e.*, lots of fun)” and making “sure musicians are happy to be there”. His responses clearly highlighted a dichotomy in perspectives on experiencing and engaging with performance, and his happiness transpired throughout his comments (see Appendix D).

Despite this contrast, some of the other participants seemed open to more positivity, which could foster positive emotions and potentially cultivate cheerfulness. Participant 3 mentioned “positive self-talk”, “internal positive self talk/mantras”, as well as “therapy”. Participant 1 concurred. This could help identify strategies to enhance cheerfulness. However, in a professional teaching context, this idea of encouraging the development of certain personality traits is complicated to address ethically. First is the question of our role as voice educators rather than therapists (Shevrin Venet, 2019): is it ever appropriate for us to discuss the psychological traits of our students? Second, if we do choose to address such matters, how can we suggest that altering aspects of their personality might be beneficial without implying that their current personality is “inadequate”? On the other hand, developing their positive emotions through means such as positive psychology could enhance positive emotions, alleviating

distress symptoms (Bolier et al., 2013), and we ought to want the best for our students (Zheng, 2022).

5. Limitations

Beyond the small sample size, this study is limited by challenges from self-reported assessments and thematic analysis. Even if bias is pervasive, especially in psychology fields (Jussim and Honeycutt, 2024), I attempted to identify potential biases influencing this project.

The thematic analysis primarily highlights how participants interpret the questions and how the researcher interprets their responses, inherently introducing subjectivity (Javadi and Zarea, 2016).

Self-reported inventories are also often critiqued for allowing social desirability bias, which results in answers aligning with societal norms, and portray the respondent in a favourable light (Fisher and Katz, 2000). Calculating if socially desirable responding (SDR) has influenced participants' responses is possible through social desirability (SD) scales (van de Mortel, 2008). However, this research did not employ any. Other research on personality traits in musicians also refrained from using such a scale, but Cameron, Duffy and Glenwright's (2014) research illustrates SDR well: "bass players were generally seen as the most agreeable band members, but this was especially true in the eyes of the bassists themselves" (p. 1). SDR also possibly limited responses to the survey.

Robins, Fraley and Krueger (2010, p. 228) warn about other self-reports disadvantages: "anchoring effects" (influence by the first information presented), "primacy and recency effects" (tendency to remember the first or last items in a list better), "time pressure" (being pressed by a short time frame to answer) and "consistency motivation" (giving biased responses to avoid appearing contradictory). These critiques apply to this research, except for the time pressure constraint, as neither inventory is timed.

Boyle (2008) critiques the five-factor model for its inadequate coverage of personality traits and its assumption that traits remain stable after age 30, despite evidence suggesting they change throughout life (Roberts, Walton, & Viechtbauer, 2006). If this holds true, personalised coping strategies for MPA may become less effective. This highlights the value of an ongoing, collaborative approach that adapts to the individual's evolving needs. While this raises the ethical concern of certain traits being more desirable or valuable than others, e.g. extroverted

are reported to be happier (Steel, Schmidt and Shultz, 2008), this final observation supports the potential benefits of incorporating greater cheerfulness into interventions for singers experiencing MPA.

6. Conclusion

In conclusion, the research findings on ELs linked to MPA aligned with the current literature (Spahn et al., 2024), revealing a moderate negative correlation. The same correlation applies between friendliness and MPA levels. Key findings showed that professionals experience as much MPA as amateur singers, which concurs with existing literature (Kenny, 2011). However, women in the sample did not experience more MPA than men, contrary to existing research reports (Kenny, 2011; Butković, Vukojević and Carević, 2021). Pearson correlation coefficients led to the discovery of a strong negative correlation between MPA and cheerfulness. Participants with high K-MPAI-R scores shared their personal coping strategies: mastery, avoidance, body connection and mindset.

Limitations, such as the small sample size and various biases—like SD bias or consistency motivation for respondents, or subjectivity and preconceived notions for the insider researcher (Fleming, 2018)—may have compromised objectivity throughout the study. These factors impact the research by making inference more challenging. Moreover, the suggestion of causality between changes in students' cheerfulness and their MPA levels remains theoretical.

Future research could focus on exploring specific activities that effectively enhance cheerfulness. For instance, coaching, therapy, meditation, gratitude practice, positive psychology, or mindset changes could be explored. Subsequent research could investigate whether implementing proven methods for enhancing cheerfulness effectively reduces MPA levels in students. Future studies could also examine whether coping strategies differ for singers with high versus low levels of extraversion and high versus low levels of MPA, to determine the effectiveness of different approaches for distinct personality traits.

Individual learning outcomes have mostly been achieved: I now have a better understanding of work-based research and experimented with time-management strategies that proved effective for concentration. While I can not claim to have fully developed tailored MPA management strategies for students based on their ELs, I am curious about the impact of enhancing cheerfulness levels in the long term.

References

American Psychological Association. (n.d.). Introversion/Extraversion. In *APA Dictionary of Psychology*. [online] Available at: <https://dictionary.apa.org/introversion-extraversion> [Accessed 17 Jan. 2025].

Barbar, A.E.M., de Souza Crippa, J.A. and de Lima Osório, F. (2014). Performance anxiety in Brazilian musicians: Prevalence and association with psychopathology indicators. *Journal of Affective Disorders*, 152-154, pp.381–386. doi:<https://doi.org/10.1016/j.jad.2013.09.041>.

Biasutti, M. and Concina, E. (2014). The role of coping strategy and experience in predicting music performance anxiety. *Musicae Scientiae*, 18(2), pp.189–202. doi:<https://doi.org/10.1177/1029864914523282>.

Bolier, L., Haverman, M., Westerhof, G.J., Riper, H., Smit, F. and Bohlmeijer, E. (2013). Positive psychology interventions: A meta-analysis of randomized controlled studies. *BMC Public Health*, [online] 13(1). doi:<https://doi.org/10.1186/1471-2458-13-119>.

Boyle, G.J. (2008). Critique of the five-factor model of personality. In: *The SAGE Handbook of Personality Theory and Assessment: Volume 1 - Personality Theories and Models*. SAGE Publications.

Braun, V. and Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2), pp.77–101. doi:<https://doi.org/10.1191/1478088706qp063oa>.

Brysbaert, M. (2019). How Many Participants Do We Have to Include in Properly Powered Experiments? a Tutorial of Power Analysis with Reference Tables. *Journal of Cognition*, [online] 2(1). doi:<https://doi.org/10.5334/joc.72>.

Burin, A.B. and Osório, F.L. (2017). Music performance anxiety: a critical review of etiological aspects, perceived causes, coping strategies and treatment. *Archives of Clinical Psychiatry (São Paulo)*, [online] 44(5), pp.127–133. doi:<https://doi.org/10.1590/0101-60830000000136>.

Butković, A., Vukojević, N. and Carević, S. (2021). Music performance anxiety and perfectionism in Croatian musicians. *Psychology of Music*, 50(1), p.030573562097869. doi:<https://doi.org/10.1177/0305735620978692>.

Cameron, J.E., Duffy, M. and Glenwright, B. (2014). Singers take center stage! Personality traits and stereotypes of popular musicians. *Psychology of Music*, 43(6), pp.818–830. doi:<https://doi.org/10.1177/0305735614543217>.

Chattin, L.B. (2019). *The Big Five Personality Types and Music Performance Anxiety in the Big Five Personality Types and Music Performance Anxiety in Collegiate Piano Students*. [online] Available at: <https://scholarcommons.sc.edu/etd/5125> [Accessed 13 Nov. 2024].

Christou, P.A. (2022). How to Use Thematic Analysis in Qualitative Research. *Journal of Qualitative Research in Tourism*, 3(2), pp.79–95. doi:<https://doi.org/10.4337/jqrt.2023.0006>.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. 2nd ed. Hillsdale, N.J.: Lawrence Erlbaum Associates.

Cooley, J.C. (1961). A Study of the Relation Between Certain Mental and Personality Traits and Ratings of Musical Abilities. *Journal of Research in Music Education*, 9(2), pp.108–117. doi:<https://doi.org/10.2307/3344307>.

Creswell, J.W. and Creswell, J.D. (2018). *Research design: qualitative, quantitative, and mixed methods approaches*. 5th ed. [online] Thousand Oaks, California: SAGE Publications. Available at: https://spada.uns.ac.id/pluginfile.php/510378/mod_resource/content/1/creswell.pdf.

Danielson, C.K., Hahn, A.M., Bountress, K.E., Gilmore, A.K., Roos, Lydia., Adams, Z.W., Kirby, C.M. and Amstadter, A.B. (2024). Depressive symptoms, avoidant coping, and alcohol use: differences based on gender and posttraumatic stress disorder in emerging adults. *Current psychology*. doi:<https://doi.org/10.1007/s12144-024-06150-x>.

Dillman, D.A., Smyth, J.D. and Christian, L.M. (2014). *Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method*. 4th ed. Hoboken, New Jersey: Wiley.

Fernholz, I., Mumm, J.L.M., Plag, J., Noeres, K., Rotter, G., Willich, S.N., Ströhle, A., Berghöfer, A. and Schmidt, A. (2019). Performance anxiety in professional musicians: a systematic review on prevalence, risk factors and clinical treatment effects. *Psychological Medicine*, 49(14), pp.2287–2306. doi:<https://doi.org/10.1017/s0033291719001910>.

Fisher, R.J. and Katz, J.E. (2000). Social-desirability bias and the validity of self-reported values. *Psychology and Marketing*, 17(2), pp.105–120. doi:[https://doi.org/10.1002/\(sici\)1520-6793\(200002\)17:2%3C105::aid-mar3%3E3.0.co;2-9](https://doi.org/10.1002/(sici)1520-6793(200002)17:2%3C105::aid-mar3%3E3.0.co;2-9).

Fleming, J. (2018). Recognizing and Resolving the Challenges of Being an Insider Researcher in Work-Integrated Learning. *International Journal of Work-Integrated Learning*, 19(3), pp.311–320.

Fredrickson, B.L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, [online] 56(3), pp.218–226. doi:<https://doi.org/10.1037/0003-066x.56.3.218>.

Greene, M.J. (2014). On the Inside Looking In: Methodological Insights and Challenges in Conducting Qualitative Insider Research. *The Qualitative Report*, [online] 19(29), pp.1–13. doi:<https://doi.org/10.46743/2160-3715/2014.1106>.

Hassan, R., Rowa, K., McCabe, R.E., Lahat, A. and Schmidt, L.A. (2021). Shyness and anxiety: Protective role of extraversion. *Personality and Individual Differences*, 178. doi:<https://doi.org/10.1016/j.paid.2021.110859>.

Headspace Inc. (2024) *Headspace: Mindful Meditation* (Version 3.346.0) *Mobileapp*. Available at: <https://www.headspace.com> (Accessed: 21 November 2024).

Herman, R. and Clark, T. (2023). It's not a virus! Reconceptualizing and de-pathologizing music performance anxiety. *Frontiers in Psychology*, 14. doi:<https://doi.org/10.3389/fpsyg.2023.1194873>.

Hoerger, M. (2010). Participant Dropout as a Function of Survey Length in Internet-Mediated University Studies: Implications for Study Design and Voluntary Participation in Psychological Research. *Cyberpsychology, Behavior, and Social Networking*, [online] 13(6), pp.697–700. doi:<https://doi.org/10.1089/cyber.2009.0445>.

Hoffman, S.L. and Hanrahan, S.J. (2012). Mental skills for musicians: Managing music performance anxiety and enhancing performance. *Sport, Exercise, and Performance Psychology*, 1(1), pp.17–28. doi:<https://doi.org/10.1037/a0025409>.

Javadi, M. and Zarea, K. (2016). Understanding Thematic Analysis and Its Pitfall. *Journal of Client Care*, 1(1), pp.34–40. doi:<https://doi.org/10.15412/J.JCC.02010107>.

Johnson, J.A. (2014). Measuring thirty facets of the Five Factor Model with a 120-item public domain inventory: Development of the IPIP-NEO-120. *Journal of Research in Personality*, 51(51), pp.78–89. doi:<https://doi.org/10.1016/j.jrp.2014.05.003>.

