

# A preliminary comparison study of burnout and engagement in performance students in Australia, Poland and the UK

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## Abstract

While there is a growing body of research concerning the well-being of music students, burnout and engagement remain largely unexplored. Likewise, cross-national variations in approaches to music education, and different educational experiences of men and women may influence burnout and engagement. This preliminary study aimed to inform further research by establishing the levels of, and exploring cross-national and sex differences in burnout and engagement in music performance students at conservatoires in Australia, Poland and the UK ( $n = 331$ ). Self-reported levels of burnout were, typically, low to moderate. Nevertheless, one in ten students reported symptoms such that they could be classified as burned out. Australian and UK students displayed more burnout than students in Poland, although Australian students reported lower levels of reduced sense of accomplishment than Polish and UK students. Self-reported engagement was, typically, moderate to high. Students in Poland reported higher levels of engagement than those in the UK. Women displayed higher levels of global burnout and emotional/physical exhaustion, while men reported lower levels of reduced sense of accomplishment. Further research on burnout and engagement could build on this investigation to gain a better understanding of their impact and the influence of the educational experience on students' music-related well-being.

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Cross-cultural, motivation, psychological well-being, sex differences, tertiary students

**Background**

The physical and psychological demands of the music profession can take their toll, affecting the health and well-being of music students and musicians. Since the first survey of orchestral players' health was conducted (Fishbein, Middlestadt, Ottati, Straus, & Ellis, 1988), there has been a great deal of research on these issues. Music performance students' physical (e.g., Kok, Nelissen, & Huisstede, 2015) and psychological health (e.g., Zander, Voltmer, & Spahn, 2010) has been studied but little research has been undertaken on burnout and engagement, which reflect attitudes towards making music.

Burnout was first observed in the context of employment, specifically in relation to working with other people, and included cynicism reflecting an indifferent attitude towards clients (i.e., depersonalisation<sup>1</sup>; Maslach & Jackson, 1981). Research on burnout was then extended to the study of professions that do not necessarily revolve around interpersonal relationships (e.g., Etzion, 1988), athletes (e.g., Gould, Tuffey, Udry, & Loehr, 1996), and students (e.g., Schaufeli, Martinez, Marques Pinto, Salanova, & Bakker, 2002). In these domains, depersonalisation was replaced by cynicism towards work in general. Thus, burnout in athletes, for example, is considered a multidimensional syndrome combining emotional and physical exhaustion, devaluation of sport and reduced sense of personal accomplishment (Raedeke & Smith, 2001). Burnout is associated with physical health issues (e.g., Armon, Melamed, Shirom, & Shapira, 2010), and attention and memory problems (Sandström, Rhodin, Lundberg, Olsson, & Nyberg, 2005), for example.

In occupational psychology, the trend towards positive psychology (Seligman & Csikszentmihalyi, 2000) has led to more attention being paid to engagement: a permanent, work-related state represented by vigour<sup>2</sup>, dedication and absorption (Schaufeli & Bakker, 2004). Like burnout, engagement was first studied at work but turned out to be applicable also to athletes (e.g., Lonsdale, Hodge, & Raedeke, 2007) and students (e.g., Schaufeli et al., 2002). Engagement is linked to aspects of positive health- (e.g., Korunka, Kubicek, Schaufeli, & Hoonakker, 2009) and performance-related status (e.g., Bakker, Demerouti, & Ten Brummelhuis, 2012). Burnout and engagement are independent constructs (e.g., Schaufeli & Bakker, 2004) so it is worth studying them both so as to gain a fuller insight into well-being.

