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Article abstract

The purpose of this study was to examine the experiences of adolescent pianists in their private lessons and solo performances in regard to concert preparation and music performance anxiety (MPA). A particular focus was placed on the student-teacher relationship and the potential role of teachers in students' preparation, experience, and anxiety in performance situations. 62 piano students completed questionnaires pertaining to their private lessons, teacher, and performance experiences, as well as two inventories—one pertaining to self-esteem and the other on music performance anxiety. Results indicate that self-esteem and practice are significant predictors of MPA, with self-esteem having the most notable effect. Almost half of the participants reported feeling nervous in their lessons at least some of the time. Most students noted that their teachers encourage them to perform; however, only half reported that their teachers address performance preparation issues. Less than half were reported to discuss memorization strategies or management of MPA with students, or to hold practice-performance classes. Implications for music educators and future research directions are discussed.

Performance Preparation, Anxiety, and the Teacher. Experiences of Adolescent Pianists

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Abstract

The purpose of this study was to examine the experiences of adolescent pianists in their private lessons and solo performances in regard to concert preparation and music performance anxiety (MPA). A particular focus was placed on the student-teacher relationship and the potential role of teachers in students' preparation, experience, and anxiety in performance situations. 62 piano students completed questionnaires pertaining to their private lessons, teacher, and performance experiences, as well as two inventories—one pertaining to self-esteem and the other on music performance anxiety. Results indicate that self-esteem and practice are significant predictors of MPA, with self-esteem having the most notable effect. Almost half of the participants reported feeling nervous in their lessons at least some of the time. Most students noted that their teachers encourage them to perform; however, only half reported that their teachers address performance preparation issues. Less than half were reported to discuss memorization strategies or management of MPA with students, or to hold practice-performance classes. Implications for music educators and future research directions are discussed.

Keywords: performance anxiety; performance preparation; adolescent pianists; student-teacher relations; piano lessons; music education; music teachers.

Résumé

Le but de cette étude était d'examiner les expériences de pianistes adolescents lors de leurs cours privés et de leurs performances individuelles, en lien avec la préparation aux concerts et l'anxiété de performance musicale (APM). Un intérêt particulier a été porté à la relation élève enseignant et le rôle potentiel des enseignants dans la préparation, l'expérience et l'anxiété des élèves dans les situations de performance. 62 élèves en piano ont rempli des questionnaires concernant leurs leçons privées, leurs professeurs et leurs expériences de performance, ainsi que deux questionnaires – l'un sur l'estime de soi et l'autre sur l'anxiété de performance musicale. Les résultats indiquent que l'estime de soi et la pratique sont des prédicteurs significatifs de l'anxiété de performance musicale, l'estime de soi ayant l'effet le plus notable. Près de la moitié des participants ont déclaré se sentir nerveux pendant leurs cours de piano, au moins une partie du temps. La plupart des élèves ont noté que leurs enseignants les encouragent à jouer en concert ; cependant, seulement la moitié ont indiqué que leurs enseignants traitent des problèmes de préparation des performances. Moins de la moitié des enseignants discutent de stratégies de mémorisation ou de gestion de l'APM avec

leurs élèves, ou organisent des cours de pratique-performance. Les implications pour les musiciens-éducateurs et les orientations pour des recherches futures sont discutées.

Mots-clés : anxiété de performance ; préparation à la performance ; pianistes adolescents ; relations élève/enseignant ; cours de piano ; éducation musicale ; professeurs de musique.

INTRODUCTION

Performance is an intrinsic part of young musicians' training and, as such, a regular component in school and conservatory music programs. Students in private study and in school music programs typically perform two or more times each year. High-achieving students generally perform more frequently, in competition, master class, church, and community concerts. Yet, despite the commonality of the performance experience for developing musicians, research on the experiences of school-age musicians has only begun to grow in recent years. By contrast, researchers have historically directed substantial attention toward the performance experiences of college level and adult musicians with respect to the high frequency of performance anxiety among these groups. We know that many musicians suffer personally and professionally from music performance anxiety (MPA). A common definition of MPA comes from Paul G. Salmon (1990), stating that MPA is "the experience of persisting, distressful apprehension about and/or actual impairment of performance skills in a public context to a degree unwarranted given the individual's musical aptitude, training, and level of preparation" (p. 3).

MPA is known to affect the quality of the playing or singing often suffered in public situations. Researchers have documented that many musicians seek psychological (Cohen and Bodner 2019; Juncos and Markman 2016; Spahn, Walther and Nusseck 2016), pharmacological (Fishbein *et al.* 1988; Wesner, Noyes and Davis 1990), or self-help treatments (Biasutti and Concina 2014; Lin *et al.* 2008; Sadler and Miller 2010) for dealing with MPA's ill effects. We also understand that a variety of personality factors, ranging from feelings of low personal control to poor stress hardiness, are implicated in increased anxiety factors (Mor *et al.* 1995; Sinden 1999; Tobacyk and Downs 1986). Additionally, issues related to the actual performance, such as the size and stature of the audience (Hamann 1982; LeBlanc *et al.* 1997), performing without the aid of the score (Leglar 1978), and the presence or absence of judges (Brotons 1994; Leglar 1978) are also linked with MPA. Low self-esteem has also been associated with increased MPA. Popular musicians reported it as a source of stress (Cooper and Wills 1989) while Dianna Kenny (2011) recognized "generally low self-esteem" as one of the 22 causes for MPA in professional orchestral musicians. Lisa Marie Sinden (1999) identified it as a significant predictor of performance anxiety in university instrumental music students.