Johnson, R.B. and Onwuegbuzie, A.J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), pp.14–26.

Jussim, L. and Honeycutt, N. (2024). Bias in Psychology: A Critical, Historical and Empirical Review. *Swiss Psychology Open*, [online] 4(1). doi:<https://doi.org/10.5334/spo.77>.

Jylhä, P., Melartin, T., Rytälä, H. and Isometsä, E. (2009). Neuroticism, introversion, and major depressive disorder-traits, states, or scars? *Depression and Anxiety*, 26(4), pp.325–334. doi:<https://doi.org/10.1002/da.20385>.

Kaplan, L. (1961). *The relationship between certain personality characteristics and achievement in instrumental music*.

Kemp, A.E. (1971). *A pilot study of the personality pattern of creative music students*. MA Dissertation.

Kemp, A.E. (1981). Personality Differences between the Players of String, Woodwind, Brass and Keyboard Instruments, and Singers. *Bulletin of the Council for Research in Music Education - Report of the Eighth International Seminar on Research in Music Education (Spring - Summer, 1981)*, 66/67, pp.33–38.

Kemp, A.E. (1996). Two: Introversion. In: *The Musical Temperament: Psychology and Personality of Musicians*. Oxford: Oxford University Press, pp.35–50.

Kenny, D.T., 2009. Kenny Music Performance Anxiety Inventory (K-MPAI). Inventory, received via personal communication, October 2024.

Kenny, D.T. (2010). The Role of Negative Emotions in Performance Anxiety. In: *Handbook of Music and Emotion: Theory, Research, Applications*. Oxford: Oxford University Press, pp.425–451.

Kenny, D.T. (2011). *The psychology of music performance anxiety*. Oxford: Oxford University Press.

Kenny, D.T. (2016). *Music Performance Anxiety: Theory, Assessment and Treatment*. Lambert Academic Publishing.

Kenny, D.T., Davis, P. and Oates, J. (2004). Music performance anxiety and occupational stress amongst opera chorus artists and their relationship with state and trait anxiety and

perfectionism. *Journal of Anxiety Disorders*, [online] 18(6), pp.757–777. doi:<https://doi.org/10.1016/j.janxdis.2003.09.004>.

Krueger, R.J. (1974). *An investigation of personality and music teaching success*. Thesis.

Lyubomirsky, S., King, L. and Diener, E. (2005). The Benefits of Frequent Positive Affect: Does Happiness Lead to Success? *Psychological Bulletin*, [online] 131(6), pp.803–855. doi:<https://doi.org/10.1037/0033-2909.131.6.803>.

Maksimović, J. and Evtimov, J. (2023). Positivism and post-positivism as the basis of quantitative research in pedagogy. *Research in Pedagogy*, [online] 13(1), pp.208–218. doi:<https://doi.org/10.5937/istrped2301208m>.

Martin, P.J. (1976). *Appreciation of music in relation to personality factors*. [PhD Thesis] Available at: <https://theses.gla.ac.uk/4291/1/1976martinphd.pdf> [Accessed 14 Nov. 2024].

McCrae, R.R. (2020). The Five-Factor Model of Personality: Consensus and Controversy. In: *The Cambridge Handbook of Personality Psychology*. Cambridge University Press, pp.129–141.

Osborne, M.S., Greene, D.J. and Immel, D.T. (2014). Managing performance anxiety and improving mental skills in conservatoire students through performance psychology training: a pilot study. *Psychology of Well-Being*, 4(1). doi:<https://doi.org/10.1186/s13612-014-0018-3>.

Özdemir, G. and Dalkıran, E. (2017). Identification of the Predictive Power of Five Factor Personality Traits for Individual Instrument Performance Anxiety. *Journal of Education and Training Studies*, 5(9), p.109. doi:<https://doi.org/10.11114/jets.v5i9.2522>.

Papageorgi, I., Creech, A. and Welch, G. (2011). Perceived performance anxiety in advanced musicians specializing in different musical genres. *Psychology of Music*, 41(1), pp.18–41. doi:<https://doi.org/10.1177/0305735611408995>.

Podsakoff, P.M., MacKenzie, S.B., Lee, J.-Y. and Podsakoff, N.P. (2003). Common Method Biases in Behavioral research: a Critical Review of the Literature and Recommended remedies. *Journal of Applied Psychology*, 88(5), pp.879–903. doi:<https://doi.org/10.1037/0021-9010.88.5.879>.

Roberts, B.W., Walton, K.E. and Viechtbauer, W. (2006). Patterns of mean-level change in personality traits across the life course: A meta-analysis of longitudinal studies. *Psychological Bulletin*, 132(1), pp.1–25. doi:<https://doi.org/10.1037/0033-2909.132.1.1>.

- Robins, R.W., Fraley, R.C. and Krueger, R.F. (2010). *Handbook of research methods in personality psychology*. New York ; London: Guilford.
- Rodríguez-Mora, Á. and López Díaz, R. (2020). Rasgos de personalidad y variables asociadas a la ansiedad escénica musical. *Ansiedad y Estrés*, 26(1). doi:<https://doi.org/10.1016/j.anyes.2020.01.002>.
- Ryan, C. and Andrews, N. (2009). An Investigation Into the Choral Singer's Experience of Music Performance Anxiety. *Journal of Research in Music Education*, [online] 57(2), pp.108–126. doi:<https://doi.org/10.1177/0022429409336132>.
- Sadler, M.E. and Miller, C.J. (2010). Performance Anxiety: A Longitudinal Study of the Roles of Personality and Experience in Musicians. *Social Psychological and Personality Science*, 1(3), pp.280–287. doi:<https://doi.org/10.1177/1948550610370492>.
- Saunders, M., Lewis, P. and Thornhill, A. (2009). *Research Methods for Business Students*. 5th ed. Pearson Education Limited.
- Schober, P., Boer, C. and Schwarte, L.A. (2018). Correlation coefficients: Appropriate Use and Interpretation. *Anesthesia & Analgesia*, 126(5), pp.1763–1768.
- Shevrin Venet, A. (2019). Role-Clarity and Boundaries for Trauma-Informed Teachers. *Educational Considerations*, [online] 44(2). doi:<https://doi.org/10.4148/0146-9282.2175>.
- Smith, A.J. and Rickard, N.S. (2004). Prediction of music performance anxiety via personality and trait anxiety in young musicians. *Australian Journal of Music Education*, 1, pp.3–12.
- Spahn, C., Krampe-Heni, F., Hohagen, J., Immerz, A. and Nusseck, M. (2024). Personality traits in musicians with different types of music performance anxiety. *Frontiers in Psychology*, 15. doi:<https://doi.org/10.3389/fpsyg.2024.1398095>.
- Steel, P., Schmidt, J. and Shultz, J. (2008). Refining the relationship between personality and subjective well-being. *Psychological Bulletin*, [online] 134(1), pp.138–161. doi:<https://doi.org/10.1037/0033-2909.134.1.138>.
- Švec, J.G., Schutte, H.K., Chen, C.J. and Titze, I.R. (2021). Integrative Insights into the Myoelastic-Aerodynamic Theory and Acoustics of Phonation. Scientific Tribute to Donald G. Miller. *Journal of Voice*, 37(3). doi:<https://doi.org/10.1016/j.jvoice.2021.01.023>.

Taylor, J. (2011). The intimate insider: negotiating the ethics of friendship when doing insider research. *Qualitative Research*, 11(1), pp.3–22. doi:<https://doi.org/10.1177/1468794110384447>.

Thomas, J.P. and Nettelbeck, T. (2013). Performance anxiety in adolescent musicians. *Psychology of Music*, 42(4), pp.624–634. doi:<https://doi.org/10.1177/0305735613485151>.

Vaag, J., Bjørngaard, J.H. and Bjerkeset, O. (2016). Symptoms of anxiety and depression among Norwegian musicians compared to the general workforce. *Psychology of Music*, 44(2), pp.234–248. doi:<https://doi.org/10.1177/0305735614564910>.

van de Mortel, T.F. (2008). Faking it: Social desirability response bias in self-report research. *Australian journal of advanced nursing*, 25(4), pp.40–48.

Zheng, F. (2022). Fostering Students' Well-Being: The Mediating Role of Teacher Interpersonal Behavior and Student-Teacher Relationships. *Frontiers in Psychology*, [online] 12(12). doi:<https://doi.org/10.3389/fpsyg.2021.796728>.

Appendices

Appendix A - Kenny's definition of MPA (2010)

Music performance anxiety is the experience of marked and persistent anxious apprehension related to musical performance that has arisen through specific anxiety-conditioning experiences. It is manifested through combinations of affective, cognitive, somatic and behavioural symptoms and may occur in a range of performance settings, but is usually more severe in settings involving high ego investment and evaluative threat. It may be focal (i.e. focused only on music performance), or occur comorbidly with other anxiety disorders, in particular social phobia. It affects musicians across the lifespan and is at least partially independent of years of training, practice, and level of musical accomplishment. It may or may not impair the quality of the musical performance.

Appendix B - K-MPAI-R and scoring form (Kenny, 2009)

Below are some statements about how you feel generally and how you feel **before or during a performance**. Please circle one number to indicate how much you agree or disagree with each statement.

		Strongly Disagree					Strongly Agree	
K_1	I generally feel in control of my life	6	5	4	3	2	1	0
K_2	I find it easy to trust others	6	5	4	3	2	1	0
K_3	Sometimes I feel depressed without knowing why	0	1	2	3	4	5	6
K_4	I often find it difficult to work up the energy to do things.....	0	1	2	3	4	5	6
K_5	Excessive worrying is a characteristic of my family	0	1	2	3	4	5	6
K_6	I often feel that life has not much to offer me.....	0	1	2	3	4	5	6
K_7	Even if I work hard in preparation for a performance, I am likely to make mistakes	0	1	2	3	4	5	6
K_8	I find it difficult to depend on others	0	1	2	3	4	5	6
K_9	My parents were mostly responsive to my needs	6	5	4	3	2	1	0
K_10	Prior to, or during a performance, I get feelings akin to panic.....	0	1	2	3	4	5	6
K_11	I never know before a concert whether I will perform well	0	1	2	3	4	5	6
K_12	Prior to, or during a performance, I experience dry mouth.....	0	1	2	3	4	5	6
K_13	I often feel that I am not worth much as a person.....	0	1	2	3	4	5	6
K_14	During a performance I find myself thinking about whether I'll even get through it	0	1	2	3	4	5	6
K_15	Thinking about the evaluation I may get interferes with my performance	0	1	2	3	4	5	6
K_16	Prior to, or during a performance, I feel sick or faint or have a churning in my stomach.....	0	1	2	3	4	5	6
K_17	Even in the most stressful performance situations, I am confident that I will perform well	6	5	4	3	2	1	0
K_18	I am often concerned about a negative reaction from the audience	0	1	2	3	4	5	6
K_19	Sometimes I feel anxious for no particular reason.....	0	1	2	3	4	5	6
K_20	From early in my music studies, I remember being anxious about performing	0	1	2	3	4	5	6

		Strongly disagree				Strongly Agree		
K_21	I worry that one bad performance may ruin my career	0	1	2	3	4	5	6
K_22	Prior to, or during a performance, I experience increased heart rate like pounding in my chest.....	0	1	2	3	4	5	6
K_23	My parents almost always listened to me	6	5	4	3	2	1	0
K_24	I give up worthwhile performance opportunities	0	1	2	3	4	5	6
K_25	After the performance, I worry about whether I played well enough.....	0	1	2	3	4	5	6
K_26	My worry and nervousness about my performance interferes with my focus and concentration.....	0	1	2	3	4	5	6
K_27	As a child, I often felt sad	0	1	2	3	4	5	6
K_28	I often prepare for a concert with a sense of dread and impending disaster.....	0	1	2	3	4	5	6
K_29	One or both of my parents were overly anxious.....	0	1	2	3	4	5	6
K_30	Prior to, or during a performance, I have increased muscle tension.....	0	1	2	3	4	5	6
K_31	I often feel that I have nothing to look forward to	0	1	2	3	4	5	6
K_32	After the performance, I replay it in my mind over and over...	0	1	2	3	4	5	6
K_33	My parents encouraged me to try new things	6	5	4	3	2	1	0
K_34	I worry so much before a performance, I cannot sleep.....	0	1	2	3	4	5	6
K_35	When performing without music, my memory is reliable.....	6	5	4	3	2	1	0
K_36	Prior to, or during a performance, I experience shaking or trembling or tremor.....	0	1	2	3	4	5	6
K_37	I am confident playing from memory	6	5	4	3	2	1	0
K_38	I am concerned about being scrutinized by others	0	1	2	3	4	5	6
K_39	I am concerned about my own judgement of how I will perform.....	0	1	2	3	4	5	6
K_40	I remain committed to performing even though it causes me great anxiety.....	0	1	2	3	4	5	6

