Self-efficacy and music performance

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ABSTRACT This study is the second in a series of investigations attempting to clarify relationships between variables that impact on a young musician’s ability to perform music (as assessed on a graded music examination). Consistent with studies on school academic subjects, our previous investigation demonstrated the importance of self-efficacy in predicting young musicians’ performance examination results. In the current study, structural equation modelling allowed us to compare two different types of graded music performance examinations. Although differences emerged between the two sets of data, self-efficacy was again found to be the most important predictor of achievement in the examinations. Implications arising from this finding are discussed in the final section of the article.

KEYWORDS: motivation, musical performance, personal beliefs, practice, self-efficacy

Introduction

The current study is the second in a series of systematic attempts to examine the role of motivation in young musicians’ capacity to prepare for, and satisfactorily complete, prepared examinations on their instrument (McCormick and McPherson, 2003). We consider this line of research important, given the number of children around the world who undertake graded externally assessed performance examinations, and how highly they are regarded by many in the profession who use them as an indication of a developing child’s musical ability. These types of performance events provide an excellent opportunity to study children’s motivation for learning their musical instruments, and the chance to explore and clarify important relationships that are frequently discussed in the literature, but rarely studied as a series of interrelated relationships that more generally impact on the acquisition of music performance skills.
Whereas theoretical conceptions of cognitive development suggest that people’s knowledge will vary depending on their individual developmental level and previous experiences, motivational theory strives to clarify the cognitive and affective processes that instigate, direct and sustain human action by studying how these processes operate as goals, expectations, attributions, values and emotions (Schunk and Pajares, 2002). One of the more important of these social cognitive motivational processes is self-efficacy, which is defined as ‘the conviction that one can successfully execute the behaviour required to produce the outcome’ (Bandura, 1997: 79). Put another way, self-efficacy thoughts refer to a person’s beliefs about the extent to which she or he can do a task in a particular situation.

In academic literature, a number of attempts have sought to test the predictive utility of self-efficacy (Schunk and Pajares, 2001). Two of the more important of these provide convincing evidence that self-efficacy is just as powerful a predictor of performance in mathematics as mental ability, which is often assumed to be the strongest predictor of academic achievement (Pajares and Kranzler, 1995), and that self-efficacy is a better predictor of mathematics performance than self-concept, perceived usefulness of mathematics, prior experience with mathematics, and gender (Pajares and Miller, 1994). Zimmerman and Bandura (1994) extended this view by showing how self-efficacy affects achievement through its influence on students’ goals. That is, self-efficacy is regarded by many educational psychologists as ‘antecedent to academic success because it motivates behavior (primarily perseverance) that leads to success’ (Jinks and Lorsbach, 2003: 113).

It is important to note that self-efficacy can be distinguished from self-concept in specificity and content (Schunk and Pajares, 2001). Whereas self-concept comprises perceptions of personal competence in general or in a domain (e.g. academic, social, motor skills), self-efficacy refers to personal beliefs that one is able to learn or perform specific tasks (Schunk and Pajares, 2001). An instrumentalist might have a high self-concept for being a good musician but this is unlikely to be something that he or she would generally think about before going on stage to perform challenging repertoire. Performers are more likely to think about whether or not they are able to cope with the demands of the literature that they are about to perform. A violinist, for example, might be concerned about whether he or she can accurately perform a tricky bowing in a difficult section of a particular piece, or a trumpeter may be worried about stamina due to a tired embouchure that would make it difficult to perform high notes and maintain a consistent tone throughout the entire performance. These types of thoughts are explained in great detail in folk literature such as Barry Green’s *Inner Game of Music* (1986). Thoughts musicians have about being able to perform in various circumstances or according to certain constraints are all related to self-efficacy judgements because these types of situation-specific judgements are
the most powerful beliefs a person can hold, in terms of their influence on what one will be capable of doing (Bandura, 1977, 1986, 1997).

In our previous research, we cited evidence showing that students' motivational orientations while presenting themselves for a music performance examination are consistent with those motivational forces that researchers in school academic subjects predict will influence their achievement (Pintrich and De Groot, 1990). Specifically, our exploratory structural equation modelling of results drawn from a study of 332 candidates who were participating in Trinity College, London performance examinations suggested a strong relationship between self-efficacy and actual performance and the former's clear superiority over other variables as a predictor of achievement for this performance situation (McCormick and McPherson, 2003).