In the last 15 years, we have seen attention turn in a more focused way towards younger populations, with the implicit understanding that performance anxiety does not suddenly emerge at the outset of college studies. On the contrary, we have learned that performance anxiety appears to be a common experience for

students from at least the elementary years ([Diaz 2018](#); [Kaleńska-Rodzaj 2020](#); [MacAfee and Comeau 2020](#); [Papageorgi 2020](#)). Indeed, from as early as third grade, students have reported a heightened degree of anxiety on school concert days ([Ryan 2005](#)). It also appears that there are differences in the ways that young male and female musicians experience and exhibit performance anxiety manifestations. Females typically report greater anxiety than males ([LeBlanc et al. 1997](#); [Osborne, Kenny and Holsomback 2005](#); [Rae and McCambridge 2004](#); [Ryan 2004, 2005](#)).

The question as to whether performance anxiety is innate or developed is often raised in the literature. Findings for young children seem to indicate that the issue may be more complex than either/or. H       Boucher and Charlene A. Ryan ([2011](#)) found that 3- and 4-year-old children experienced significantly higher levels of cortisol secretion and anxious behaviours during a group music performance than they did at baseline. Children with prior performing experience reported less anticipatory anxiety than those without experience. However, those with prior experience had higher levels of cortisol secretion than those without. This suggests a greater anxiety response when in the performance situation but lower anticipation from knowledge of previous experiences. Since children without previous experience showed increased anxiety, and those with previous experience did as well, it suggests that components could be both innate and learned but expressed differently in the two groups. Starting age has also been studied as a factor for increased MPA by Francisco Javier Zarza-Alzugaray *et al.* ([2018](#)). In their study, musicians who started at the age of 7 or younger reported lower levels of MPA. If anxiety does have a progressive nature, questions then arise with respect to factors that may affect its development.

Due to the nature of the relation between student and teacher, it is likely that teachers play a role in students' development of performance ease or anxiety. However, a limited number of researchers have addressed that topic. A study of high school musicians at a specialized music high school ([Fehm and Schmidt 2006](#)) found that 73% of participants reported anxiety as a negative influence on their performances. They also found that while music lessons were rarely affected by performance anxiety, the performance situation in which they experienced the greatest anxiety was influenced by teachers and professors. They cited teachers' professional knowledge and the importance of their opinion as the most common reasons for this response. 78% of participants noted that they would like help in dealing with the negative effects of anxiety. Specifically, they requested more opportunities to practise performing, opportunities to talk more often and more openly about anxiety, a more supportive atmosphere during lessons, training courses for relaxation techniques, and specialized performance training.

Although not directly addressing the questions of teachers' roles, D. Riley Nicholson, Meghan W. Cody and Gayle J. Beck ([2015](#)) demonstrated that MPA increases from practice, to group, to solo settings, with fear of negative evaluation uniquely predicting anxiety in all three contexts. These results highlight fear of negative evaluation as a core component of MPA which is a factor that can also be present during music lessons. From a similar perspective, Crystal Sieger's ([2017](#)) interviews with three school ensemble conductors indicated their belief that student musicians need a safe environment in which to learn. This includes the acknowledgement that

mistakes are acceptable in performance, as well as providing multiple opportunities to both perform and practise performing. The view that anxiety continues to be a taboo topic was noted by one teacher, with all three suggesting that teacher training in how to navigate anxiety in their students would be beneficial to the profession.

In many ways the choral conductor can be likened to the music teacher. The conductor prepares and implements rehearsals and makes decisions with respect to technique and interpretation. Indeed, for many choral singers, their only training occurs within the context of a rehearsal, with the conductor and teacher being one and the same. Conductors have been found to play a major role in adult singers' experience of performance anxiety (Ryan and Andrews 2009). In fact, 80% of participants said that the conductor can greatly increase their anxiety, with their influence stemming not only from the actual performance, but also from their attitude, preparation, skill, and respect in rehearsals. Moreover, teachers in other performance-evaluative fields have also been implicated, both positively and negatively, in students' experience of anxiety. This further suggests that the music teacher may likewise play a role in students' performance and anxiety experiences during the training years (Fleege *et al.* 1992; Passer 1988; Power 1982; Roberts 1986; Smith, Smoll and Barnett 1995; Zatz and Chassin 1985). For instance, research has shown that the intervention techniques coaches use can reduce the level of anxiety experienced by the athletes they train (Cecchini *et al.* 2001; Smith, Smoll and Cumming 2007). In addition, students whose teachers were given training in intervention techniques demonstrated improvement when public speaking (Herbein *et al.* 2018). Since research in other fields shows that teachers can impact children's experience of anxiety, is it therefore conceivable that music teachers play a role in students' experiences of MPA?

The purpose of the present study was to take a closer look at the private lesson/solo performance context with respect to: 1) the experience and anxiety of adolescent pianists in their lessons and performances, 2) the student-teacher relationship as perceived by young pianists, and 3) the role of teachers in students' performance preparation, performance experience, and performance anxiety.

METHOD

Participants

Participants were 62 adolescent piano students. All had been playing the piano for at least two, and as many as twelve years. The average age of entry into piano study was approximately seven years. Details about the participants are shown in Figures 1 and 2.

	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
<i>Age</i>	62	11	17	13.63	2.01
<i>Experience</i>	62	2	12	6.65	2.45
<i>Starting Age</i>	62	4	14	6.98	2.09

Figure 1: Participants' age, experience playing the piano, and starting age for piano studies.

<i>Participant Age</i>	<i>11</i>	<i>12</i>	<i>13</i>	<i>14</i>	<i>15</i>	<i>16</i>	<i>17</i>	<i>Total</i>
<i>Male</i>	2	5	5	5	3	3	3	26
<i>Female</i>	12	2	4	5	4	7	2	36

Figure 2: Participants' sex and age.