©Kenny, D.T. (2009). *Kenny Music Performance Anxiety Inventor-Revised* (K-MPAI-R)

K-MPAI© (Kenny, 2009, 2011) FACTORS	SCORE	%
1. Proximal somatic anxiety and worry about performance		
K_10 Prior to, or during a performance, I get feelings akin to panic		
K_12 Prior to, or during a performance, I experience dry mouth		
K_14 During a performance I find myself thinking about whether I'll even get through it		
K_16 Prior to, or during a performance, I feel sick or faint or have a churning in my stomach		
K_22 Prior to, or during a performance, I experience increased heart rate like pounding in my chest		
K_26 My worry and nervousness about my performance interferes with my focus and concentration		
K_28 I often prepare for a concert with a sense of dread and impending disaster		
K_30 Prior to, or during a performance, I have increased muscle tension		
K_34 I worry so much before a performance, I cannot sleep		
K_36 Prior to, or during a performance, I experience shaking or trembling or tremor		
K_40 I remain committed to performing even though it causes me significant anxiety		
TOTAL/66		
2. Worry/dread (Negative cognitions) focused on self/other scrutiny		
K_7 Even if I work hard in preparation for a performance, I am likely to make mistakes		
K_15 Thinking about the evaluation I may get interferes with my performance		
K_18 I am often concerned about a negative reaction from the audience		
K_21 I worry that one bad performance may ruin my career		
K_25 After the performance, I worry about whether I played well enough		
K_32 After the performance, I replay it in my mind over and over		
K_38 I am concerned about being scrutinized by others		
K_39 I am concerned about my own judgment of how I performed		
TOTAL/48		
3. Depression/hopelessness (Psychological vulnerability)		
K_1 I generally feel in control of my life (-)*		
K_2 I find it easy to trust others (-)*		
K_3 Sometimes I feel depressed without knowing why		
K_4 I often find it difficult to work up the energy to do things		
K_6 I often feel that life has not much to offer me		
K_8 I find it difficult to depend on others		
K_13 I often feel that I am not worth much as a person		
K_31 I often feel that I have nothing to look forward to		
TOTAL/48		
4. Parental empathy		
K_9 My parents were mostly responsive to my needs (-)*		
K_23 My parents always listened to me (-)*		
K_27 As a child, I often felt sad		
K_33 My parents encouraged me to try new things (-)*		
TOTAL/24		
5. Memory		
K_35 When performing without music, my memory is reliable (-)*		
K_37 I am confident playing from memory (-)*		
TOTAL/12		
6. Generational transmission of anxiety		
K_5 Excessive worrying is a characteristic of my family		
K_19 Sometimes I feel anxious for no particular reason		
K_29 One or both of my parents were overly anxious		
TOTAL/18		
7. Anxious apprehension		
K_11 I never know before a concert whether I will perform well		
K_17 Even in the most stressful performance situations, I am confident that I will perform well (-)*		
K_24 I give up worthwhile performance opportunities due to anxiety		
TOTAL/18		
8. Biological vulnerability		
K_20 From early in my music studies, I remember being anxious about performing TOTAL/6		
OVERALL TOTAL/240		

Appendix C - Pearson correlation coefficients between all data categories

Pearson correlation coefficients for components of K-MPAI-R scores and Extraversion levels						
	K-MPAI-R score (/240)	Extraversion level	Friendliness	Gregariousness	Assertiveness	Activity Level
K-MPAI-R score (/240)	1.000 ($p=\text{nan}$)	-0.387 ($p=0.00464$)	-0.328 ($p=0.0176$)	-0.222 ($p=0.114$)	-0.196 ($p=0.164$)	-0.139 ($p=0.325$)
Extraversion level	-0.387 ($p=0.00464$)	1.000 ($p=\text{nan}$)	0.903 ($p=5.61\text{e-}20$)	0.838 ($p=8.99\text{e-}15$)	0.519 ($p=8.09\text{e-}05$)	0.554 ($p=2.02\text{e-}05$)
Friendliness	-0.328 ($p=0.0176$)	0.903 ($p=5.61\text{e-}20$)	1.000 ($p=\text{nan}$)	0.783 ($p=6.64\text{e-}12$)	0.432 ($p=0.00139$)	0.416 ($p=0.00217$)
Gregariousness	-0.222 ($p=0.114$)	0.838 ($p=8.99\text{e-}15$)	0.783 ($p=6.64\text{e-}12$)	1.000 ($p=\text{nan}$)	0.170 ($p=0.228$)	0.361 ($p=0.00848$)
Assertiveness	-0.196 ($p=0.164$)	0.519 ($p=8.09\text{e-}05$)	0.432 ($p=0.00139$)	0.170 ($p=0.228$)	1.000 ($p=\text{nan}$)	0.169 ($p=0.23$)
Activity Level	-0.139 ($p=0.325$)	0.554 ($p=2.02\text{e-}05$)	0.416 ($p=0.00217$)	0.361 ($p=0.00848$)	0.169 ($p=0.23$)	1.000 ($p=\text{nan}$)
Excitement seeking	-0.097 ($p=0.496$)	0.497 ($p=0.000178$)	0.250 ($p=0.0741$)	0.464 ($p=0.000529$)	0.031 ($p=0.825$)	0.181 ($p=0.198$)
Cheerfulness	-0.600 ($p=2.53\text{e-}06$)	0.551 ($p=2.27\text{e-}05$)	0.548 ($p=2.6\text{e-}05$)	0.404 ($p=0.00301$)	0.156 ($p=0.268$)	0.052 ($p=0.712$)
Pro status (Pro = 1, Amateur - 2)	0.109 ($p=0.461$)	-0.292 ($p=0.0438$)	-0.362 ($p=0.0113$)	-0.183 ($p=0.213$)	-0.203 ($p=0.165$)	-0.286 ($p=0.0488$)
Proximal somatic anxiety and worry about performance	0.802 ($p=9.08\text{e-}13$)	-0.310 ($p=0.0255$)	-0.244 ($p=0.0819$)	-0.172 ($p=0.224$)	-0.115 ($p=0.415$)	-0.152 ($p=0.282$)
Worry/dread (Negative cognitions)	0.828 ($p=3.77\text{e-}14$)	-0.330 ($p=0.0169$)	-0.269 ($p=0.054$)	-0.237 ($p=0.0913$)	-0.143 ($p=0.313$)	-0.053 ($p=0.709$)
Depression/hopelessness (Psychological vulnerability)	0.697 ($p=9.55\text{e-}09$)	-0.364 ($p=0.00807$)	-0.366 ($p=0.00769$)	-0.182 ($p=0.197$)	-0.198 ($p=0.16$)	-0.220 ($p=0.117$)
Parental empathy	0.485 ($p=0.000265$)	-0.132 ($p=0.351$)	-0.245 ($p=0.0802$)	-0.077 ($p=0.589$)	-0.155 ($p=0.274$)	0.108 ($p=0.448$)
Memory	0.438 ($p=0.00115$)	-0.301 ($p=0.0303$)	-0.207 ($p=0.142$)	-0.276 ($p=0.048$)	-0.093 ($p=0.512$)	-0.275 ($p=0.0486$)
Generational transmission of anxiety	0.591 ($p=3.99\text{e-}06$)	-0.086 ($p=0.545$)	-0.018 ($p=0.898$)	0.020 ($p=0.886$)	-0.039 ($p=0.786$)	-0.062 ($p=0.662$)
Anxious apprehension	0.734 ($p=8.86\text{e-}10$)	-0.302 ($p=0.0312$)	-0.209 ($p=0.141$)	-0.193 ($p=0.174$)	-0.284 ($p=0.0434$)	0.045 ($p=0.753$)
Biological vulnerability	0.508 ($p=0.000122$)	-0.008 ($p=0.955$)	0.136 ($p=0.338$)	0.124 ($p=0.383$)	-0.000 ($p=0.997$)	-0.118 ($p=0.407$)

Pearson correlation coefficients for components of K-MPAI-R scores and Extraversion levels

	Excitement seeking	Cheerfulness	Pro status (Pro = 1, Amateur - 2)	Proximal somatic anxiety and worry about performance	Worry/dread (Negative cognitions)
K-MPAI-R score (/240)	-0.097 ($p=0.496$)	-0.600 ($p=2.53e-06$)	0.109 ($p=0.461$)	0.802 ($p=9.08e-13$)	0.828 ($p=3.77e-14$)
Extraversion level	0.497 ($p=0.000178$)	0.551 ($p=2.27e-05$)	-0.292 ($p=0.0438$)	-0.310 ($p=0.0255$)	-0.330 ($p=0.0169$)
Friendliness	0.250 ($p=0.0741$)	0.548 ($p=2.6e-05$)	-0.362 ($p=0.0113$)	-0.244 ($p=0.0819$)	-0.269 ($p=0.054$)
Gregariousness	0.464 ($p=0.000529$)	0.404 ($p=0.00301$)	-0.183 ($p=0.213$)	-0.172 ($p=0.224$)	-0.237 ($p=0.0913$)
Assertiveness	0.031 ($p=0.825$)	0.156 ($p=0.268$)	-0.203 ($p=0.165$)	-0.115 ($p=0.415$)	-0.143 ($p=0.313$)
Activity Level	0.181 ($p=0.198$)	0.052 ($p=0.712$)	-0.286 ($p=0.0488$)	-0.152 ($p=0.282$)	-0.053 ($p=0.709$)
Excitement seeking	1.000 ($p=nan$)	0.073 ($p=0.605$)	-0.032 ($p=0.83$)	-0.208 ($p=0.138$)	-0.192 ($p=0.173$)
Cheerfulness	0.073 ($p=0.605$)	1.000 ($p=nan$)	-0.004 ($p=0.977$)	-0.379 ($p=0.00557$)	-0.450 ($p=0.00081$)
Pro status (Pro = 1, Amateur - 2)	-0.032 ($p=0.83$)	-0.004 ($p=0.977$)	1.000 ($p=nan$)	0.153 ($p=0.3$)	0.056 ($p=0.708$)
Proximal somatic anxiety and worry about performance	-0.208 ($p=0.138$)	-0.379 ($p=0.00557$)	0.153 ($p=0.3$)	1.000 ($p=nan$)	0.629 ($p=5.88e-07$)
Worry/dread (Negative cognitions)	-0.192 ($p=0.173$)	-0.450 ($p=0.00081$)	0.056 ($p=0.708$)	0.629 ($p=5.88e-07$)	1.000 ($p=nan$)
Depression/hopelessness (Psychological vulnerability)	0.151 ($p=0.285$)	-0.663 ($p=8.76e-08$)	0.122 ($p=0.41$)	0.235 ($p=0.093$)	0.489 ($p=0.000234$)
Parental empathy	0.321 ($p=0.0205$)	-0.465 ($p=0.000522$)	-0.126 ($p=0.392$)	0.164 ($p=0.244$)	0.179 ($p=0.204$)
Memory	-0.194 ($p=0.168$)	-0.135 ($p=0.34$)	0.204 ($p=0.165$)	0.347 ($p=0.0118$)	0.286 ($p=0.0397$)
Generational transmission of anxiety	-0.008 ($p=0.958$)	-0.309 ($p=0.0259$)	-0.018 ($p=0.905$)	0.351 ($p=0.0108$)	0.362 ($p=0.00836$)
Anxious apprehension	-0.240 ($p=0.0895$)	-0.339 ($p=0.015$)	0.116 ($p=0.436$)	0.641 ($p=4.14e-07$)	0.651 ($p=2.27e-07$)
Biological vulnerability	-0.162 ($p=0.251$)	-0.116 ($p=0.412$)	-0.007 ($p=0.964$)	0.551 ($p=2.31e-05$)	0.403 ($p=0.00308$)