Burnout first emerged in popular psychology, building upon people's experiences rather than as a theory-informed scientific concept. References in the early literature on burnout in music students are predominantly anecdotal, lacking a sound theoretical basis (e.g., Moore, Burland, & Davidson, 2003). An exception is Hamann and Daugherty's study of university music students, which suggests that they experienced 'varying levels of burnout' (Hamann & Daugherty, 1985, p. 6). More recently, Bernhard (2007, 2010) studied music students at an American university and noted high levels of emotional exhaustion, moderate depersonalisation and personal accomplishment. His respondents were not necessarily training to become professional performers and the questionnaire used referred to their attitudes towards school and peers rather than music-making. Although young musicians interact with other people in the context of one-to-one lessons and group music-making, they are perhaps more comparable with athletes than workers in people-oriented professions, in that their experience of burnout might include devaluation of their activity to a greater extent than depersonalisation. Finally, Burland (2005) showed differences between the psychological characteristics of university music students and their conservatoire counterparts. For example, university music students tend to be more easily discouraged by setbacks and

demonstrate fewer coping skills than their conservatoire counterparts. It seems that university students may experience higher levels of stress and therefore compromised well-being.

Similarly, the literature on music students' engagement *per se* is limited to implicit references in the research on motivation for music (e.g., Martin, 2008). MacNamara, Holmes and Collins (2008), for example, point to the role of dedication in optimal development and sustaining a long-term career in music. Furthermore, music students are likely to be highly engaged with music: Spahn, Strukely and Lehmann (2004) found in their sample of university students that those studying music identified with and were more committed to their subject than those studying medicine, psychology, and sport.

There are variations in burnout (e.g., Schaufeli & Janczur, 1994) and engagement (e.g., Taipale, Selander, Anttila, & Nätti, 2011) as a function of geographical location. These variations could be explained not only by country-specific differences in working environments (Deci et al., 2001) but also cultural differences (Hofstede, 1980). There are fundamental differences between systems of music education in Australia, North America, and the UK, on the one hand, and the Russian tradition on the other (Walker, 2007). Students in these countries have different experiences while training that could well affect their well-being. The Polish system of music education that developed in the 1950s was influenced by the Soviet Russian tradition of music teaching (Jankowski, 2012), and has not changed much since then. The vast majority of Polish students at conservatoires in Poland attend specialist music schools prior to commencing education at the tertiary level. In Australia and the UK, by contrast, private tuition is more common. Lebler, Burt-Perkins and Carey (2009) compared students on similar tertiary-level programmes at conservatoires in Australia and the UK, and found that the latter had engaged in more music-making activities by the time they began their conservatoire training than had the former. This suggests that even students on similar programmes vary in their experiences of music education.

While most literature has produced inconsistent results regarding sex differences in burnout (Maslach, Schaufeli, & Leiter, 2001), a meta-analysis conducted by Purvanova and Muros (2010) showed that women tend to feel more exhausted but men report higher depersonalisation. Furthermore, research in music education suggests sex differences in self-perceptions and well-being, whereby female students are more prone to negative experiences, including lower self-efficacy (Ginsborg, Kreutz, Thomas, & Williamon, 2009), and a greater increase in fatigue in their first year of tertiary education (Hildebrandt, Nübling, & Candia, 2012). These findings, perhaps associated with gender stereotyping within the context of music education (e.g., Green, 1997), point to the possibility that men and women studying music differ also in relation to their burnout and engagement. Although no major differences in burnout between men and women studying music emerged in Hamann and Daugherty's (1985) study, these results reflect the experiences of university students and are likely to be outdated.

The present study is one of the first to examine burnout and engagement in music performance students training at conservatoires and to test the internal consistencies of measurement instruments that could be used in the further investigation of these issues that is clearly needed. It represents a preliminary attempt to establish and compare their levels of burnout and engagement in Australia, Poland, and the UK; these levels may well be attributable to cultural and systemic differences in music education. The study thus offers a cross-cultural perspective on music students' well-being, a novelty in the music education literature. An additional aim is an exploration of sex differences in burnout and engagement. To date, negative aspects of students' well-being have been studied to a greater extent than its positive facets (e.g., Hildebrandt et al., 2012); the examination of engagement redresses this balance. Music performers and athletes share similar experiences, being involved in physically exerting domains that put strong emphasis on achievements. In this study burnout is therefore defined as it is in the sport literature (e.g., Reinboth & Duda, 2006) as a syndrome of emotional and physical exhaustion, devaluation of the key activity for the population

under investigation (i.e., music-making), and reduced sense of accomplishment. The choice of the national samples was primarily based on their availability although, as discussed above, there are obvious differences between pre-tertiary music education in Australia and the UK, on the one hand, and Poland, on the other. Furthermore, in Poland, very few universities provide training in music performance – the vast majority of performers are trained at conservatoires. Accordingly, to avoid introducing a potential confounding variable associated with different experiences of students at universities and conservatoires (Burland, 2005), the current study examined only the latter.