The study took place in a large urban centre and the majority of participants received their music training at a large conservatory preparatory program. All students performed at least once, and as many as 10 times per year, intermediate to advanced level repertoire.

Measures

1. Young Pianist Performance Experience Questionnaire

The Young Pianist Performance Experience Questionnaire is an author-constructed questionnaire designed to elicit information in three key areas: 1) Your Piano Studies, 2) Your Lessons and Teacher, and 3) Your Practice Time and Parents (in order to focus on the role of the teacher, questions pertaining to parents will not be examined in this paper). Since no existing questionnaire was found to address our research questions, a 50-item tool was designed for this research. The questionnaire was developed as an exploratory instrument designed to gather demographic information about participants as well as information specific to their piano studies and performances, and their experience of performance anxiety. Questions were largely drawn from the findings from Ryan (2000) which explored performance anxiety in 12-year-old pianists. Sections 1 and 2 of the questionnaire are available in Appendix 1.

A combination of closed- and open-ended questions were included to learn as much as possible, in as clear a manner as possible, about participants' background and experiences. Most questions were closed-ended (e.g. Do you take piano examinations? Yes/No; Do you like taking piano lessons? Yes/No; Are you usually happy to attend your lesson? Yes/No). Open-ended questions were typically follow-up questions to closed-ended counterparts (e.g. Closed: Do you usually feel positive when you leave your lesson? Yes/No; Follow-up Open: Why?). Responses to open-ended questions were migrated from the original paper questionnaires and organized in a spreadsheet. Prior to analysis, data were reviewed by two of the researchers for accuracy. Individual responses were then coded for emerging themes by the primary researcher. Responses were typically short and unambiguous phrases that presented clear codes (e.g. Closed: Do you like performing for an audience? Yes/No; Open: Why/why not?; Response examples: "I get very nervous," "It makes me proud of myself"). An independent observer reviewed the data and codes, after which the observer and researcher discussed their observations and agreed together on the final codes presented here.

2. The Coopersmith Self-Esteem Inventory–School Short Form

The Coopersmith Self-Esteem Inventory–School Short Form (Coopersmith 1987) is a tool designed to measure children’s evaluative attitudes toward themselves. It uses items such as “There are lots of things about myself I’d change if I could” and “It takes me a long time to get used to anything new.” The self-esteem questionnaire asked students to respond to statements as “Like me” or “Unlike me.” Responses indicating higher self-esteem were scored as 1 and lower self-esteem as 0. The inventory has been used extensively throughout the literature on education and in several studies in music education. The internal consistency of the form has been found to be between $r=0.8$ and $r=0.92$, varying according to school grade. The short form takes significantly less time than the original scale, while maintaining a high ($r=0.86$) total score correlation with the original. Since a negative relationship between self-esteem and performance anxiety has been seen in the literature on young musicians, it was deemed to be an important factor to consider in this study (Ryan 1998).

3. The Music Performance Anxiety Inventory for Adolescents (MPAI–A)–Modified

The Music Performance Anxiety Inventory for Adolescents (MPAI–A) is a scale designed specifically to measure music performance anxiety in young musicians. It comprises 15 questions across three categories: Somatic and Cognitive Features of Anxiety, Performance Context, and Performance Evaluation. The MPAI–A-modified scale has 16 items on a Likert-type scale, with possible responses between 0 and 6 for each question. Higher scores indicate a greater degree of performance anxiety. The internal consistency of the measure has been shown to be quite high across large samples of 11- to 19-year-olds. In each case, Cronbach’s alpha for the full measure was .91 (Kenny and Osborne 2006; Osborne and Kenny 2005; Osborne, Kenny and Holsomback 2005). Construct validity was demonstrated through high correlations with commonly employed measures of trait anxiety and social phobia. As presented in the review of the literature, performing without the aid of the score is a variable that increases MPA (Leglar 1978). Since this is a typical component of piano performance, one additional question was added to the original questionnaire that pertains to performing from memory.

Procedure

Prior to commencement, this research project was approved by the researchers’ university research ethics board. Participants were solicited through notices posted in a large urban conservatory that was housed in and affiliated with a large university music school. Recruitment letters were also sent out to all students on the mailing list of the aforementioned music conservatory.

Participants met with two of the authors in a university classroom. In most cases, one participant attended each session. In a few instances, two participants attended the same session. This was deemed to be appropriate since the survey was paper-based and no oral responses were required. Once informed consent was obtained from

parents and from participants, participants completed the questionnaire packet, comprised of the Young Pianist Performance Experience Questionnaire, followed by the Coopersmith Self-Esteem Inventory (entitled: “How You Usually Feel”) and ending with the MPAI–A (entitled: “What You Think About When You Perform Music”). Instructions for each component in the packet were provided in writing and were also read aloud by the researchers.

As the study was administered in a large bilingual city, questionnaires were translated into French by a professional translator and reviewed for accuracy of translation by one of the researchers who is fluent in both languages. Nine students completed the study in French and 53 completed it in English. All sessions were administered by one of two researchers, both of whom are fluent in the two languages. Instructions were given in the preferred language of the student. The time required to complete the questionnaire and both inventories was approximately 30 minutes.

RESULTS

Regression and Correlation Analysis

In order to determine what factors may contribute to students’ level of anxiety in performance, we conducted a regression analysis with MPA as the dependent variable, and self-esteem, gender, years of study, age, practice time, and score on most recent piano examination as independent variables. Figure 3 presents the results of this analysis and indicates significant effects of self-esteem and practice. The plot of residuals against MPAI–A also suggests the possibility of a missing explanatory variable in the regression, so these regression results should be viewed as preliminary.