Pearson correlation coefficients for components of K-MPAI-R scores and Extraversion levels						
	Depression/hopelessness (Psychological vulnerability)	Parental empathy	Memory	Generational transmission of anxiety	Anxious apprehension	Biological vulnerability
K-MPAI-R score (/240)	0.697 ($p=9.55e-09$)	0.485 ($p=0.000265$)	0.438 ($p=0.00115$)	0.591 ($p=3.99e-06$)	0.734 ($p=8.86e-10$)	0.508 ($p=0.000122$)
Extraversion level	-0.364 ($p=0.00807$)	-0.132 ($p=0.351$)	-0.301 ($p=0.0303$)	-0.086 ($p=0.545$)	-0.302 ($p=0.0312$)	-0.008 ($p=0.955$)
Friendliness	-0.366 ($p=0.00769$)	-0.245 ($p=0.0802$)	-0.207 ($p=0.142$)	-0.018 ($p=0.898$)	-0.209 ($p=0.141$)	0.136 ($p=0.338$)
Gregariousness	-0.182 ($p=0.197$)	-0.077 ($p=0.589$)	-0.276 ($p=0.048$)	0.020 ($p=0.886$)	-0.193 ($p=0.174$)	0.124 ($p=0.383$)
Assertiveness	-0.198 ($p=0.16$)	-0.155 ($p=0.274$)	-0.093 ($p=0.512$)	-0.039 ($p=0.786$)	-0.284 ($p=0.0434$)	-0.000 ($p=0.997$)
Activity Level	-0.220 ($p=0.117$)	0.108 ($p=0.448$)	-0.275 ($p=0.0486$)	-0.062 ($p=0.662$)	0.045 ($p=0.753$)	-0.118 ($p=0.407$)
Excitement seeking	0.151 ($p=0.285$)	0.321 ($p=0.0205$)	-0.194 ($p=0.168$)	-0.008 ($p=0.958$)	-0.240 ($p=0.0895$)	-0.162 ($p=0.251$)
Cheerfulness	-0.663 ($p=8.76e-08$)	-0.465 ($p=0.000522$)	-0.135 ($p=0.34$)	-0.309 ($p=0.0259$)	-0.339 ($p=0.015$)	-0.116 ($p=0.412$)
Pro status (Pro = 1, Amateur - 2)	0.122 ($p=0.41$)	-0.126 ($p=0.392$)	0.204 ($p=0.165$)	-0.018 ($p=0.905$)	0.116 ($p=0.436$)	-0.007 ($p=0.964$)
Proximal somatic anxiety and worry about performance	0.235 ($p=0.093$)	0.164 ($p=0.244$)	0.347 ($p=0.0118$)	0.351 ($p=0.0108$)	0.641 ($p=4.14e-07$)	0.551 ($p=2.31e-05$)
Worry/dread (Negative cognitions)	0.489 ($p=0.000234$)	0.179 ($p=0.204$)	0.286 ($p=0.0397$)	0.362 ($p=0.00836$)	0.651 ($p=2.27e-07$)	0.403 ($p=0.00308$)
Depression/hopelessness (Psychological vulnerability)	1.000 ($p=nan$)	0.573 ($p=9.08e-06$)	0.221 ($p=0.116$)	0.467 ($p=0.000481$)	0.369 ($p=0.00767$)	0.191 ($p=0.174$)
Parental empathy	0.573 ($p=9.08e-06$)	1.000 ($p=nan$)	0.150 ($p=0.288$)	0.348 ($p=0.0115$)	0.194 ($p=0.172$)	-0.077 ($p=0.585$)
Memory	0.221 ($p=0.116$)	0.150 ($p=0.288$)	1.000 ($p=nan$)	0.125 ($p=0.377$)	0.384 ($p=0.00541$)	0.158 ($p=0.263$)
Generational transmission of anxiety	0.467 ($p=0.000481$)	0.348 ($p=0.0115$)	0.125 ($p=0.377$)	1.000 ($p=nan$)	0.201 ($p=0.157$)	0.360 ($p=0.00877$)
Anxious apprehension	0.369 ($p=0.00767$)	0.194 ($p=0.172$)	0.384 ($p=0.00541$)	0.201 ($p=0.157$)	1.000 ($p=nan$)	0.354 ($p=0.0108$)
Biological vulnerability	0.191 ($p=0.174$)	-0.077 ($p=0.585$)	0.158 ($p=0.263$)	0.360 ($p=0.00877$)	0.354 ($p=0.0108$)	1.000 ($p=nan$)

Appendix D - Coping strategies survey

12/20/24, 3:20 PM

Coping strategies - MPA

Coping strategies - MPA

This is the second part of the research on music performance anxiety and personality traits.

This survey is provided to participants who scored **105 or higher** on the K-MPAI (Kenny Music Performance Anxiety Inventory), which is considered a cut-off point for significant performance anxiety.

You may skip any question that you do not wish to answer.

📥 Again, I have copied the participants information below, in case you would like to go through it again, but you may have read it already on my website and on the first Google Form you answered to.

Project title as of October 21st, 2024:

Investigating the correlation between extraversion levels and music performance anxiety (MPA) in adult amateur and professional singers: Developing personalised coping strategies for effective MPA management in the singing studio

Research question as of October 21st, 2024:

How do levels of extraversion, as measured by the IPIP-NEO, correlate with varying levels of music performance anxiety (MPA) in adult amateur and professional singers, and can personalized coping strategies based on extraversion levels be identified to help students manage MPA more effectively in a singing studio context?

Purpose of the study:

This study is being conducted as part of a Master's Degree in Voice Pedagogy at the University of Wales Trinity Saint David. It aims to investigate how extraversion and introversion influence music performance anxiety (MPA) in singers. The goal is to identify patterns that can lead to more personalized strategies for managing MPA. I am looking for adult amateur and professional solo/lead singers. Your input will help me better understand how extraversion and introversion affect MPA and how tailored strategies can be developed to support singers experiencing MPA.

What will happen:

If you agree to participate:

1. You will be asked to complete two inventories:

- First, the **IPIP-NEO-120** (to assess your personality traits, specifically extraversion levels). At this point, you may have already completed it but have not shared the results with the researcher yet.
- Then, the **K-MPAI** (to assess your levels of music performance anxiety). This is this form.

The inventories can be completed at any time and do not need to be done consecutively. The first test (IPIP-NEO-120) is usually completed in 15-25 minutes, and the second one

(K-MPAI) is usually completed in 10 minutes.

2. You may also be invited to participate in an optional survey about your coping strategies and/or an interview to share more in-depth information about your experiences and coping strategies. **You are at this stage of the process now.**

Participation is voluntary:

Your participation is entirely voluntary. You may choose to stop or withdraw at any point for any reason and without any consequences.

Confidentiality and anonymity:

All data you provide will be treated as confidential. Your responses will be anonymized, and no personally identifiable information will be included in the final report. Although the personality inventory (IPIP-NEO) is conducted via a third-party platform, psytests.org, the platform affirms that no personal data is collected and your results are anonymized. Here is their privacy policy: *"We do not solicit, collect, nor retain any personally identifiable information from users. We do not collect or retain users' testing results. A direct link to the Report, provided at the end of the assessment, contains all test scores, required to generate the Report page, and isn't associated with any particular user. Link is not unique: different persons, receiving the same test scores, will be provided with the same link. We do not collect or retain users' answers to the tests. A direct link to the completed Form, provided by explicit user request, contains all the answers, required to generate the Form page, and isn't associated with any particular user. Link is not unique: different persons, answering the same way, will be provided with the same link. We do not track users across the site or to other websites on the internet using cookies or any other methods."*

Data handling:

All data will be securely stored in password-protected, encrypted files, and only the researcher can access it. The data will be stored until the research is complete and then securely deleted.

Emotional discomfort:

It is possible that discussing your experiences with MPA may cause emotional discomfort. If at any point you feel uncomfortable, you are free to discontinue the inventory, survey, or interview. Should you choose to withdraw from participation, there will be no consequences, and no pressure will be exerted by the researcher to encourage your continuation. If you feel the need to express your concerns about emotional discomfort, may it be before, during or after the inventories, survey or interview, this can be done by contacting the researcher at contact@howlingbirds.com

Benefits of the study:

The information you provide will contribute to a better understanding of how to support singers in managing music performance anxiety through more personalized coping strategies. If you choose to receive them, you will be contacted with the study results at the conclusion of the research.

Outline of the study:

Data from participants will be collected and analyzed using mixed methods. The participants will take the IPIP-NEO-120 and the K-MPAI to measure extraversion levels and performance anxiety. Data collection will commence when participants give their consent before sharing their IPIP-NEO link and taking the K-MPAI.

Data will be summarised using descriptive statistics and categorized by MPA and extraversion levels.

Participants suffering from MPA will then have the possibility of answering a survey on coping strategies. Interviews may be conducted. Coping strategies will be analysed with thematic analysis and/or frequency counts to determine which strategies are the most common, which may or may not be validated by the interviews.

Questions:

If you have any questions before, during, or after your participation, feel free to contact me at contact@howlingbirds.com

Sources:

Kenny, D.T. (2009). *Kenny Music Performance Anxiety Inventory-Revised (K-MPAI-R)*

Kenny, D. T. (2011). *The Psychology of Music Performance Anxiety*. Oxford University Press.

* Indique une question obligatoire

1. Consent *

Plusieurs réponses possibles.

☐ I have read the participant information and give my consent to participate in the study. I agree to my data being collected and used in an anonymized manner. I understand that I can withdraw from the study at any time, for any reason, without consequences. I also understand that I can request my data to be erased at any point during or after the study by contacting the researcher at the address provided in the participants information.

2. Could you please share the email address where you received the link to this form? *

This will help me compare coping strategies with the extraversion levels you've already provided on the first form.

3. **1) What strategies or methods do you use before a performance to manage your music performance anxiety?**

This includes the entire preparation period leading up to the performance but does not include the day of.

4. **2) What strategies do you use on the day of the performance to cope with your music performance anxiety, from when you wake up to 1 second before going on stage?**

5. **3) Do you use any specific strategies during the performance to stay calm? If so, could you describe them?**

6. **4) Which techniques or strategies do you find most effective in reducing your music performance anxiety? Why do you think they work well for you?**

7. **5) Are there any methods you've tried in the past that didn't work for you? Could you explain why?**

8. **6) Do you have any routines or stress management habits outside of your performances that you think help you indirectly during performances?**

9. **7) If you were to recommend a strategy to another singer struggling with performance anxiety, what would you suggest?**

10. **If you wish to add something, please feel free to do so below**

11. While interviews are not currently planned, would you be interested in participating if they were added at a later stage? If so, may we contact you via the email address you provided at the beginning of the survey?

Plusieurs réponses possibles.

- ☐ Yes
☐ No

Thank you!

Thank you very much for your time and participation in this study. Your input is **invaluable**.

If you selected the option to receive results of the research in the first survey, they will be sent to you during the first trimester of 2025.

May you have any question or concern, you can contact me at contact@howlingbirds.com

Happy singing!

Ce contenu n'est ni rédigé, ni cautionné par Google.

Google Forms

Responses - Participant 1

1) What strategies or methods do you use before a performance to manage your music performance anxiety?

This includes the entire preparation period leading up to the performance but does not include the day of.

Currently enrolled in a vocal training program that emphasizes the mind body connection. We work on technique to produce a more solid, consistent sound, and also mindset coaching. I'm at the beginning stages so currently just working on technique, which, when fully anchored will hopefully help to relieve anxiety. I practise technique 2x a week for about 6 hours - each practise is like a singing lesson. I evaluate my progress by how my throat feels - if I end up without pain I know I've relieved some tension.