## Method

### Respondents

A total of 331 students, men ( $n = 98$ ) and women ( $n = 233$ ) aged between 18 and 32 years with performance as their major study, completed the survey. They comprised instrumental ( $n = 270$ ) and vocal ( $n = 61$ ) music students at one conservatoire in Australia ( $n = 65$ ), and several conservatoires in Poland ( $n = 142$ ) and in the UK ( $n = 124$ )<sup>4</sup>. Table 1 provides an overview of the demographic characteristics of the respondents.

### Materials

The Athlete Burnout Questionnaire (ABQ; Raedeke & Smith, 2001) and Utrecht Work Engagement Scale-Student (UWES-S; Schaufeli et al., 2002) were adapted for the context of music performance and then pilot tested with a group of students ( $n = 33$ ) at one conservatoire in the UK. ABQ has been widely used with athletes (e.g., Adie, Duda, & Ntoumanis, 2012; Lonsdale, Hodge, & Rose, 2009) and it has been employed in research involving dancers (e.g., Quedest & Duda, 2011). UWES-S has been gaining recognition as a measure of students' engagement (e.g., Sulea, van Beek, Sarbescu, Virga, & Schaufeli, 2015). On the basis of respondents' comments, slight modifications were made to the questionnaires. Respondents were asked to refer to their experiences regarding playing an instrument or singing 'in the last month'.

The steps recommended by van Widenfelt, Treffers, de Beurs, Siebelink and Koudijs (2005) were followed while translating the instructions and questionnaire items into Polish. The team consisted of four Polish bilinguals demonstrating a very good command of English. Three independent English-into-Polish translations of the questionnaire instructions and items were produced first. After the single version of the translation was agreed on, the questionnaire was back-translated into English. Discrepancies between the original and translated questionnaire were addressed, and minor alterations were made to the Polish version of the questionnaire. The translated instructions and items were then pilot tested with two Polish-speaking music performance students and three recent graduates. The final version of the Polish questionnaire incorporating changes made on the basis of the pilot testing with Polish respondents was prepared. A Polish translation of UWES already existed (Szabowska-Walaszczyk, Zawadzka, & Wojtaś, 2011) but it was modified following pilot testing with five respondents whose native language was Polish as reported above for use with music performance students.

The ABQ adapted for performance students consists of three 5-item subscales measuring emotional/physical exhaustion<sup>3</sup> (e.g., 'I feel physically worn out from playing my instrument/singing'), devaluation (e.g., 'I am not into playing my instrument/singing like I used to be'), and reduced sense of accomplishment (e.g., 'I am not achieving much in playing my instrument/singing') on a Likert scale of 1 (*almost never*) to 5 (*almost always*). The validity and reliability of the original ABQ is supported by a number of studies (e.g., Cresswell & Eklund, 2005; Raedeke & Smith,

**Table 1.** Demographic characteristics of the respondents.

Respondents	Australia (n = 65)	Poland (n = 142)	UK (n = 124)	Men (n = 98)	Women (n = 233)	Total (n = 331)
<i>Age</i>						
Average age in years (standard deviation)	21.0 (2.59)	21.4 (2.20)	21.2 (2.50)	21.2 (2.37)	21.3 (2.41)	21.2 (2.39)
Median	20.0	21.0	21.0	21.0	21.0	21.0
<i>Sex (%)</i>						
Men	45	24	28			30
Women	55	76	72			70
<i>Country (%)</i>						
Australia				30	16	
Poland				35	46	
UK				36	38	
<i>Course of study (%)</i>						
Undergraduate	88	77	79	83	79	80
Postgraduate	12	23	21	17	22	20
<i>Mode of study (%)</i>						
Full-time	99	93	100	99	96	97
Part-time	2	7	0	1	4	3
<i>Principal study (%)</i>						
Instrument	91	87	71	87	79	82
<i>Type of instrument (%)</i>						
Keyboard	23	24	13	30	16	20
Percussion	2	1	6	9	0	3
String	35	39	24	22	37	33
Wind	29	21	27	25	25	25
Not stated	2	1	2	1	2	2
Voice	9	13	29	13	21	18
<i>Genre (%)</i>						
Classical	99	97	92	91	97	95
Jazz	2	3	6	7	2	4
Popular	0	1	5	5	1	2