Self-Esteem	-1.492*** (0.3)
Gender	-7.117 (4.405)
Years of Study	-1.164 (1.510)
Age	2.376 (2.039)
Practice	-0.017*** (0.006)
Score on Most Recent Piano Exam	-0.232 (0.323)
Constant	73.497** (34.494)
** p<0.05	
*** p<0.01	

Figure 3: Regression analysis with robust standard errors: dependent variable MPA.

To better understand the relationships between various study variables, Pearson Product Moment correlations were calculated on the following variables: age, years of study, starting age, score on the most recent examination, practice, self-esteem, and performance anxiety. Significant correlations were found between age and years of study ($r=0.58$, $p<0.01$), age and starting age ($r=0.29$, $p<0.05$), age and practice ($r=0.26$, $p<0.05$), years of study and starting age ($r=-0.62$,

$p < 0.01$), self-esteem and age ($r = -0.34$, $p < 0.01$), performance anxiety and practice ($r = -0.32$, $p < 0.05$), and performance anxiety and self-esteem ($r = -0.48$, $p < 0.01$). Means and standard deviations for individual items of the Music Performance Anxiety Inventory for Adolescents and the Coopersmith Self-Esteem Inventory are given in Figures 4 and 5 (next page).

<i>Statement</i>	<i>Mean</i>	<i>Standard Deviation</i>
1. Before I perform, I get butterflies in my stomach.	3.5	2.02
2. I often worry about my ability to perform.	3.2	2.04
3. I would rather play for myself than in front of other people.	3.25	2.09
4. Before I perform, I tremble or shake.	2.24	2.18
5. When I perform in front of an audience, I am afraid of making mistakes.	4.17	1.89
6. When I perform in front of an audience, my heart beats very fast.	3.28	2.11
7. When I perform in front of an audience, I find it hard to concentrate on my music.	1.85	1.82
8. If I make a mistake during a performance, I usually panic.	2.16	2.15
9. When I perform in front of an audience, I get sweaty hands.	2.85	2.26
10. When I finish performing, I usually feel happy with my performance.	4.5	1.49
11. I try to avoid playing on my own.	1.74	1.81
12. Just before I perform, I feel nervous.	3.77	2.16
13. I worry that my parents or teacher might not like my performance.	1.89	1.93
14. I would rather play in a group or ensemble than on my own.	2.35	2.29
15. My muscles feel tense when I perform.	2.1	2.01
16. When I play from memory, I worry that I will forget the music.	2.21	2.10

Figure 4: Response to individual items of Music Performance Anxiety Inventory for Adolescents (“What you think about when you perform music”).

Results from Young Pianist Performance Experience Questionnaire

Questionnaire results are grouped by related questions below and results were coded by frequency count for each answer.

a) *Do you like taking piano lessons? Why do you take lessons?* 86% of participants said that they like taking piano lessons, and that they take lessons for that very reason, along with the desire to be able to play an instrument. Other reasons that participants gave for taking lessons were that their parents make them (21%) and because their friends also take lessons (3%). Of the students who reported not liking piano lessons, most (78%) said they take lessons because their parents make them.

<i>Statement</i>	<i>Mean</i>	<i>Standard Deviation</i>
1. Things usually don't bother me.	.623	.489
2. I find it very hard to talk in front of the class.	.758	.432
3. There are lots of things about myself I'd change if I could.	.645	.482
4. I can make up my mind without too much trouble.	.565	.500
5. I'm a lot of fun to be with.	.919	.275
6. I get upset easily at home.	.726	.450
7. It takes me a long time to get used to anything new.	.807	.398
8. I'm popular with kids my own age.	.672	.473
9. My parents usually consider my feelings.	.839	.371
10. I give in very easily.	.645	.482
11. My parents expect too much of me.	.629	.487
12. It's pretty tough to be me.	.548	.502
13. Things are all mixed up in my life.	.694	.465
14. Kids usually follow my ideas.	.677	.471
15. I have a low opinion of myself.	.774	.422
16. There are many times when I'd like to leave home.	.790	.410
17. I often feel upset in school.	.738	.444
18. I'm not as nice looking as most people.	.742	.441
19. If I have something to say, I usually say it.	.790	.410
20. My parents understand me.	.742	.441
21. Most people are better liked than I am.	.742	.441
22. I usually feel as if my parents are pushing me.	.661	.477
23. I often get discouraged at school.	.774	.422
24. I often wish I were someone else.	.887	.319
25. I can't be depended on.	.903	.298

Figure 5: Response to individual items of the Coopersmith Self-Esteem Inventory.

b) *Are you usually happy to attend your lesson? Do you usually feel positive when you leave your lesson?* Most participants said they are usually happy to attend their lessons and usually feel positive when they leave their lesson (81% for both questions). Participants who reported not feeling positive cited a realization of how much more work was needed, a feeling that they didn't prepare well enough for the lesson, or a belief that the teacher was disappointed in their work.

c) *How comfortable do you usually feel at your private lessons? Do you ever feel nervous about playing for your teacher at your lessons?* Participants were asked to rank on a four-point scale their level of comfort in private lessons, from very comfortable to very uncomfortable. 45% said they are “very comfortable”; 52% somewhat comfortable; and 3% said they are “a little uncomfortable” at their lessons. However, 48% reported that they sometimes feel nervous about playing for their teacher at lessons. Frequency of music performance anxiety at lessons was ranked on a 5-point scale, from always to never. Responses were: 3% “always” and 3% “most of the time”; 67% “sometimes”; and 27% “rarely.” When asked how nervous they are on these occasions, 10% reported that they are “very nervous,” 17% “moderately nervous,” and 73% “a little nervous.” Reasons for being nervous centred about not practising enough, not wanting to play poorly, a fear of disappointing the teacher, and an expectation for perfection either from themselves or from others. A desire to please their parents, anxiety about playing from memory, and shyness were also noted as factors by individual participants.