2) What strategies do you use on the day of the performance to cope with your music performance anxiety, from when you wake up to 1 second before going on stage?

I don't think about it much - I find that thinking about it makes it worse.

3) Do you use any specific strategies during the performance to stay calm? If so, could you describe them?

working on technique right now. try to use correct technique - in performances I currently find the anxiety and panic obliterates the technical - I'm working on recognising this and correcting it when it happens. I truly believe that having more awareness and control of my body will ultimately help with performance. I have learned that my entire body is the instrument, not just the vocal folds.

4) Which techniques or strategies do you find most effective in reducing your music performance anxiety? Why do you think they work well for you?

feeling confident and aware in my body. relaxation, apoggio breathing for support. focusing on that rather than what's going on in my brain.

5) Are there any methods you've tried in the past that didn't work for you? Could you explain why?

positive self talk - substituting encouraging, validating words for the automatic negativity. I'm finding the physical awareness works better for me.

6) Do you have any routines or stress management habits outside of your performances that you think help you indirectly during performances?

no. mindfulness, meditation isn't easy for me.

7) If you were to recommend a strategy to another singer struggling with performance anxiety, what would you suggest?

the things that work for me - build confidence in your abilities, educate yourself as much as possible, get appropriate therapy, all of which will translates into confidence when singing.

8) If you wish to add something, please feel free to do so below

This is a work in progress and I am at the beginning stages. I am determined to reach my fullest potential as a singer and am fortunate to have found a program that is helping. It's by Arden Kaywin from Los Angeles.

Responses - Participant 2

1) What strategies or methods do you use before a performance to manage your music performance anxiety?

This includes the entire preparation period leading up to the performance but does not include the day of.

Continuous listening to of repertoire, mentally downplaying the event, trying to memorise repertoire to permit more mental and physical freedom

2) What strategies do you use on the day of the performance to cope with your music performance anxiety, from when you wake up to 1 second before going on stage?

All of the aforementioned, plus a small amount of breathing exercises and some light stretching, as well as drinking more water than usual

3) Do you use any specific strategies during the performance to stay calm? If so, could you describe them?

Trying to avoid eye-contact with audience where possible, even if there are familiar people in the audience, and also trying to gauge pacing throughout the event

4) Which techniques or strategies do you find most effective in reducing your music performance anxiety? Why do you think they work well for you?

None are consistent, therefore it is hard to evaluate - at the end of the day, the anxiety remains as I am diagnosed with anxiety and am dealing with this via medication and emotional coping methods

5) Are there any methods you've tried in the past that didn't work for you? Could you explain why?

CBT - was not in the right cognitive state to carry out techniques, especially due to self-insistence on perfectionism and black-or-white thinking.

6) Do you have any routines or stress management habits outside of your performances that you think help you indirectly during performances?

Current emotional coping methods have allowed me to think less about the "quality" of the performance (thus reducing anxiety to an extent), and more of the "quality" of the self in the performance. Yet to be tested in actual performance, as I have been out of the scene for the past 18 months, but in theory I feel this will be effective if/when I return to performing.

7) If you were to recommend a strategy to another singer struggling with performance anxiety, what would you suggest?

There is no strategy I can recommend, as the root of the performance anxiety is different according to each person's circumstances, and I feel that performance anxiety may either be a stand-alone condition (which may also be fleeting) or indicative of an overall anxiety, the latter of which would require a much more holistic strategy overall. The body, mind, and spirit must all be ready to address the performance anxiety before it can be tackled, which is why I cannot recommend a strategy beyond "Self-care".

8) If you wish to add something, please feel free to do so below

No answer.

Responses - Participant 3

1) What strategies or methods do you use before a performance to manage your music performance anxiety?

This includes the entire preparation period leading up to the performance but does not include the day of.

Lots of practice so that I feel confident. Vocal warmups. Doing everything I can to ensure my voice is in good shape. Avoiding excess dairy, drinking throat coat tea, etc.

2) What strategies do you use on the day of the performance to cope with your music performance anxiety, from when you wake up to 1 second before going on stage?

Try to keep my normal morning routine. Try to eat enough food to sustain me throughout the day and the performance, it can be hard for me to eat when I'm nervous. Throat coat tea, salt water gargle, gentle warmups. Run through the song(s) one more time. 1-2 bourbon hot toddies before hand if available. I often get quiet and focused right before a performance, I don't like people talking to me. Internal positive self talk/mantras: you're going to do great, you've practiced and you know you've got this, you are more than capable, etc. Deep breaths and meditation.

3) Do you use any specific strategies during the performance to stay calm? If so, could you describe them?

Try not to overthink it. Almost meditative, let your mind go blank and focus only on the music, how your body feels. Act like you're doing it at home when you're alone and really letting loose. I basically black out during performances, I remember singing but I don't take in the crowd or external stimuli.

4) Which techniques or strategies do you find most effective in reducing your music performance anxiety? Why do you think they work well for you?

I think a lot of it is simply mental health work. Positive self-talk. Realizing even professionals aren't perfect live, that studio recordings are heavily produced. Learning to accept that I might mess up. Developing more confidence in myself outside of singing. Also drunk karaoke.

5) Are there any methods you've tried in the past that didn't work for you? Could you explain why?

No answer.

6) Do you have any routines or stress management habits outside of your performances that you think help you indirectly during performances?

No answer.

7) If you were to recommend a strategy to another singer struggling with performance anxiety, what would you suggest?

Therapy. Working on self-confidence in general. Make sure you are comfortable and feel confident in what you wear that day. Focus on the things within your control and try to trust yourself.

8) If you wish to add something, please feel free to do so below

Anxiety and performance are interesting. Anxiety can often feel negative, but it can also be a sign of excitement. And I think we can use that anxiety as fuel if we change our mindset around it. While I have a lot of performance anxiety, I also love the feeling while I'm doing it. And I'm more comfortable in front of a large audience of strangers than I am in an intimate setting, especially with friends and family. The fear of judgement by people I care about is scarier than flubbing in front of a bunch of people I'll probably never meet and whose opinions I don't actually care about. It's also more about me being a perfectionist and judging myself too harshly. You have to learn to be nicer to yourself.

Responses - Participant 4

1) What strategies or methods do you use before a performance to manage your music performance anxiety?

This includes the entire preparation period leading up to the performance but does not include the day of.

Practicing as often as possible (within healthy bounds), talking to loved ones, cracking jokes (to make the performance seem less impactful/serious), thinking about limitations and accepting ones I can't control

2) What strategies do you use on the day of the performance to cope with your music performance anxiety, from when you wake up to 1 second before going on stage?

Doing breathing exercises, avoiding potential anxiety triggers (e.g. social media except for close friends)

3) Do you use any specific strategies during the performance to stay calm? If so, could you describe them?

Focusing only on body connection, closing eyes when possible

4) Which techniques or strategies do you find most effective in reducing your music performance anxiety? Why do you think they work well for you?

Breathing and other physiological techniques - most effective when I target the physiological symptoms of anxiety directly because they have the greatest impact on my singing

5) Are there any methods you've tried in the past that didn't work for you? Could you explain why?

Imagining the audience naked - I still have to impress them, nude or not

6) Do you have any routines or stress management habits outside of your performances that you think help you indirectly during performances?

DBT techniques serve me well. Being able to manage my emotions intellectually prevents them from becoming problematic during times when I have to react fast (e.g. performances)

7) If you were to recommend a strategy to another singer struggling with performance anxiety, what would you suggest?

1. Run face under cold water and breathe slowly/deeply for 10 minutes.
2. Examine the magnitude of possible consequences and reason that none of them will result in one's life physically ending

8) If you wish to add something, please feel free to do so below

No answer.

Responses - Participant 5

1) What strategies or methods do you use before a performance to manage your music performance anxiety?

This includes the entire preparation period leading up to the performance but does not include the day of.

Practice, practice practice. Prepare the set list.

2) What strategies do you use on the day of the performance to cope with your music performance anxiety, from when you wake up to 1 second before going on stage?

Nothing really. Before I go on stage I may have 1 or 2 drinks.

3) Do you use any specific strategies during the performance to stay calm? If so, could you describe them?

I look above the audience, focus on a spot at the back of the room, look up, dance. I also have a drink on stage. My husband is my guitar player so he keeps me calm. I am also very close with my band mates so looking at them and smiling or laughing helps calm me down.

4) Which techniques or strategies do you find most effective in reducing your music performance anxiety? Why do you think they work well for you?

Knowing the songs really well. Being mentally and physically prepared by drinking lots of water.

5) Are there any methods you've tried in the past that didn't work for you? Could you explain why?

Getting too drunk! Smoking pot before going on stage. I NEVER do that now!

6) Do you have any routines or stress management habits outside of your performances that you think help you indirectly during performances?

I do cardio 5 days a week with strengthens my lung/breath capacity. Stop smoking pot at least a week before a show. Right now I don't smoke pot because I have really bad asthma and it's cold and flu season in Canada right not. I have a show tonight in fact!!

7) If you were to recommend a strategy to another singer struggling with performance anxiety, what would you suggest?

I'm a bad influence. I would say have a drink--but no drugs. Also--practice practice practice! If you mess up-just let the band keep playing and then join in when you catch the next measure of the song.

8) If you wish to add something, please feel free to do so below

No answer.

Responses - Participant 6

1) What strategies or methods do you use before a performance to manage your music performance anxiety?

This includes the entire preparation period leading up to the performance but does not include the day of.

I rarely feel anxious :) But I have routines, such as distributing to musicians the lead sheets I prepared, summing up the few songs or parts where we need to pay attention, and rehearsing the most difficult tune when doing the balance. Then I relax in two ways, firstly by engaging with the audience (walking around and creating a first connection), secondly by going to the bathrooms to warm up / relax my voice :). I also always start my performance engaging the audience to continue building our connection. Occasionally I'll order a gin & tonic, but only Hendrick's with cucumber :))) + lots of water handy.

2) What strategies do you use on the day of the performance to cope with your music performance anxiety, from when you wake up to 1 second before going on stage?

It's all about my check list, reading most lyrics a last time, packing the gears I need to bring to the gig (I often bring extra items in case musicians forget theirs, such as extra lead sheets or music stands). I send them gentle reminders and I order cabs or pick them up (like a kind of parental supervision, but in a friendly manner of course :))) And I do my best not to sing (or even hum) so that I get "fresh with no worries" on stage. I don't eat much before.

3) Do you use any specific strategies during the performance to stay calm? If so, could you describe them?

I tend to engage with the musicians and the audience throughout the gig. With the musicians to keep connected and maintain harmony between ourselves + acknowledging regularly their talent and contribution during the performance. With the audience I play with emotions, often with soft jokes, sometimes with short (but inspiring) story telling, or even with moments of introspection when a song is appropriate for this. As a result, anxiety isn't really an issue, but as I am a perfectionist, I sometimes put unnecessary pressure on myself.

4) Which techniques or strategies do you find most effective in reducing your music performance anxiety? Why do you think they work well for you?

I work hard to prepare a performance, so I play hard (i.e., lots of fun) when performing.

I make sure musicians are happy to be there and have what they need to enjoy the gig.

5) Are there any methods you've tried in the past that didn't work for you? Could you explain why?

It fits my personality and I enjoy entertaining people, so having fun (be it crying when singing if the song is sad or moving) is just what I need not to be anxious. I focus on the moment. And if the band is at ease + is having fun performing with me, then I get positive feedback from musicians too, thus the group effect makes anxiety non existing... somehow :)

6) Do you have any routines or stress management habits outside of your performances that you think help you indirectly during performances?

Singing is my night job, I am a former senior exec. with lots of coaching experience. I "borrow" various simple coaching techniques which can be leveraged in any life circumstance.

7) If you were to recommend a strategy to another singer struggling with performance anxiety, what would you suggest?