2001). Both the English and Polish versions of the ABQ demonstrated acceptable internal consistencies (Hair, Anderson, Tatham, & Black, 1998). Normative data were computed using the ABQ by dividing samples into three equally sized groups representing 'low', 'average', and 'high' levels of burnout, consistent with researchers using other, well-established measures of burnout (e.g., Maslach, Jackson, & Leiter, 1996). Eklund and Cresswell (2007) suggest that scores of 3 or above on each subscale of the ABQ could be indicative of burnout in athletes. These two criteria were used to identify respondents with high levels of burnout in the present study.

The UWES-S adapted for performance students consists of three subscales: vigour (five items; e.g., 'When I get up in the morning, I feel like playing my instrument/singing'); dedication (five items; e.g., 'I am enthusiastic about playing my instrument/singing'); and absorption (four items; e.g., 'Time flies when I'm playing my instrument/singing'). The anchor responses were changed to those used in the ABQ: 1 (*almost never*) to 5 (*almost always*). The original UWES-S has good psychometric properties (e.g., Rigg, Day, & Adler, 2013; Schaufeli et al., 2002). Internal

consistencies of global engagement, vigour and dedication in both the English and Polish versions of the UWES-S were acceptable (Hair et al., 1998). While internal consistencies of absorption in the English and Polish versions of the questionnaire were below the arbitrary criterion of 0.70 (Hair et al., 1998), the coefficient alpha underestimates the internal consistency of scales with a low number of items (Cronbach, 1961). The internal consistencies of absorption were therefore deemed acceptable.

## **Procedure**

Ethical approval was sought and obtained from relevant research ethics committees. Data were collected between the ninth and 14th weeks of the academic year to ensure that students' experiences were captured during similar periods of the academic year. In the UK, respondents were recruited through an invitation e-mail, including a link to the online questionnaire circulated by staff at the conservatoires, or via social media. Australian and Polish respondents were recruited through an advertisement distributed by staff at the conservatoire or in person by the researcher.

## **Data analysis**

Data analysis was carried out using SPSS 23.0. Preliminary analyses were conducted in order to rule out potential confounding variables in the cross-national and sex comparisons. Chi-square tests were applied to check differences in distributions where appropriate. All cells consisted of the minimum five cases required unless otherwise stated. Data for global burnout and global engagement, and their subscales, for full-time and part-time students in Poland only, were tested for the assumptions of parametric statistics using a series of Shapiro–Wilk tests. Mann–Whitney tests or *t*-tests were run where appropriate. Averages, standard deviations, and medians for global burnout and global engagement, and their subscales, were then calculated for the total sample, for each of the three countries, and men and women. Data for age, global burnout, and global engagement, and their subscales, first for each national sample, and then for men and women, were tested for the assumptions of parametric statistics using a series of Shapiro–Wilk tests. Kruskal–Wallis tests were carried out to test for cross-national differences where appropriate, with pairwise comparisons performed following Bonferroni correction for multiple comparisons (Dunn, 1964). One-way analyses of variance (ANOVAs) were run to test for cross-national differences where appropriate, with pairwise comparisons performed using Tukey honest significant difference tests. The *t*-tests or Mann–Whitney tests were performed to test for sex differences where appropriate.