d) *Do you practise enough?* With respect to practise, participants were evenly divided as to whether or not they believe they practise enough. Those who responded that they did not practice enough stated the primary reasons as being either too lazy or too busy. Participants who felt they practised enough reported an average practice time of 1.23 hours per day and indicated that they are normally prepared for their performances. Very few participants among the “practising-enough” group (10%) said that they do not play their best in performance, which they attributed to nerves. Interestingly, 37% of the “practising-enough” students reported feeling anxious in their lessons at least some of the time. Reasons they gave were: 1) fear of playing poorly, 2) desire to play their best for the teacher, 3) not enough practice, or 4) shyness.

e) *Do you like performing for an audience? Are you prepared? Do you play your best?* Almost all participants (95%) reported that they are prepared for performances. However, 30% indicated that they do not like to perform, with most citing music performance anxiety as the primary reason. The majority of participants (77%) indicated that they play their best at performances, with the full 23% who do not all citing music performance anxiety as the cause for diminished performance quality.

f) *Does your teacher: encourage you to perform for an audience; talk with you about what to do if you are nervous; talk with you about what to do on stage?* Almost all participants (86%) reported that their teacher encourages them to perform for an audience. However, less than half (42%) said that their teacher talks with them about what to do if they are nervous in performance situations. The most commonly reported teacher advice was to breathe deeply, to relax/not be nervous, and to pretend you are alone or at home. All teacher suggestions for coping are given in Figure 6. Aside from how to navigate music performance anxiety, about half of the participants (53%) said that their teacher talks with them about what to do onstage in performance, with a focus primarily on physical demeanour and mental mindset. The specific responses about teacher advice are given in Figure 7.

<i>Teacher Comment</i>	<i>Percentage of all participants</i>
Breathe deeply	13%
Relax/calm down/don't be nervous	13%
Concentrate	5%
Pretend there is no one there	3%
Pretend you are at home	3%
Ignore the audience	3%
Don't think about it	3%
Play for fun	3%
Do your best	3%
Mistakes don't matter	3%
You'll be happy you did it	2%
Keep your shoulders up	2%
Think of the audience as naked	2%
Don't think about notes too much	2%
You are prepared—no need to be afraid	2%
Keep going if you make a mistake	2%
Practice	2%
Be in your "bubble"	2%
Focus on "sun" in centre of body, warming, giving energy	2%

Figure 6: Reported teacher advice for coping with nerves in performance.

<i>Teacher Advice</i>	<i>Percentage of all participants</i>
Bow	16%
Relax/calm down	11%
Have good posture	8%
Play as if at home/play for self	8%
Be gracious/polite towards audience	5%
Don't stop if make mistake	5%
Which pieces to play	3%
Step into the music/feel every note	3%
How to enter and exit	3%
Play your best	3%
Play for fun	3%

Figure 7: Reported teacher advice for how to behave on stage (continues).

Don't look around	3%
Prepare mentally before starting	3%
Adjust seat	3%
Look confident	2%
Take your time	2%
Don't be scared	2%
Be serious	2%
Concentrate	2%
Ignore audience	2%

Figure 7: Reported teacher advice for how to behave on stage (end).

g) *Does your teacher: hold studio classes; talk with you about how to memorize for performance?* Less than a third of participants (31%) reported that their teachers hold studio classes in which they can practise performing for their studio mates. These classes tend to be infrequent—between one and three times per year. Most participants who engaged in studio classes reported some music performance anxiety during them (21% “not nervous”; 53% “a little nervous”; 11% “moderately nervous”; and 11% “very nervous”). While performing from memory is a typical requirement of piano performance that has been linked with increased anxiety (Leglar 1978), less than one third of participants (31%) indicated that their teacher talks with them about how to memorize for performance. Strategies they noted are listed in Figure 8. There was no consistency in types of strategies recommended; only two were noted by more than one student—to practise/play many times and to go section by section.

<i>Teacher Comments</i>	<i>Percentage of all participants</i>
Go section by section	11%
Practice/play over and over	7%
Break it up measure by measure	2%
Learn it line by line	2%
Go over all pieces (regularly?)	2%
Gives instructions on how to test memory	2%
See score in your head	2%
Listen to a recording of the piece	2%
Think while playing, not just play	2%
Learn the harmonic structure	2%
Learn notes (in head), not just in fingers	2%
Teacher gives tricks	2%

Figure 8: Reported teacher suggestions for effective memorization.

h) *Does your teacher attend your performances?* Participants reported that their piano teachers typically attend their performances (89%) and that they, for the most part, value their presence. They indicated feeling encouraged and more at ease when their teachers attend, and they enjoy the opportunity to demonstrate their achievements, to receive immediate feedback, and to make their teacher proud. Only two participants said that they do not like the teacher to attend performances: one felt that the teacher is critical, even when things go well; the other worried that the teacher would feel responsible if he performs poorly. A small number of participants (11%) reported that their teachers do not attend their performances. Of these, only one said that he would prefer for the teacher to be there, so that he could make her proud. The other four said that they would not like the teacher to be at their performances, citing music performance anxiety, fear of making a mistake in front of the teacher, discomfort, and fear of disappointing the teacher as the reasons for this preference.

i) *What does your teacher say or do/do not if you perform well?* Participants were asked what their teachers say or do when they perform well and when they do not perform well. When performances go well, most reported teacher responses that focus on praise and general congratulations. Only three participants reported that their teachers provide immediate suggestions for improvement; one said they make no comment and one said the teacher speaks only to their parents. Responses were more varied when it came to performances that were poor, with the more common teacher responses involving the need to practise more and suggestions for how to do better. All teacher responses are given in Figure 9.