Purpose of the study

In two ways, we sought to replicate and extend our previous analyses (McCormick and McPherson, 2003). First, the results of our previous investigation provided a suitable framework as we continued to refine the measures used to assess young instrumentalists’ practice habits, and the cognitive mediational processes that theorists suggest predict their level of achievement (Bandura, 1997; Schunk and Miller, 2002; Schunk and Pajares, 2001, 2002). Second, we were able to examine a much larger group of candidates who were preparing for a similar kind of graded performance examination that was administered by a completely different organization, a procedure that enhanced the robustness of the findings. The purpose of the study, therefore, was to employ structural equation modelling to further test the results of our previous research (McCormick and McPherson, 2003), which, supported by research in academic subjects, places great importance on the power of self-efficacy as a predictor of student achievement.

Sample

The sample consisted of 446 (65%) females and 240 (35%) males (n = 686) who were completing an Australian Music Examinations Board (AMEB) performance examination (90 in Grade 1, 125 in Grade 2, 138 in Grade 3, 119 in Grade 4, 96 in Grade 5, 52 in Grade 6, 31 in Grade 7 and 35 in Grade 8).

The AMEB examinations require candidates to perform prepared pieces (with piano accompaniment), technical exercises, and an étude or study from a graded syllabus in front of a trained, professional examiner who provides one of seven grade indications: unsatisfactory (D), satisfactory (C and C+), credit (B and B+), and honours (A and A+). Students undertaking these types of examinations often progress through the various grades from the preliminary grade, Grade 1 to Grade 8 and then diplomas. In Australia, the
AMEB system is highly regarded by the music teaching profession as providing an important indicator of a musician’s overall ability to perform music.

In the months preceding the study, teachers who were preparing students were sent a letter by the AMEB, and asked to sign and then return it if they were willing to allow their students to complete a research questionnaire the night before their graded performance examination. The letter explained the aims of the study and provided information on the procedure to be employed by the investigators. As a result of our enquiries, 176 teachers were identified who were willing to help with the study. In the month before the students’ examinations, the teachers were sent copies of a professionally formatted and printed music research questionnaire and asked to distribute these among their students. The research questionnaire included an ethics clearance with spaces for the parent/guardian, candidate and a witness to sign (in addition to the printed signatures of the two chief investigators). AMEB candidates were asked to complete the questionnaire the day before their performance examination so that their personal beliefs and attitudes about their examination could be measured in close temporal proximity to their examination. Altogether, 58 percent of the subjects who were given copies of the questionnaire by their teacher handed in the booklet on the day of the examination to the AMEB information booth immediately before they proceeded to the room for their formal examination.

Included on the first page of the booklet were questions on the instrument to be examined and candidate number, which enabled the researchers to gain information on each candidate’s performance result using the computer records of the AMEB (New South Wales head office). Candidates aged between 9 and 19 (mean = 13.3, SD = 2.04) completed the questionnaire. Participating subjects were learning to play either piano, or a string, brass or woodwind instrument.

**Description of the measures**

In our Trinity College study (McCormick and McPherson, 2003), the label Self-Regulation was used for a factor that included items related to how candidates organized their practice to ensure efficient learning. Similarly worded items were used in this study (e.g. ‘When I’m practising’: ‘I avoid practising pieces I don’t like’; ‘prefer to be reminded to do my practice rather than having to remember myself’; ‘think about other things, which takes my mind off what I’m playing’; ‘spend most of my time running through pieces I can already play well’; ‘I don’t always make myself practise when I should’; and ‘I like to think about other things so much that I don’t always make myself practise’). Negatively worded items were recoded for consistency. In order to build on our previous work, we decided also to re-label this factor ‘practice regulation’, so that it would be clearly distinguished from Self-
Regulation Theory, which, although including a component related to how students manage their own learning, is a much broader concept involving the interaction of personal, behavioural and environmental processes (McPherson and Zimmerman, 2002; Zimmerman, 2000a, 2000b).

As for our Trinity College study (McCormick and McPherson, 2003), ‘cognitive strategy use’ was tapped by 12 items focusing on rehearsal strategies (e.g. ‘When I’m practising’: ‘I think about how many mistakes I’m making and how I can correct them’; and ‘practise slowly things I can’t play and then gradually build up speed’), elaboration strategies (e.g. ‘When I’m practising’: ‘I experiment to try and make my pieces sound more expressive’); and organizational strategies (e.g. ‘When I’m practising’: ‘I make sure I get each scale perfect before I go on to something else’; and ‘write down things I need to ask my teacher’).