## **Results**

### ***Preliminary analyses***

The percentages of male versus female, full-time versus part-time, and instrumental versus vocal students within each national group are presented in Table 1. Chi-square tests indicated that the relative percentages of male and female respondents differed between Australia and Poland ( $\chi^2_{(1)} = 9.00, p = 0.003$ ), and between Australia and the UK ( $\chi^2_{(1)} = 5.12, p = 0.02$ ), such that there was a higher percentage of male respondents in Australia than in Poland and the UK. The relative percentages of full- and part-time students could not be compared using a Chi-square test because there were no part-time students in the UK and only one part-time student in Australia. To check whether full-time versus part-time enrolment status of students in Poland influenced burnout and engagement, a series of analyses was performed but only one significant difference was found:

absorption was higher in part-time than full-time students (mean ranks 99.9 versus 69.4, respectively;  $U = 944$ ,  $z = 2.28$ ,  $p = 0.02$ ) as shown by a Mann–Whitney test. The part-time and full-time students comprising the Polish sample were therefore combined. Chi-square tests revealed that the relative percentages of instrumental and vocal students differed between Australia and the UK ( $\chi^2_{(1)} = 9.67$ ,  $p = 0.002$ ), and Poland and the UK ( $\chi^2_{(1)} = 9.89$ ,  $p = 0.002$ ), in that there were more vocal students in the UK than in Australia and Poland.

## Burnout

Self-reported levels of global burnout, emotional/physical exhaustion, devaluation and reduced sense of accomplishment in the whole sample, and by country (Table 2) and sex were comparatively low, with respondents scoring, on average, between 2 and 3. The average scores for devaluation for Polish respondents and men were lower, however, ranging between 1 and 2. As described in *Materials* above, normative data were computed by dividing responses into three groups categorised as low, average and high. Thresholds were set at scores of 3 for high emotional/physical exhaustion, 2.4 for devaluation and 3.2 for reduced sense of accomplishment. According to these criteria, 11% of all respondents were at risk of burnout (14% of UK, 11% of Polish, and 8% of Australian respondents; 14% women and 5% of men). Furthermore, 9% of all respondents (11% of UK, 8% of Polish, and 6% of Australian respondents; 11% of women and 5% of men) scored 3 or more on all subscales of the ABQ.

Kruskal–Wallis tests revealed cross-national differences in self-reported global burnout, emotional/physical exhaustion and devaluation. Pairwise comparisons showed differences for global burnout, emotional/physical exhaustion, and devaluation between Polish and UK respondents, with the latter reporting higher levels. Pairwise comparisons revealed differences for emotional/physical exhaustion and devaluation between Australian and Polish respondents: self-reported levels were higher in Australia. One-way ANOVA showed differences for reduced sense of accomplishment: self-reported levels were lower for Australian than Polish and UK respondents as indicated by pairwise comparisons (Table 2).

The *t*-tests revealed that women reported higher levels of global burnout (mean ( $M$ ) = 2.53, standard deviation ( $SD$ ) = 0.63) than men ( $M = 2.35$ ;  $SD = 0.56$ ), a statistically significant difference of 0.18 (95% confidence interval (CI) [0.03, 0.32];  $t(329) = 2.42$ ,  $p = 0.02$ ; Cohen's  $d = 0.30$ ). Self-reported levels of reduced sense of accomplishment were lower for men ( $M = 2.67$ ,  $SD = 0.73$ ) than women ( $M = 2.85$ ,  $SD = 0.73$ ), a statistically significant difference of 0.18 (95% CI [0.00, 0.35];  $t(329) = 1.99$ ,  $p = 0.047$ ; Cohen's  $d = 0.25$ ). A Mann–Whitney test showed that women reported higher levels of emotional/physical exhaustion than men (mean ranks 172.8 versus 149.8, respectively;  $U = 9,829.000$ ,  $p = 0.045$ ).

## Engagement

Self-reported levels of global engagement and its subscales in the whole sample, and by country (Table 2) and sex were moderate, with average scores above the midpoint of 3. Average scores in the whole sample, and by country and sex ranged between 3 and 4 for global engagement, vigour, and absorption. The average scores for dedication were higher, between 4 and 5, other than for the UK respondents, whose average scores were between 3 and 4.