<i>Teacher Comment</i>	<i>Percentage of all participants</i>
You need to practise more	21%
Tips on how to do better	18%
You'll do better next time	11%
Good, but you can do better	5%
It's okay	5%
Teacher looks disappointed	5%
Details of what was done wrong	3%
It was just a little mistake	3%
You tried your best	3%
You did well	2%
You could have done much better	2%
You were a little nervous?	2%
Why?	2%
Gets angry at next lesson	2%

Figure 9: Teacher remarks following a poor performance (continues).

You can always re-do it	2%
Tells me what she liked	2%
“You start well, and then you screw it up!”	2%
Nothing	2%
It is just a bad day	2%
Do you feel you did a good job?	2%
It’s human to make mistakes	2%
He laughs it off	2%
Too bad	2%
Better luck next time	2%
See, you should have practised more	2%
Congratulations, but you made some mistakes	2%
Talks only to parents	2%

Figure 9: Teacher remarks following a poor performance (end.).

j) *What do you think your teacher expects for you in the future as a musician? How important is your teacher’s opinion to you?* Many participants believe that their teachers expect them to continue with their piano studies in a professional capacity. Specifically, participants indicated that their teacher expects them to continue playing (26%), become a professional musician (15%), teach piano (15%), go to college for music (8%), be very successful (5%), and be famous (3%). 13% said that they don’t know what their teacher’s expectations for them are and 7% said that the teacher has no expectations. When asked how important the teacher’s opinion is to them, 50% responded “somewhat important,” 40% “very important,” 8% “a little important,” and 2% “not important.”

DISCUSSION

Performance anxiety is a serious concern for many musicians, causing behavioural, physiological, and psychological distress, and often impairing performance quality ([Kenny 2011](#)). In recent years, the experience of school age musicians has been considered, with findings indicating that performance anxiety is present in many people from an early age—potentially from the earliest performances. Questions have been raised as to the innate or developed nature of performance anxiety, with preliminary findings suggesting that both may be relevant ([Boucher and Ryan 2011](#)). This study sought to investigate the experience of music performance anxiety in young pianists’ lessons and performances.

Results indicate that self-esteem and practice are significant predictors of MPA, with self-esteem having the most notable effect. Almost half of the participants reported feeling nervous in their lessons at least some of the time. Most students noted that their teachers encourage them to perform; however, less than half reported that their teachers address performance preparation issues, or discuss memorization

strategies or performance anxiety with them. Less than a third of the participants reported that their teacher holds classes that simulated performance situations, such as a studio dress rehearsal.

Self-esteem was negatively related to performance anxiety—a finding that has been seen previously in the music performance anxiety literature ([Ryan 1998](#)). This relationship poses a challenge for the teacher. The general belief seems to be that performance experiences are good for students, that these opportunities allow students to demonstrate their skill and to be proud of their achievements. It seems reasonable, then, to suggest that positive performing experiences might improve students' self-esteem. However, the situation appears to be complex, given the relationship between self-esteem and anxiety. Students who are lower in self-esteem appear to be more prone to suffer from anxiety in performance situations, which might ultimately result in the experience being detrimental rather than enhancing their overall self-esteem. Therefore, it may be worth looking into developing strategies of self-efficacy and incorporating regulated learning approaches into studio teaching and learning. Indeed, researchers have shown that high levels of self-efficacy can be associated with lower MPA and successful performance outcomes ([Hendricks, Smith and Legutki 2016](#); [McPherson and McCormick 2006](#)).

Perhaps not surprisingly, insufficient practice appears to play an important role both in students' level of comfort in performance and in their experience of performance anxiety. According to Albert LeBlanc's model of music performance anxiety (1994), weak performances may result not only in negative feedback both during and immediately following a performance but may ultimately feed into increased anxiety in subsequent performances. So, performing during a period of poor practice—say, during the middle school years—might build up negative feelings and anxiety for future performances regardless of students' level of preparation at a later time. Should teachers do trial-run performances before determining who can perform at a given event? Would it be more detrimental to pull an ill-prepared student from a scheduled performance, or to let the student perform repertoire that has not been sufficiently practised and risk triggering a potentially long-term issue of performance anxiety? These are difficult questions to answer but given the difficulties that many musicians experience with respect to performance anxiety, they seem worth considering.

In this study, we did not find gender to be a significant factor in young musicians' experience of MPA. Throughout the literature, gender has been an inconsistent variable. While a number of studies have indicated higher anxiety in female musicians than in males ([LeBlanc et al. 1997](#); [Osborne, Kenny and Holsomback 2005](#); [Rae and McCambridge 2004](#); [Ryan 2004, 2005](#)), others found no differences. Erin Dempsey and Gilles Comeau ([2019](#)) hypothesized that the lack of significance might be attributed to the small sample size they used or to the inclusion of younger children (7 to 18 years of age) in their sample. Several studies fit this hypothesis. For example, Boucher (2008) found no significant gender differences among very young children, nor did Alexandra Sandy Errico ([2012](#)) with fourth and fifth graders. Moreover, Ryan ([2005](#)) found that gender differences were apparent in upper elementary grades only. These contradictory sets of findings indicate a need for more

extensive examination of gender with a larger number of participants across each age category. It is possible that musicians of one gender or the other (or both) do not report accurately when faced with questions about feelings, or that males and females interpret questionnaire items, their potential responses, and/or their own responses to anxiety differently. Or, perhaps there are developmental expectations (e.g. perfectionism) placed more often on females that increase the likelihood of their being anxious in performance.