For measurement of self-efficacy, we adopted the approach recommended by Bandura (1997), who suggested that the reliability of a self-efficacy measure will be improved by asking subjects to record the strength of their beliefs using an 11-point scale, ranging in 10-unit intervals from 0 to 100 percent (see also Pajares et al., 2001). According to Bandura (1997), self-efficacy items should be couched in terms of what subjects believe they can do rather than will do, because the use of the word ‘can’ infers a judgement of capability whereas ‘will’ is a statement of intention. Furthermore, self-efficacy measures should, according to Bandura (1997), ‘measure people’s beliefs in their abilities to fulfil different levels of task demands within the psychological domain selected for study’ (p. 44). To satisfy this requirement, our measure included questions on the five specific areas in which candidates were tested during their performance examination.

To further ensure the validity of the self-efficacy measure and to distinguish it from the other scales used in the investigation, we decided to include a general introduction to help candidates differentiate between each individual component of their examination. The final wording of the self-efficacy scale is shown in Figure 1. It should be noted, however, that the aural item was not part of the measurement model, meaning that self-efficacy encompassed technical work, pieces, sight-reading and general knowledge.

As for the previous study, we also included items that sought information on the quantity and content of each candidate’s practice in the month before the examination. Estimates for the variable ‘practice time’ were calculated by multiplying the number of practice sessions candidates had averaged each week by the average length (in minutes) of these practice sessions.

Practice content was gauged by asking candidates how frequently they practised various activities on their instruments. Candidates responded on a five-point scale (never, rarely, sometimes, often, every practice) to indicate the frequency with which they practised different types of activities, such as a warm-up routine, technical work, pieces and repertoire, sight-reading, working out pieces by ear (without using printed music), and improvising.
In the following questions, please tick the percentage that best represents how confident you feel that you can perform correctly on each section of your AMEB exam. For example, if you are completely confident that you can perform a section correctly, then tick 100%. If you have no confidence that you can perform a section correctly, tick 0%. If your confidence lies somewhere in between, then please tick the percentage that matches your confidence.

**How confident are you for your AMEB exam that you can perform correctly your:**

Technical Work (e.g., scales)

- 0%
- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%
- 100%

Pieces

- 0%
- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%
- 100%

Sight-reading

- 0%
- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%
- 100%

**How confident are you for your AMEB exam that you can answer correctly each question in the:**

Aural section (ear tests)

- 0%
- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%
- 100%

General knowledge section

- 0%
- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%
- 100%

**FIGURE 1**  Self-efficacy scale.

(making up music during home practice). In the Trinity College study (McCormick and McPherson, 2003), ‘formal practice’ refers to using a warm-up routine, practising scales/arpeggios, plus studies and études, and sight-reading music. For the current analyses, ‘formal practice’ included the components directly tested in the examination (i.e. the pieces studied for the examination and sight-reading). ‘Informal practice’ (playing by ear and improvising) was the same for both studies.

Finally, in the analysis and discussion that follow, ‘grade level’ refers to the grades of the examinations, from 1 to 8, while the variable Performance was calculated using a seven-point ordinal scale based on the grade each candidate’s AMEB examiner allocated (i.e. D, C, C+, B, B+, A, A+).

**Model development**

Structural equation modelling (SEM) was employed for data analysis. SEM enables estimation of parameters describing complex multiple relationships between variables (Hair et al., 1992). SEM usually has two components. First, measurement models are constructed in which underlying, latent variables, for example, psychological constructs, are related to actual (observed)
measures. The second component is the structural equation model in which relationships between the specified latent variables are described (Joreskog and Sorbom, 1996). Although SEM is theoretically causal modelling, as in all empirical analysis, true causal effects can only be identified by analysis of appropriate data and we do not draw causal conclusions from the analyses that follow.

Because most of the data were ordinal and the sample size was relatively large, an asymptotic covariance matrix was generated from the polychoric correlation matrix and the weighted least squares method employed (Joreskog and Sorbom, 1996). The first step towards attempting to replicate the relationships identified by McCormick and McPherson (2003) was to establish credible measurement models. This was essentially an exploratory procedure with these data. That is, theoretically coherent congeneric models were posited and model fit evaluated. Residuals and goodness of fit statistics were considered from logical and theoretical positions and, when appropriate, adjustments were made. Thus, items with low path coefficients or negative error variance were eliminated and the fit improved. No error terms were allowed to co-vary in the measurement models.