That's a tough one... everybody is different and "one size fits it all" doesn't apply to artists, too much individuality and sensitivity. When coaching I only provide custom counselling. But I would say that, in general, focusing on how to enjoy rather than how to perform can help connect better with the moment and ourselves. That leaves less room for anxiety to get in :)

8) If you wish to add something, please feel free to do so below

Learning jazz vocal has been the greatest lesson of humility I could get. While I do not experience much anxiety, I am always conscious of how much more I need to work and improve, so as to enjoy even more my singing.

Appendix E - Ethics form



PG2 / E1 FORM

APPLICATION FOR ETHICAL APPROVAL

RESEARCH STUDENTS

This form is to be completed by the student within **SIX** months for full-time students and **TWELVE** months for part time students, after the commencement of the research degree or following progression to Part Two of your course.

Once complete, submit this form via the **MyTSD Doctoral College Portal** at (<https://mytsd.uwtsd.ac.uk>).

This document is also available in Welsh.

RESEARCH STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk, with the title 'Ethical Approval' followed by your name.

STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.

In order for research to result in benefit and minimise risk of harm, it must be conducted ethically. A researcher may not be covered by the University's insurance if ethical approval has not been obtained prior to commencement.

The University follows the OECD Frascati manual definition of **research activity**: "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications". As such this covers activities undertaken by members of staff, postgraduate research students, and both taught postgraduate and undergraduate students working on dissertations/projects.

The individual undertaking the research activity is known as the "principal researcher".

Ethical approval is not required for routine audits, performance reviews, quality assurance studies, testing within normal educational requirements, and literary or artistic criticism.

Please read the notes for guidance before completing ALL sections of the form.

This form must be completed and approved prior to undertaking any research activity. Please see Checklist for details of process for different categories of application.

SECTION A: About You (Principal Researcher)

1	Full Name:	Florie-Anne Gounelle			
2	Tick all boxes that apply:	Member of staff:	☐	Honorary research fellow:	☐
	Undergraduate Student	☐	Taught Postgraduate Student	☒	Postgraduate Research Student
3	Institute/Academic Discipline/ Centre:	WAPPAR / University of Wales Trinity Saint David / Voice Study Centre			

4	Campus:	Carmarthen (Online)
5	E-mail address:	gounelleflorie@gmail.com
6	Contact Telephone Number:	+1 825 994 0354
For students:		
7	Student Number:	2316444
8	Programme of Study:	MA Professional Practice (Voice Pedagogy)
9	Director of Studies/Supervisor:	Louise Emanuel/Julie Crossman/Debbie Winter

SECTION B: Approval for Research Activity

1	Has the research activity received approval in principle? (please check the Guidance Notes as to the appropriate approval process for different levels of research by different categories of individual)	YES	☒	NO	☐
					Date
2	If Yes, please indicate source of approval (and date where known): Approval in principle must be obtained from the relevant source prior to seeking ethical approval	Research Degrees Committee	☐		
Institute Research Committee		☐			
Other (write in) WAPPAR Ethics Board Representative / Institute for Management and Business Studies		☒			

SECTION C: Internal and External Ethical Guidance Materials

Please list the core ethical guidance documents that have been referred to during the completion of this form (including any discipline-specific codes of research ethics, location-specific codes of research ethics, and also any specific ethical guidance relating to the proposed methodology). Please tick to confirm that your research proposal adheres to these codes and guidelines. You may add rows to this table if needed.	
1	UWTSD Research Ethics & Integrity Code of Practice ☒
2	UWTSD Research Data Management Policy ☒
3	Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2) ☒
4	Tri-Agency Research Data Management Policy ☒

SECTION D: External Collaborative Research Activity

If there are external collaborators then you should gain consent from the contact persons to share their personal data with the university. If there are no external collaborators then leave this section blank and continue to section E.

1	Institution					
2	Contact person name					
3	Contact person e-mail address					
4	Is your research externally funded?	YES	☐	NO	☐	
5	Are you in receipt of a KESS scholarship?	YES	☐	NO	☐	
6	Are you specifically employed to undertake this research in either a paid or voluntary capacity?	Voluntary	YES	☐	NO	☐
7		Employed	YES	☐	NO	☐
8	Is the research being undertaken within an existing UWTSD Athrofa Professional Learning Partnership (APLP)?	If YES then the permission question below does not need to be answered.	YES	☐	NO	☐
9	Has permission to undertake the research has been provided by the partner organisation?	(If YES attach copy) If NO the application cannot continue	YES	☐	NO	☐

Where research activity is carried out in collaboration with an external organisation

10	Does this organisation have its own ethics approval system?	YES	☐	NO	☐
If Yes, please attach a copy of any final approval (or interim approval) from the organisation (this may be a copy of an email if appropriate).					

SECTION E: Details of Research Activity

1	Indicative title:	Exploring the susceptibility of personality traits, as identified by self-reported assessments, to music performance anxiety (MPA) among adult amateur and professional singers: Leveraging psychometric scales for identifying, anticipating, and mitigating MPA in singing students			
2	Proposed start date:	26th September 2024	Proposed end date:	21st January 2025	

	Introduction to the Research (maximum 300 words per section) Ensure that you write for a <u>Non-Specialist Audience</u> when outlining your response to the points below: • <i>Purpose of Research Activity</i> • <i>Proposed Research Question</i> • <i>Aims of Research Activity</i> • <i>Objectives of Research Activity</i> Demonstrate, briefly, how Existing Research has informed the proposed activity and explain • <i>What the research activity will add to the body of knowledge</i> • <i>How it addresses an area of importance.</i>
3	Purpose of Research Activity Investigate whether specific personality traits, as identified by self-reported assessments, are more susceptible to music performance anxiety (MPA) among adult amateur and professional singers. This study also explores how educators can use validated psychometric scales to better anticipate and address MPA in their students. By examining the link between personality traits and anxiety, the research aims to uncover strategies for more personalized support in music education. While existing research acknowledges the individualized nature of MPA, there is limited understanding of how personality traits influence its experience and management for singers. This study aims to fill this gap by identifying common patterns across personality types, potentially leading to more tailored and effective educational interventions.
4	Research Question Are certain personality traits, as identified by self-reported psychometric scales, more susceptible to experiencing music performance anxiety (MPA) among adult amateur and professional singers, and if so, how can educators leverage these assessments to potentially anticipate, identify, and mitigate the effects of MPA in their students?
5	Aims of Research Activity Explore a potential relationship between personality types/traits and MPA in singers. Determine if specific personality traits, as identified by self-reported assessments, are more prone to experiencing MPA. Explore if/how these personality types correlate with particular coping mechanisms. Determine if/how personality traits can inform more effective and personalized strategies for managing MPA. Provide insights that could potentially help educators anticipate and mitigate the effects of MPA in their students.
6	Objectives of Research Activity Conduct surveys to assess MPA levels of participants and its manifestations. Conduct validated psychometric scales to measure specific psychological traits related to MPA. Analyze data to identify possible correlations between specific personality traits and MPA. Conduct interviews/focus groups to gather insights on coping strategies used by different personality types. Develop recommendations for educators on how to use psychometric scales to better support students with MPA.

	Proposed methods (maximum 600 words) Provide a brief summary of all the methods that may be used in the research activity, making it clear what specific techniques may be used. If methods other than those listed in this section are deemed appropriate later, additional ethical approval for those methods will be needed. You do not need to justify the methods here, but should instead describe how you intend to collect the data necessary for you to complete your project.
7	Overarching methodology: mixed methods Literature review Questionnaires: one or more psychometric scales, selected for their relevance with the research, to gather personality traits data. Psychometric scales will be chosen based on their credibility within the social sciences, therefore be validated and evaluated. These may include the Mindful Attention Awareness Scale (MAAS), the IPIP-NEO, the K-MPAI, the M-MPAS, the PAQ, and/ or the General Self-Efficacy Scale (GSES). Surveys used to gather descriptive statistics on MPA as experienced (or not) by the participants Interviews and/or focus groups to triangulate as well as to gather more in-depth understanding of personal experience with MPA Thematic and/or comparative analysis to analyse data Contingency tables and/or visual data representation
	Location of research activity Identify all locations where research activity will take place.
8	Canada, using a private room at the public library or a singing studio, but close to other individuals/ Online (Zoom)
	Research activity outside of the UK If research activity will take place overseas, you are responsible for ensuring that local ethical considerations are complied with and that the relevant permissions are sought. Specify any local guidelines (e.g. from local professional associations/learned societies/universities) that exist and whether these involve any ethical stipulations beyond those usual in the UK (provide details of any licenses or permissions required). Also specify whether there are any specific ethical issues raised by the local context in which the research activity is taking place, for example, particular cultural and/or legal sensitivities or vulnerabilities of participants. If you live in the country where you will do the research then please state this.
9	Canadian ethical guidelines for research: Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2) Canadian ethical guidelines for data in research: Tri-Agency Research Data Management Policy This guidelines will be thoroughly followed. I will take into account any specific cultural or legal sensitivities that might affect participants, such as language barriers, cultural norms, or legal restrictions on data collection and privacy. This includes ensuring that informed consent is obtained in a culturally appropriate manner and that participants fully understand their rights and the nature of the research. I am familiar with the location where the research will take place, be it “the country of Canada” or “the meeting rooms at the public library” used for face-to-face interviews/focus groups. I am familiar with the local context, including cultural norms and legal requirements. This familiarity will guide my approach to ethical compliance and ensure that the research is conducted respectfully and appropriately.

10	Use of documentation not in the public domain: Are any documents NOT publicly available?	NO	☐
		YES	☒
11	I will be using participants' results from the psychometric scales, which are considered personal data and are not publicly available. The results of the personality tests will be collected directly from the participants through secure online surveys. Participants will be fully informed about the purpose of the research and how their data will be used. Informed consent will be obtained prior to data collection. The IPIP-NEO inventory may be used and its results would be calculated by the online platform psytests.org. The platform's privacy statement is as follows: "We do not solicit, collect, nor retain any personally identifiable information from users. We do not collect or retain users' testing results. A direct link to the Report, provided at the end of the assessment, contains all test scores, required to generate the Report page, and isn't associated with any particular user. Link is not unique: different persons, receiving the same test scores, will be provided with the same link. We do not collect or retain users' answers to the tests. A direct link to the completed Form, provided by explicit user request, contains all the answers, required to generate the Form page, and isn't associated with any particular user. Link is not unique: different persons, answering the same way, will be provided with the same link. We do not track users across the site or to other websites on the internet using cookies or any other methods." Music performance anxiety (MPA) scales may be used. The results of the MPA tests will be collected directly from the participants through secure online surveys. Participants will be fully informed about the purpose of the research and how their data will be used. Informed consent will be obtained prior to data collection. The collection, storage, and processing of this data will be carried out in strict accordance with the General Data Protection Regulation (GDPR) 2016 and the Data Protection Act 2018. All personal data, including personality test results, will be anonymized or pseudonymized to protect participant identities. The data will be stored securely on encrypted devices or cloud storage solutions that are GDPR-compliant, with access restricted to authorized research personnel only. Data will be retained only for the duration necessary to complete the research and will be securely deleted thereafter.		

	Does your research relate to one or more of the seven aims of the Well-being of Future Generations (Wales) Act 2015?	YES	NO
12	A prosperous Wales	☐	☒
13	A resilient Wales	☐	☒
14	A healthier Wales	☐	☒
15	A more equal Wales	☐	☒
16	A Wales of cohesive communities	☐	☒
17	A Wales of vibrant culture and thriving Welsh language	☐	☒
18	A globally responsible Wales	☐	☒
19	If YES to any of the above, please give details:		

	(this box should expand as you type)
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SECTION F: Scope of Research Activity

	Will the research activity include:	YES	NO
1	Use of a questionnaire or similar research instrument?	☒	☐
2	Use of interviews?	☒	☐
3	Use of focus groups?	☒	☐
4	Use of participant diaries?	☐	☒
5	Use of video or audio recording?	☒	☐
6	Use of computer-generated log files?	☒	☐
7	Participant observation with their knowledge?	☐	☒
8	Participant observation without their knowledge?	☐	☒
9	Access to personal or confidential information without the participants' specific consent?	☐	☒
10	Administration of any questions, test stimuli, presentation that may be experienced as physically, mentally or emotionally harmful / offensive?	☒	☐
11	Performance of any acts which may cause embarrassment or affect self-esteem?	☐	☒
12	Investigation of participants involved in illegal activities?	☐	☒
13	Use of procedures that involve deception?	☐	☒
14	Administration of any substance, agent or placebo?	☐	☒
15	Working with live vertebrate animals?	☐	☒
16	Procedures that may have a negative impact on the environment?	☐	☒
17	Other primary data collection methods. Please indicate the type of data collection method(s) below.	☒	☐
	Details of any other primary data collection method: Self-report inventory Thematic and/or comparative analysis to analyse data Contingency tables and/or visual data representation		

If NO to every question, then the research activity is (ethically) low risk and **may** be exempt from **some** of the following sections (please refer to Guidance Notes).