Most of the research available with adolescents is questionnaire-based and does not involve physiological measures ([Dempsey and Comeau 2019](#); [Errico 2012](#); [Ryan 2005](#); [Thomas and Nettelbeck 2014](#)). To fully understand MPA in young musicians, both physiological and behavioural data may be required, in addition to self-report measures. Ryan (2004) found that male and female piano students appeared to manifest their anxiety in different ways, and that females seemed better able to accurately forecast their anxiety responses. In that study, sixth-grade girls' heart rates rose steadily through each recital stage (sitting stage side, walking onstage, and performing). Boys' heart rates, however, were generally low throughout sitting stage side and walking onstage, and then spiked to exceed the girls' once they were onstage to perform. Another difference was found with regard to relationships between the various physiological, behavioural, and psychological measures of anxiety. For girls, they were remarkably synchronous, but for boys, they were highly dyssynchronous. It is possible, then, that the issue may be a matter of timing in anxiety studies—that questions and measures taken in advance of a performance may not elicit accurate or clear responses by males—not because they intend to misreport, but because they have difficulty forecasting how they will actually respond to the situation until it actually arrives. Certainly, the gender issue needs continued investigation in order to more fully understand its relationship with performance anxiety with more attention required on the actual physiological response of these young musicians.

Teachers appear to play a major role in young piano students' performance experiences. Almost half of the students report that they are nervous at their piano lessons at least some of the time, including one third of the students who feel that they practise enough. They cite fear of playing poorly, a desire to play their best, worry about not practising enough, and shyness as factors. Additionally, students who do not feel positive when they leave their lessons cite feeling that they disappointed their teacher as a primary reason for their negative response. Interestingly, each of these reasons is also implicated in students' reactions to performance situations. This leads us to speculate as to whether the private piano lesson is actually viewed as a form of performance for many students, inciting concern, anxiety and, sometimes, negative responses.

The majority of students reported that their teachers encourage them to perform. However, it appears that many teachers do not prepare their students for the performance experience. Only 42% of students said that their teachers talk with them about what to do when they are nervous, and many of the reported teacher suggestions do not really address the issue or provide any tangible strategies for coping with anxiety. (Anyone who has ever been told to "Relax" when they are anxious can attest to the fact that it does little to appease the feeling, and often only serves to

exacerbate it.) It might be helpful for teachers to consider making dress rehearsals or mini performances with small groups of students a regular part of their studio's schedule. Additionally, these events could be opportunities for open pre- or post-discussions about music performance anxiety. Sports psychologists have developed concrete tools for performance preparation ranging from preparation calendar plans to mealtime and food intake the day of a performance. Andrew J. Martin (2008) has shown that performers of music and sports share similar models of motivation and engagement, therefore music specialists would gain in investigating these strategies to better support their students.

Previous research has shown that students want to be able to talk openly and honestly about anxiety, to have their teachers remove some of the stress from their lessons, to have opportunities to practise performing for supportive audiences, and to learn strategies for dealing with anxiety ([Fehm and Schmidt 2006](#)). Yet, it appears that anxiety and performance preparation are areas that many teachers are not addressing. Studio classes were not commonly reported in this study. Likewise, techniques for effective memorization were rarely addressed, in spite of the fact that this is a typical expectation for piano students. When asked about teacher strategies for memorizing, the most common response was to “go section by section,” followed by “practice”—a recommendation that provides no new information to students who already know they have to practise to learn their pieces at even a most basic level.

It seems clear that piano students overwhelmingly value their teachers' opinion and support. The vast majority of students appreciate their teachers' attendance at their performances—they take comfort in the teacher's presence, they want to make their teacher proud, and they value the teacher's feedback. Even the students whose teachers do not attend performances and who prefer it this way reveal the importance of the teacher's opinion in their indications that teacher presence provides an added layer of pressure. The high expectations that teachers place on their students is perhaps most evident in students' beliefs regarding their teacher's expectations for them. Almost half of the students believe that their teacher expects them to continue their piano studies to a professional level. And most tellingly, 40% students say that their teacher's opinion is very important to them; 50% “somewhat important.” Clearly, teachers play a major role in young musicians' lives and development.

Limitations and Future Directions

Two of the measurement instruments used in this study are standardized and have been used extensively: The Coopersmith Self-Esteem Inventory–School Short Form, and The Musical Performance Anxiety Inventory for Adolescents (MPAI–A). The third instrument, however, the Young Pianist Performance Experience Questionnaire is an author-constructed questionnaire. Because no existing measures were available to elicit information about the students' piano studies, their experience of their lessons and the relationship with their teacher, we developed a questionnaire to specifically address these questions, based on the existing literature on performance anxiety in general and anxiety as it relates to the learning context in particular. Questions from the questionnaire were largely drawn from the findings from Ryan (2000) which

explored performance anxiety in 12-year-old pianists. While results from this new questionnaire should be taken with caution, it provided important information about the students' experiences and indicated a need for follow-up research on this topic.

Additionally, our research sample consisted of only 62 piano students, which is a relatively small sample size. However, it allowed us to explore a topic that had received little research consideration so far, the role of teachers in children's experience of performance anxiety, as well as an instrument to measure this role. Given the findings, a study with a larger number of participants seems warranted.