Final goodness of fit and Cronbach alpha statistics for each of the factor scales are shown in Table 1. Two factors, ‘formal practice’ and ‘informal practice’ each comprised only two items, so fit statistics were not meaningful. ‘Performance’ (examination result), ‘grade’ and ‘practice time’ were each single measures. As recommended by Joreskog and Sorbom (1989), error variance was set for each of the latter measures at .15.

| Factor            | GFI  | AGFI | RMSR | RMSEA | Alpha |
|-------------------|------|------|------|-------|-------|
| Self-efficacy     | .99  | .98  | .04  | .07   | 1.00  |
| Cognitive strategy use | .97  | .96  | .13  | .07   | 1.00  |
| Practice regulation | .99  | .97  | .07  | .09   | .87   |
| Formal practice   | –    | –    | –    | –     | 1.00  |
| Informal practice | –    | –    | –    | –     | 1.00  |

Structural equation analysis

We began our analyses by attempting to replicate the Trinity College performance examination data of our previous study (McCormick and McPherson, 2003). The initial model, based on the latter study, is shown in Figure 2. This model was unstable with negative error variance, requiring elimination of the path from Grade to ‘practice time’. It was clear, then, that the model identified in the earlier study would not be fully confirmed. Hence we proceeded to a ‘model-generating phase’ (Joreskog and Sorbom, 1993), by eliminating non-significant paths and considering modification indices.
When the latter made sense, paths were added and model fit re-evaluated. The final model had relatively good fit statistics ($\chi^2 = 1837.78$, d.f. = 364, $p < .01$; root mean square error of approximation (RMSEA) = .08; goodness of fit index (GFI) = .94; adjusted goodness of fit index (AGFI) = .93) and is shown graphically in Figure 3.

DIFFERENCES BETWEEN THE TRINITY COLLEGE AND AMEB MODELS
There are two readily apparent explanations for differences between the Trinity and AMEB models. First, we improved the measures used in the McPherson and McCormick: Self-efficacy and music performance

![Diagram of initial model for structural equation modelling](image)

**Figure 2** Initial model for structural equation modelling (based on previous Trinity College data).

![Diagram of final structural equation model](image)

**Figure 3** Final structural equation model (based on current AMEB data).
current investigation by rewording some of the items to make the intention even clearer to the respondents. In addition, our original self-efficacy measure (McCormick and McPherson, 2003), which employed three items to assess the extent to which the students felt they had mastered the requirements for their examination, how good they believed they were compared to other students of their own age, and what result they thought they would obtain for the examination, was changed to specific questions dealing with each separate component of the examination. The new scale also employed an 11-point scale based on Bandura’s (1997) suggestions as stated earlier (see Figure 1).

Second, although sharing important common characteristics, there are also differences between the two performance examinations. Information [http://www.ameb.edu.au/; http://www.trinitycollege.co.uk/, accessed November 2004] about the two examination systems suggests that the AMEB syllabi and examinations place greater emphasis on technique than the Trinity syllabi and examinations. For example, in the Trinity College examinations, candidates on piano are able to choose between a performance of their own composition or one from the syllabus, and to complete technical work (i.e. scales/arpeggios) or keyboard musicianship (which involves transposition and keyboard exercises such as the performance of cadences in various keys). The Trinity College examinations also provide scope for improvisation and allow candidates to choose between a viva voce involving questions on the pieces studied or the performance of a piece from memory. In the AMEB examinations, candidates are required to perform a study or étude in addition to their technical work (i.e. scales and arpeggios) and prepared pieces, plus also complete ear tests and general knowledge questions on the repertoire studied. The AMEB syllabus appears to be more structured with less scope for choice in the main components examined (even though the choice of performance repertoire is larger). These comments do not infer that one examination system is better than the other, but rather that the differences between the two systems, plus the improved measures used in the current investigation, may account for subtle but important variations in the data.

The most important differences between the Trinity College and the AMEB models are that the current model has fewer paths involving ‘cognitive strategy use’ and ‘practice regulation’, and more paths from ‘formal practice’, ‘informal practice’ and ‘grade level’ to ‘performance’.

Figure 3 shows that there is a high path coefficient from ‘cognitive strategy use’ to ‘formal practice’. Candidates who reported using cognitive strategies were more likely to have undertaken more formal practice in preparation for their examination.