If YES to any question, then no research activity should be undertaken until full ethical approval has been obtained.

SECTION G: Intended Participants

If there are no participants then do not complete this section, but go directly to section H.

Who are the intended participants:		YES	NO
1	Students or staff at the University?	☒	☐
2	Adults (over the age of 18 and competent to give consent)?	☒	☐
3	Vulnerable adults?	☐	☒
4	Children and Young People under the age of 18? (Consent from Parent, Carer or Guardian will be required)	☐	☒
5	Prisoners?	☐	☒
6	Young offenders?	☐	☒
7	Those who could be considered to have a particularly dependent relationship with the investigator or a gatekeeper?	☐	☒
8	People engaged in illegal activities?	☐	☒
9	Others. Please indicate the participants below, and specifically any group who may be unable to give consent.		
	Details of any other participant groups: (this box should expand as you type)	☐	☒

Participant numbers and source Provide an estimate of the expected number of participants. How will you identify participants and how will they be recruited?		
10	How many participants are expected?	Self-report inventories and surveys: 20 - 100 Interviews: 5 - 12 Focus groups: 5 - 15
11	Who will the participants be?	Participants will be adult amateur and professional singers, all levels and ages. They may be current students but might more probably be unknown to me.
12	How will you identify the participants?	Participants will be identified based on their involvement in music-related activities, either through self-identification as singers or through membership in relevant communities or organizations. Online communities: outreach will be conducted in online forums, social media groups, and platforms specifically dedicated to singers, such as Facebook groups for musicians or Reddit communities focused on singing and performance. Professional networks: recruitment will also take place through professional networks, such as associations for vocalists or local music schools and conservatories, where adult amateur and professional singers are likely to be engaged. Snowball sampling: Initial participants may be asked to refer other singers who might be interested in participating in the study, leveraging personal networks to increase recruitment.

	Information for participants:	YES	NO	N/A
13	Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	☒	☐	☐
14	Will you tell participants that their participation is voluntary?	☒	☐	☐
15	Will you obtain written consent for participation?	☒	☐	☐
16	Will you explain to participants that refusal to participate in the research will not affect their treatment or education (if relevant)?	☒	☐	☐
17	If the research is observational, will you ask participants for their consent to being observed?	☐	☐	☒
18	Will you tell participants that they may withdraw from the research at any time and for any reason?	☒	☐	☐
19	With questionnaires, will you give participants the option of omitting questions they do not want to answer?	☒	☐	☐
20	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	☒	☐	☐
21	Will you debrief participants at the end of their participation, in a way appropriate to the type of research undertaken?	☒	☐	☐
22	If NO to any of above questions, please give an explanation			
	<i>(this box should expand as you type)</i>			

	Information for participants:	YES	NO	N/A
24	Will participants be paid?	☐	☒	☐
25	Is specialist electrical or other equipment to be used with participants?	☒	☐	☐
26	Are there any financial or other interests to the investigator or University arising from this study?	☐	☒	☐
27	Will the research activity involve deliberately misleading participants in any way, or the partial or full concealment of the specific study aims?	☐	☒	☐
28	If YES to any question, please provide full details			
	Box 25: Phone for audio recording, computer for audio recording and holding Zoom sessions, participants' computers on their own time to answer the questionnaires and surveys.			

SECTION H: Anticipated Risks

	Outline any anticipated risks that may adversely affect any of the participants, the researchers and/or the University, and the steps that will be taken to address them. If you have completed a full risk assessment (for example as required by a laboratory, or external research collaborator) you may append that to this form.					
1	Full risk assessment completed and appended?	<table border="1"> <tr> <td>Yes</td> <td>☐</td> </tr> <tr> <td>No</td> <td>☒</td> </tr> </table>	Yes	☐	No	☒
Yes	☐					
No	☒					
2	Risks to participants For example: sector-specific health & safety, emotional distress, financial disclosure, physical harm, transfer of personal data, sensitive organisational information					

	<i>How you will mitigate the risk to participants:</i>
Risk to participants: 1) Emotional distress: participants may experience discomfort or anxiety when discussing experiences with (MPA) during interviews. 2) Emotional impact of psychometric scales: participants may feel emotionally affected by their personality test results. 3) Transfer of personal data: the collection of personal data, such as test results and MPA levels, poses a risk if not properly handled. 4) Sensitive information disclosure: discussion of personal experiences during interviews or focus groups may inadvertently lead to the sharing of sensitive personal information. 5) Potential for bias in self-reporting: participants may feel pressured to respond in a socially desirable manner on questionnaires and during interviews, leading to biased data. Participants may have a biased view on their personality. 6) Data security breach: there is a risk that data could be accessed by unauthorized individuals. 7) Participant fatigue: participants may feel fatigued if the survey or interview process is too lengthy. 8) Physical harm: participants may accidentally injure themselves on the premises where research activities are conducted.	1) Ensure that all participants are informed about the nature of the questions and that they can skip any questions they find distressing. Explain to participants the option to stop the interview or withdraw from the study at any time without any negative consequences. Offer written resources for mental health support if discussing MPA triggers any distress. 2) Clearly explain the nature of the test before administration and inform participants that the results are a tool for self-reflection, not a definitive psychological assessment. Provide access to support resources if needed. 3) All data will be anonymized, ensuring that participants' identities are protected. Data will be stored securely in encrypted, password-protected files or cloud storage compliant with GDPR regulations. Access to data will be limited to authorized research personnel only. 4) Inform participants about confidentiality measures and ensure that all sensitive information shared is handled according to ethical guidelines and GDPR compliance. 5) Assure participants that their responses will remain confidential and that they will not be judged. Design surveys to minimize leading questions and provide neutral options to reduce pressure on participants to respond in a certain way. 6) Implement strong encryption and password protection on all digital files. Regularly back up data in secure locations, ensuring that no unauthorized access occurs during the transfer or storage of data. 7) Design the survey and interviews to be concise and respectful of participants' time. Inform participants of the estimated time commitment beforehand and allow breaks during longer sessions. 8) Conduct a thorough risk assessment of the premises beforehand to identify and mitigate potential hazards. Ensure the research environment is safe, with clear signage and instructions to prevent accidents. Provide first aid support on-site.

3	If research activity may include sensitive, embarrassing or upsetting topics (e.g. sexual activity, drug use) or issues likely to disclose information requiring further action (e.g. criminal activity), give details of the procedures to deal with these issues, including any support/advice (e.g. helpline numbers) to be offered to participants. Note that where applicable, consent procedures should make it clear that if something potentially or actually illegal is discovered in the course of a project, it may need to be disclosed to the proper authorities	
	While the research focuses on MPA, sensitive topics related to anxiety and emotional distress may arise. Participants will be informed that they can withdraw at any time and will be provided with mental health support resources such as helpline numbers if needed.	
4	Risks to the investigator For example: personal health & safety, physical harm, emotional distress, risk of accusation of harm/impropriety, conflict of interest	
	Risk to the investigator: 1) Emotional distress: engaging with participants discussing their MPA and personal experiences may lead to emotional strain for the investigator. 2) Emotional attachment to participants: prolonged engagement with participants might lead to emotional attachment, potentially affecting objectivity. 3) Risk of accusation of harm/impropriety: there is a risk of being accused of causing distress or mishandling sensitive topics during interviews or focus groups. 4) Conflict of interest: potential conflicts may arise if the investigator has prior relationships with participants, as often during insider research. 5) Physical harm: risks when conducting in-person interviews or focus groups, especially in unfamiliar locations. 6) Personal safety: traveling to meet participants or attending interviews in unfamiliar locations may pose risks to personal safety.	<i>How you will mitigate the risk to the investigator:</i> 1) Maintain professional boundaries and seek supervision with tutor or counseling if needed. 2) Maintain professional boundaries and reflect on the need for detachment in research through regular supervision. 3) Obtain clear, informed consent from participants, emphasizing their right to withdraw at any time. 4) Disclose any potential conflicts of interest before the research begins and recuse oneself from interacting with those participants. 5) - Conduct all in-person activities in safe, public or well-known locations and avoid working alone in isolated areas. 6) Use virtual platforms for interviews where possible, or meet in secure, public locations.

5	University/institutional risks For example: adverse publicity, financial loss, data protection		
	Risk to the University: 1) Reputational damage: if ethical standards are not maintained, the university's reputation could be harmed. 2) Data protection breaches: failure to securely handle personal data could result in breaches, leading to legal consequences and financial penalties. 3) Fabrication: making up results or other outputs and presenting them as if they were real	<i>How you will mitigate the risk to the University:</i> 1) Follow the university's Research Ethics and Integrity Code of Practice, ensuring all research is conducted to the highest ethical standards. 2) Strictly adhere to GDPR and Data Protection Act 2018 guidelines, ensuring all personal data is anonymized, encrypted, and stored securely. 3) I will not fabricate or alter results. In the case I feel stuck with my results, I will seek help from a tutor.	
6	Environmental risks For example: accidental spillage of pollutants, damage to local ecosystems		
	Risk to the environment: N/A <i>(this box should expand as you type)</i>	<i>How you will mitigate the risk to environment:</i> N/A <i>(this box should expand as you type)</i>	

Disclosure and Barring Service				
	If the research activity involves children or vulnerable adults, a Disclosure and Barring Service (DBS) certificate must be obtained before any contact with such participants.	YES	NO	N/A
7	Does your research require you to hold a current DBS Certificate?	☐	☒	☐
8	If YES, please give the certificate number. If the certificate number is not available please write "Pending"; in this case any ethical approval will be subject to providing the appropriate certificate number.			

SECTION I: Feedback, Consent and Confidentiality

1	Feedback What de-briefing and feedback will be provided to participants, how will this be done and when?
	At the conclusion of the entire research study, participants will receive an email summarizing the overall findings and explaining how their contributions have helped achieve the research objectives. This final email will provide closure to their participation, helping them understand the significance of their involvement. This email will also offer participants the opportunity to ask any further questions or seek additional details about the study. This approach ensures that participants are fully informed about the outcomes of the research and that their participation is appropriately acknowledged.
2	Informed consent Describe the arrangements to inform potential participants, before providing consent, of what is involved in participating. Describe the arrangements for participants to provide full consent before data collection begins. If gaining consent in this way is inappropriate, explain how consent will be obtained and recorded in accordance with prevailing data protection legislation.
	Before providing consent, participants will receive a clear explanation of the study's purpose, procedures, potential risks, and data protection measures. They will be informed that participation is voluntary and that they can withdraw at any time. They will be informed that the self-report inventory data collection is independent of the university and the research project, and that confidentiality of this data cannot be guaranteed by the researcher or the university. Written consent: Participants will provide written or electronic consent before any data collection begins, either through a signed consent form or by agreeing online. Electronic consent: For online surveys, consent will be recorded when participants click an "I agree" button after reading the consent details, or participants will be informed at the beginning of the survey of the details and implications of the research, and that by participating they give their consent for data collection. All consent records will be securely stored in compliance with GDPR and data protection laws.
3	Confidentiality / Anonymity Set out how anonymity of participants and confidentiality will be ensured in any outputs. If anonymity is not being offered, explain why this is the case.
	Participants' anonymity will be maintained by assigning unique codes or identifiers to all data collected, ensuring no personal information is linked to their responses. In any reports or publications, only aggregated data or anonymized quotes will be used, preventing identification of individual participants. Confidentiality will be ensured by securely storing all data in encrypted files, accessible only to the research team. Personal data, such as consent forms, will be stored separately from research data to further protect participant identities. However, for the personality test, which is conducted independently of the university and research project, confidentiality cannot be guaranteed by the research team. Participants will be informed of this limitation before they consent to participate.