This study focused on pianists exclusively, serving as a first step in developing a deeper understanding of the teachers' role across a group of young musicians studying the same instrument. Although it is not clear if pianists experience performance anxiety differently than other musicians, some requirements such as playing from memory are more typical in piano study than in other instruments. Future research should address these questions with other instrumentalists.

Moreover, the data collection procedure was consistent across participants, with questionnaires completed in the same order by all. As the self-esteem inventory was completed before the performance anxiety inventory, it is possible that how students felt about themselves that particular day affected how they responded to the performance anxiety inventory, especially as it focused on what they usually thought about when they performed as opposed to how anxious they were in a particular performance. It is conceivable that questions about self-esteem could put students in a positive or negative mindset, which could have affected their responses regarding performance anxiety.

An additional limitation of the present study is its exclusive focus on the student perspective, without input from the teacher or more objective data, such as video footage of music lessons. For example, there may be aspects of performance preparation built-in to teachers' practices that are not readily recognized as such by students. Future studies might examine the issue with a broader lens in order to get a more complete picture of the context.

CONCLUSION

There remains much to learn about the nature of performance anxiety and the potential role that teachers may play in its development in young musicians. This study showed that teachers may need to be more involved in supporting their students in developing ways to manage music performance anxiety. It also raises many interesting questions to consider in future research. Does teaching style play a role? Do teachers adapt their teaching style according to their beliefs and expectations about students' skill and potential, and might such adaptations impact upon the preparation they provide for performance experiences? Would teacher training in anxiety coping strategies result in reduced anxiety in their students? Certainly, there seems to be cause to further explore the issue. If teachers are shown to play a part in the development of performance anxiety, they may be equally well positioned to be part of the solution.

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ETHICS' PROTOCOL

This research was approved by the McGill University Research Ethics Board. The ethics protocol included providing information about the study to the children who volunteered to participate. Participants then gave their informed consent and completed three questionnaires. The parents signed a consent form as well to approve their child's completion of the questionnaires.

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APPENDIX 1: MCGILL YOUNG PIANIST PERFORMANCE EXPERIENCE QUESTIONNAIRE

Age

Gender [Male/Female]

INSTRUCTIONS: The following questions are about your private *piano* lessons, your practice time, your teacher and your parents. We are interested in your musical and performance training, guidance, and experience. Please answer honestly and in as much detail as possible. Your answers will not be viewed by anyone other than the researcher and her assistant. If you are not sure what a question means, please ask the research assistant who is supervising your session. If you require extra space to fully answer a question, please continue on the back of the page.

A: Your piano studies

1. Years of private piano study
2. Years with current piano teacher
3. Gender of teacher [Male/Female]
4. Did you have another teacher prior to this one? [Yes/No]

If yes,

- a. How many others?
- b. How long did you study with each one?
- c. Why did you change teachers?

5. Average number of times you perform *on piano* each year
6. Do you take piano examinations? [Yes/No]

If yes,

- a. What grade are you now studying for?
- b. Which exams (e.g. McGill Conservatory, Royal Conservatory, etc.)?
- c. What was your result/score in your last examination?

7. Do you play in competitions? [Yes/No]

If yes, how many times each year? (How many competition classes? For example, there may be two different classes—say, Baroque and Classical—within the same competition, such as the QMTA Music Competition)

8. Do you like taking piano lessons? [Yes/No]
9. Why do you take piano lessons? [I like it/My parents make me/My friends take lessons/Other reason:]
10. Do you practise enough? [Yes/No]

If no, why not?

11. How many days a week do you practise?
12. For how long each time?
13. Do you like performing for an audience? [Yes/No] Why/why not?
14. Are you usually well prepared for your performances? [Yes/No]
15. Do you usually play your very best for an audience? [Yes/No]

If no, why not?

16. Are you usually happy with your performances? [Yes/No]

If no, why not?

17. Is piano your primary instrument? [Yes/No]

If no, what is your primary instrument?

B: Your lessons and teacher

1. Are you usually happy to attend your lesson? [Yes/No]
2. Do you usually feel positive when you leave your lesson? [Yes/No] Why?
3. How comfortable do you usually feel at your private lessons? [Very comfortable/Somewhat comfortable/A little uncomfortable/Very uncomfortable]
4. Do you ever feel nervous about playing for your teacher at your lessons? [Yes/No]

If yes,

- a. How often? [Always/Most of the time/Sometimes/Rarely/Never]
- b. How nervous are you? [Very nervous/Moderately nervous/A little nervous]
- c. Why are you nervous?

5. Does your teacher encourage you to perform for an audience? [Yes/No]
6. Does your teacher talk with you about what to do if you are nervous? [Yes/No]

If yes, what does he/she say?

7. Does your teacher talk with you about what to do onstage? [Yes/No]

If yes, what does he/she say?

8. Does your teacher talk with you about how to memorize for performance? [Yes/No]

If yes, what does he/she say?

9. Does your teacher talk with you about how to prepare for a performance (this does not include teaching you how to play the piece)? [Yes/No]

If yes, what does he/she say?

10. Does your teacher attend your performances? [Yes/No]

If yes, do you like him/her to be there? [Yes/No] Why/why not?

If no, would you like him/her to be there? [Yes/No] Why/why not?

11. What does your teacher say or do if you perform well?
12. What does your teacher say or do if you do not perform well?
13. Does your teacher hold studio classes (lessons where many of the students come together and perform for each other)? [Yes/No]
If yes, do you ever perform at them? [Yes/No]
If yes,
 - a. How many times each year?
 - b. How nervous are you? [Very nervous/Moderately nervous/A little nervous/Not at all nervous]
14. What do you think your teacher expects for you in the future as a musician?
15. How important is your teacher's opinion to you? [Very important/Somewhat important/A little important/Not important]