There is a direct path from ‘practice time’ to ‘formal practice’. In general, students who did more practice also tended to undertake more formal practice. Unlike the Trinity College model, ‘cognitive strategy use’ did not
have a direct path to ‘self-efficacy’, but an indirect path through ‘formal practice’. The ‘cognitive strategy use’ factor was made up of items that were related to learning repertoire so it is therefore not surprising that the path between this variable and ‘formal practice’ should be so strong, given that the former involved practising the main repertoire for the examination. The paths from ‘cognitive strategy use’ and ‘practice time’ directly to ‘formal practice’ imply that students who were cognitively engaged with their practice and were doing more practice were also students who undertook more ‘formal practice’ in preparation for their examination. Importantly, however, the effect of ‘cognitive strategy use’ was stronger on ‘formal practice’ than the actual time they spent practising.

Figure 3 also shows a moderately strong direct positive effect from ‘practice regulation’, but a weak, significant negative effect from ‘grade level’ to ‘self-efficacy’. The former is consistent with the social cognitive view (Bandura, 1997) that human beings are self-regulating organisms, and the latter replicates a path in the Trinity College model, and is consistent with Wigfield et al. (1997). This makes sense, as increasing grade level means increasing complexity of musicianship and, realistically, greater difficulty in maintaining or increasing the extent of mastery which the student has over his or her instrument.

In accord with the Trinity College data, ‘self-efficacy’ is the best predictor of the student’s performance result in the examination. As well as indirect paths through ‘self-efficacy’ to ‘performance’, ‘informal practice’ and ‘grade level’ have negative direct effects on performance. The former is particularly interesting as there is a relatively strong direct effect on ‘informal practice’ from ‘formal practice’. One reasonable interpretation is that in the context of preparation for the AMEB examination, informal practice (i.e. playing by ear, improvising) did not occur in isolation from formal practice. This makes sense given that the AMEB syllabi and examinations aim to nurture and assess the formal (i.e. re-creative) aspects of instrument performance. Time spent in informal practice may have been at the expense of the more relevant formal practice for the AMEB examination. The negative path coefficient between ‘grade level’ and ‘performance’ is consistent with the earlier discussion of a negative relationship between ‘grade level’ and ‘self-efficacy’. That is, the higher the grade and the greater the demands of the syllabus and assessment, the more difficult it is to score well in the examination. Examiners tend to assess lower grades less stringently, not only because their expectations are lower, but also to avoid the negative effects of discouraging novice musicians.

Discussion

Graham and Weiner (1996) asserted, after undertaking an extensive review of theories and principles involved in academic motivation for the Handbook of Educational Psychology, that studies concerned with self-beliefs are so
prevalent that they dominate the field and that self-efficacy theory continues to be a more consistent predictor of student achievement than other conceptions involving self-beliefs. Given the enormous body of evidence showing the power of self-efficacy’s influence on academic achievement, it is surprising how few studies have applied this theoretical framework in music, an area of learning that places great physical, mental and emotional demands on musicians.

It is self-evident that learning to play a musical instrument can be a difficult and taxing task for any young learner. Moreover, learning to play an instrument presents special challenges because it is usually self-scheduled, in that learners are often left to their own devices to choose for themselves how and when they will complete their practice. The physical, mental and emotional effort needed to sustain long-term engagement when progress is not always apparent, plus the need to engage in repetition of repertoire that can take weeks or even months to fully master, requires a resilience and persistence of the kind that many students, even some with great potential, do not seem to possess. As with skill development in other domains, students’ self-efficacy beliefs in their own competence and capacity to master tasks on the long road to success determine how, and in what ways, they will be able to persist in the face of difficulties, stressors, and competing attractions (Bandura, 1997).

Given the stressful and challenging nature of performance examinations on children’s emotional and physical resources, one educational imperative arising from the results is to find better ways to identify students with low self-efficacy, and then attempt to strengthen these students’ beliefs in the areas in which they find it difficult to cope and manage (Bandura, 1986; Schunk and Miller, 2002).

It would be naïve to regard high self-efficacy as a single panacea for correcting all student problems. There is no secret ingredient that can make massive improvement for all students. But, as any good teacher intuitively understands, improving students’ abilities often rests not on making massive improvements as a result of finding a single ingredient, but on small, gradual improvements across a range of areas. The results of this study suggest that meaningful improvements can be achieved by improving young instrumentalists’ self-efficacy judgements. Whether these improvements amount to a 1 percent or a 10 percent improvement will depend on each individual student. Small gains of this magnitude however, should, nonetheless be considered by all teachers.