SECTION J: Data Protection and Storage

	Does the research activity involve personal data (as defined by the General Data Protection Regulation 2016 "GDPR" and the Data Protection Act 2018 "DPA")?	YES	NO
1	"Personal data" means any information relating to an identified or identifiable natural person ('data subject'). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person. Any video or audio recordings of participants is considered to be personal data.	☒	☐
	If YES, provide a description of the data and explain why this data needs to be collected:		
2	The research involves collecting personal data, including participants' personality test results, audio recordings of interviews and focus groups, and their responses to MPA questionnaires. This data is essential to identify potential correlations between personality types and levels of performance anxiety, which is central to the study's objectives. All personal data will be anonymized and stored securely in compliance with GDPR and DPA 2018 regulations.		
	Does it involve special category data (as defined by the GDPR)?	YES	NO
3	"Special category data" means sensitive personal data consisting of information as to the data subjects' – (a) racial or ethnic origin, (b) political opinions, (c) religious beliefs or other beliefs of a similar nature, (d) membership of a trade union (within the meaning of the Trade Union and Labour Relations (Consolidation) Act 1992), (e) physical or mental health or condition, (f) sexual life, (g) genetics, (h) biometric data (as used for ID purposes),	☒	☐
	If YES, provide a description of the special category data and explain why this data needs to be collected:		
4	The research involves the collection of special category data related to the mental health of participants, specifically concerning the emotional distress that MPA can cause. This data is crucial for understanding the relationship between personality types and the experience of MPA, which is central to the research objectives. This data will be handled with the highest level of confidentiality, anonymized, and stored securely in compliance with GDPR and DPA 2018 regulations.		

	Will data from the research activity (collected data, drafts of the thesis, or materials for publication) be stored in any of the following ways?	YES	NO
5	Manual files (i.e. in paper form)?	☒	☐
6	University computers?	☐	☒
7	Private company computers?	☐	☒
8	Home or other personal computers?	☒	☐
9	Laptop computers/ CDs/ Portable disk-drives/ memory sticks?	☒	☐
10	"Cloud" storage or websites?	☒	☐

11	Other – specify:	☐	☒
12	For all stored data, explain the measures in place to ensure the security of the data collected, data confidentiality, including details of backup procedures, password protection, encryption, anonymisation and pseudonymisation:		
	All data will be kept in password-protected cloud storage using a secure, GDPR-compliant service, which will not be shared with unauthorized individuals. Any audio or visual data collected will be transcribed, and participants will be given the opportunity to review these transcriptions to check for accuracy. Data stored on USB sticks or other portable devices will be encrypted and password-protected. Each participant will be assigned a unique identifier to ensure confidentiality, and this identifier list will be securely stored in a separate, password-protected folder. All measures are in place to maintain data security and protect participant confidentiality throughout the research process.		

Data Protection			
	Will the research activity involve any of the following activities:	YES	NO
13	Electronic transfer of data in any form?	☒	☐
14	Sharing of data with others at the University outside of the immediate research team?	☐	☒
15	Sharing of data with other organisations?	☐	☒
16	Export of data outside the UK or importing of data from outside the UK?	☒	☐
17	Use of personal addresses, postcodes, faxes, emails or telephone numbers?	☒	☐
18	Publication of data that might allow identification of individuals?	☐	☒
19	Use of data management system?	☐	☒
20	Data archiving?	☒	☐
21	If YES to any question, please provide full details, explaining how this will be conducted in accordance with the GDPR and Data Protection Act (2018) (and any international equivalents, where appropriate):		
	All data will be encrypted and kept in password protected cloud storage. Any USB sticks used to store or transfer data will be password protected. All data transfers will be encrypted, and password protected. All participants will be given a unique identifier to ensure confidentiality and this list will be kept securely in the password protected folder. The data will be stored until the final grades are released and then deleted. In accordance with the DPA2018, participants will have the right to ask to see what data is held relating to them, and this data will be deleted immediately if the participant requests this, in which case the data will not be used in the project. All data will be stored in accordance with Data Protection Act and Tri-Agency Research Data Management Policy's guidelines.		
22	List all who will have access to the data generated by the research activity:		
	The principal researcher and David Cane.		
23	List who will have control of, and act as custodian(s) for, data generated by the research activity:		

	The principal researcher.		
24	Give details of data storage arrangements, including security measures in place to protect the data, where data will be stored, how long for, and in what form. Will data be archived – if so how and if not why not.		
	All data will be encrypted and kept in password protected cloud storage on the Company's Office 365 system which will not be shared. Any USB sticks used to store or transfer data will be password protected and will be reformatted at the end of the project in order to destroy the data. The data will be stored until the completion of the project and then deleted. Data will be archived by the principal researcher until final grades are released.		
25	Please indicate if your data will be stored in the UWTSD Research Data Repository (see https://researchdata.uwtsd.ac.uk/). If so please explain. (<i>Most relevant to academic staff</i>)		
	N/A		
26	Confirm that you have read the UWTSD guidance on data management (see https://www.uwtsd.ac.uk/library/research-data-management/)	YES	☒
27	Confirm that you are aware that you need to keep all data until after your research has completed or the end of your funding	YES	☒

SECTION K: Declaration

The information which I have provided is correct and complete to the best of my knowledge. I have attempted to identify any risks and issues related to the research activity and acknowledge my obligations and the rights of the participants. In submitting this application I hereby confirm that I undertake to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice which is published on the website: https://www.uwtsd.ac.uk/research/research-ethics/		
1	Signature of applicant:	
		Date: October 15th, 2024

For STUDENT Submissions: N/A

2	Director of Studies/ Supervisor:	Laura James	Date: 17.10.24
3	Signature:	<i>Laura James</i>	

For STAFF Submissions: N/A

4	Academic Director/ Assistant Dean:		Date:
5	Signature:		

Checklist: Please complete the checklist below to ensure that you have completed the form according to the guidelines and attached any required documentation:

☒	I have read the guidance notes supplied before completing the form.
☒	I have completed ALL RELEVANT sections of the form in full.
☒	I confirm that the research activity has received approval in principle
☐	I have attached a copy of final/interim approval from external organisation (where appropriate)
☐	I have attached a full risk assessment (where appropriate) ONLY TICK IF YOU HAVE ATTACHED A FULL RISK ASSESSMENT
☒	I understand that it is my responsibility to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice.
☒	I understand that before commencing data collection all documents aimed at respondents (including information sheets, consent forms, questionnaires, interview schedules etc.) must be confirmed by the DoS/Supervisor, module tutor or Academic Director.

RESEARCH STUDENTS ONLY

Once complete, submit this form via the **MyTSD Doctoral College Portal** at (<https://mytsd.uwtsd.ac.uk>).

RESEARCH STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk , with the title 'Ethical Approval' followed by your name.

STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.

Appendix F - Permission letter

Florie-Anne Gounelle
Howling Birds Vocal Studio
207 - 1221 Macleod Trail SE
T2G 2K1 Calgary AB
Canada
gounelleflorie@gmail.com



20th August 2024

Dear UWTSD,

RE: Exploring the susceptibility of personality types, as identified by self-reported assessments, to music performance anxiety (MPA) among adult amateur and professional singers: Leveraging personality assessments for identifying, anticipating, and mitigating MPA in students

I confirm that I approve of the research proposed into 'music performance anxiety' to be carried out by Florie-Anne Gounelle, of Howling Birds Vocal Studio, between September 2024 and January 2024.

Kind Regards,

Florie-Anne Gounelle

Appendix G - Participants' information sheet

Participants provided consent by checking a box in the K-MPAI-R form.

Participants information sheet

Project title as of October 21st, 2024:

Investigating the correlation between extraversion levels and music performance anxiety (MPA) in adult amateur and professional singers: Developing personalised coping strategies for effective MPA management in the singing studio

Research question as of October 21st, 2024:

How do levels of extraversion, as measured by the IPIP-NEO, correlate with varying levels of music performance anxiety (MPA) in adult amateur and professional singers, and can personalized coping strategies based on extraversion levels be identified to help students manage MPA more effectively in a singing studio context?

Purpose of the study:

This study is being conducted as part of a Master's Degree in Voice Pedagogy at the University of Wales Trinity Saint David. It aims to investigate how extraversion and introversion influence music performance anxiety (MPA) in adult singers (18+). The goal is to identify patterns that can lead to more personalized strategies for managing MPA.

I am looking for adult amateur and professional solo/lead singers. Your input will help me better understand how extraversion and introversion affect MPA and how tailored strategies can be developed to support singers experiencing MPA.

What will happen:

If you agree to participate:

1. You will be asked to complete two inventories:
 - First, the **IPIP-NEO-120** (to assess your personality traits, specifically extraversion levels)
 - Then, the **K-MPAI** (to assess your levels of music performance anxiety).

The inventories can be completed at any time and do not need to be done consecutively. The first test (IPIP-NEO-120) is usually completed in 15-25 minutes, and the second one (K-MPAI) is usually completed in 10 minutes.

2. You may also be invited to participate in an optional survey about your coping strategies and/or an interview to share more in-depth information about your experiences and coping strategies.

Participation is voluntary:

Your participation is entirely voluntary. You may choose to stop or withdraw at any point for any reason and without any consequences.

Confidentiality and anonymity:

All data you provide will be treated as confidential. Your responses will be anonymized, and no personally identifiable information will be included in the final report. Although the personality inventory (IPIP-NEO) is conducted via a third-party platform, psytests.org, the platform affirms that no personal data is collected and your results are anonymized. Here is their privacy policy: *“We do not solicit, collect, nor retain any personally identifiable information from users. We do not collect or retain users' testing results. A direct link to the Report, provided at the end of the assessment, contains all test scores, required to generate the Report page, and isn't associated with any particular user. Link is not unique: different persons, receiving the same test scores, will be provided with the same link. We do not collect or retain users' answers to the tests. A direct link to the completed Form, provided by explicit user request, contains all the answers, required to generate the Form page, and isn't associated with any particular user. Link is not unique: different persons, answering the same way, will be provided with the same link. We do not track users across the site or to other websites on the internet using cookies or any other methods.”*

Data handling:

All data will be securely stored in password-protected, encrypted files, and only the researcher can access it. The data will be stored until the research is complete and then securely deleted.

Emotional discomfort:

It is possible that discussing your experiences with MPA may cause emotional discomfort. If at any point you feel uncomfortable, you are free to discontinue the inventory, survey, or interview. Should you choose to withdraw from participation, there will be no consequences, and no pressure will be exerted by the researcher to encourage your continuation. If you feel the need to express your concerns about emotional discomfort, may it be before, during or after the inventories, survey or interview, this can be done by contacting the researcher at contact@howlingbirds.com

Benefits of the study:

The information you provide will contribute to a better understanding of how to support singers in managing music performance anxiety through more personalized coping strategies. If you choose to receive them, you will be contacted with the study results at the conclusion of the research.

Outline of the study:

Data from participants will be collected and analyzed using mixed methods.

The participants will take the IPIP-NEO-120 and the K-MPAI to measure extraversion levels and performance anxiety.

Data collection will commence when participants give their consent before sharing their IPIP-NEO link and taking the K-MPAI.

Data will be summarised using descriptive statistics and categorized by MPA and extraversion levels.

Participants suffering from MPA will then have the possibility of answering a survey on coping strategies. Interviews may be conducted. Coping strategies will be analysed with thematic analysis and/or frequency counts to determine which strategies are the most common, which may or may not be validated by the interviews.

Questions:

If you have any questions before, during, or after your participation, feel free to contact me at contact@howlingbirds.com