Achievement in any pursuit requires resilient self-efficacy. According to Bandura (1997), people are most resilient to failures when they have a strong sense of self-efficacy developed largely through personal mastery experiences and when the setbacks they experience are mild or occur infrequently. People with resilient self-efficacy are able to rebound quickly from difficulties and move forward. They assess the situations in which failure occurs to determine
how they might perform better in the future, such as by changing strategies, seeking assistance, or altering dysfunctional environmental conditions. The speed of bounce-back after difficulties and failure is an important factor that distinguishes high achievers from low achievers (Bandura, 1997).

Having stated the above, however, we also realize that although self-efficacy is an important determinant of achievement, it is not its only influence. Self-efficacy alone will not produce a competent performance when requisite skills and knowledge are lacking. Put quite bluntly, students still need to do the work and the practice. In this way of thinking, both the mental and the physical dimensions of learning are of vital importance.

PRACTICAL IMPLICATIONS
A number of practical implications arise from the current analyses, the most important of which concern what teachers might do to help prepare their students for stressful and challenging performances, and what examination systems might consider to provide an environment in which candidates are given the best possible chance to perform at their best.

Academic literature shows that solid evidence of personal ability is much more likely to enhance achievement than false bravado (Jinks and Lorsbach, 2003). We have known this for a number of years, based on early studies on teacher-constructed tests, where students will tend to do better if easier items come early in the test (Gallagher, 1998; Stiggins, 1994). According to Jinks and Lorsbach (2003):

Students make judgements about how they will perform on a test based upon two sets of experiences: how they performed on similar tests in the past and how the test at hand appears. A test that opens with the real ‘cranium crunchers’ will have a negative impact on all of the students – particularly the lower self-efficacy ones – because the most immediate concrete evidence of the task at hand is one of extreme difficulty. This leads to a sense of futility and, subsequently, an unwillingness to try. And, of course, leave of effort typically leads to lower achievement. (p. 115)

Extending this concept to music performance examinations, we would speculate that candidates should be encouraged to start their examination with the pieces or technical work they feel most comfortable performing. This would allow them to settle down in the early part of their examination, with the added advantage of helping them get off on a firm footing by starting with the literature they feel most comfortable performing. Both the Trinity College and AMEB systems allow candidates to complete the examination in an order of their choosing. However, based on the first author’s 20 years of experience as an examiner, this rarely occurs. Most students come in to the examination and perform the repertoire in the order stated in the syllabus. This means that many candidates start with the technical requirements (e.g. scales and arpeggios) that for many is often the weakest and most frustrating section of their examination.
Another implication is the need for teachers to help students develop both their competence and their confidence as they progress on their instrument, and attempt more challenging tasks. In this regard, Bandura (1986) states that:

educational practices should be gauged not only by the skills and knowledge they impart for present use but also by what they do to children’s beliefs about their capabilities, which affects how they approach the future. Students who develop a strong sense of self-efficacy are well equipped to educate themselves when they have to rely on their own initiative. (p. 417)

Practically, this is reinforced by Pajares (2003), who suggests that personal beliefs of competence are ways of thinking that develop like any other habit of conduct. This suggests, therefore, that teachers should pay more attention to their students’ perceptions of their own personal competence, given evidence that these types of perceptions accurately predict their motivation and the future decisions they make about their desire to continue improving (Pajares, 2003). Teachers can influence their student’s self-beliefs about their own ability if they provide them with challenging tasks and meaningful activities to master, actively support and encourage them along the way, teach in ways that demonstrate that they believe in their students, and convey these impressions in ways aimed at developing a robust sense of self-confidence (Pajares, 2003).

There is a multitude of issues that could, and should, be examined on how self-efficacy processes work in music. Given the enormous body of evidence accumulating in academic subjects, it seems particularly relevant for music researchers to focus on those elements of the theory that may be unique to music, or that distinguish music from other academic subjects. This is why our own research will continue to examine self-efficacy in relation to different types of musical performance, to determine whether the results obtained from high stakes grade examinations hold across other types of events, such as a recital or a concert.

In summary, the results of this study suggest that self-efficacy theory deserves more focused attention by music researchers. This is especially important in a discipline that involves high levels of self-regulation and mental discipline, in the form of practising at home for long periods and for many years, in order to achieve success. Along the journey to developing expertise, ‘insidious self-doubts can easily overrule the best of skills’ (Bandura, 1997, p. 35). For this reason, clarifying the types of self-beliefs which come into play before, during and after a musical performance will help us understand how successful musicians develop the self-assurance needed to approach and manage challenging tasks and thereby make good use of their capabilities (Bandura, 1997).
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