Kruskal–Wallis tests indicated cross-national differences in self-reported global engagement, vigour, and dedication. Pairwise comparisons revealed differences between respondents in Poland and the UK such that self-reported levels were higher for Polish respondents (Table 2). No differences emerged between men and women in their self-reported engagement.

**Table 2.** Descriptive statistics and tests for differences for global burnout and engagement, and their subscales by country.

	Australia (AU)			Poland (PL)			UK			Kruskal-Wallis <i>H</i>	One-way analysis of variance <i>F</i>	<i>p</i>	Significant pairwise comparisons
	Mean (standard deviation (SD))	Median rank	Mean rank	Mean (SD)	Median rank	Mean rank	Mean (SD)	Median rank	Mean rank				
Global burnout	2.49 (0.50)	2.47	173.0	2.36 (0.65)	2.23	144.4	2.61 (0.61)	2.60	187.0	13.58	0.001	UK > PL	
Emotional/physical exhaustion	2.81 (0.62)	2.80	199.2	2.39 (0.80)	2.40	141.7	2.68 (0.78)	2.80	176.5	18.62	<0.001	AU > PL UK > PL	
Devaluation	2.09 (0.68)	2.00	176.7	1.84 (0.84)	1.60	134.9	2.30 (0.83)	2.20	196.1	28.26	<0.001	AU > PL UK > PL	
Reduced sense of accomplishment	2.57 (0.70)	2.60	139.0	2.85 (0.76)	2.80	174.1	2.84 (0.71)	2.80	170.9	3.81	0.02	PL > AU UK > AU	
Global engagement	3.74 (0.57)	3.79	166.4	3.87 (0.58)	3.93	189.1	3.59 (0.54)	3.57	139.4	17.89	<0.001	PL > UK	
Vigour	3.48 (0.62)	3.60	166.5	3.65 (0.66)	3.60	190.6	3.30 (0.64)	3.40	137.6	20.52	<0.001	PL > UK	
Dedication	4.09 (0.75)	4.00	171.7	4.20 (0.69)	4.40	188.2	3.88 (0.61)	4.00	137.6	19.01	<0.001	PL > UK	
Absorption	3.62 (0.60)	3.75	160.3	3.73 (0.63)	3.75	176.9	3.61 (0.56)	3.63	156.5	3.37	0.19		



## Discussion

While Bernhard (2007, 2010) observed high exhaustion, and moderate depersonalisation and personal accomplishment in American music students, the findings of the present study show that burnout was reported rather infrequently by music performance students in Australia, Poland, and the UK. This discrepancy may be attributable to the difference between the questions respondents were asked: Bernhard investigated their experiences in relation to university life rather than music-making. There is also some empirical evidence suggesting that higher levels of burnout may be observed in North America than in Western Europe (e.g., van Horn, Schaufeli, Greenglass, & Burke, 1997). Nevertheless, it should be noted that one in ten of respondents in the present study could be classified as burned out, which highlights the need for more research on burnout in this population. Students reported moderate to high engagement with playing an instrument or singing. The comparatively high levels of self-reported dedication that emerged in the study support the findings of previous research, in that music students identify strongly with and are highly committed to their discipline (Spahn et al., 2004).

Cross-national differences emerged, with Polish students tending to be less burned out than their counterparts in Australia and the UK, and more engaged than the latter. This supports previous findings demonstrating cross-cultural differences in well-being (e.g., Taipale et al., 2011) although, as we shall see, it may also be attributable to systemic differences in music education. Eleven to 14% of students in the UK displayed symptoms of burnout: a higher proportion than in Australia and Poland. Australian and UK students reported feeling more emotionally and physically drained by playing or singing, and expressed negative attitudes towards playing or singing more frequently than those in Poland. Nevertheless, students in Australia felt more efficacious at playing or singing compared to their colleagues in Poland and the UK. Students in Poland reported higher global engagement than those in the UK. This finding is in line with previous research showing levels of work engagement in the UK to be typically lower than in other European countries (Taipale et al., 2011). Specifically, students in Poland felt more invigorated, mentally and physically resilient, and enthusiastic in relation to music-making than their counterparts in the UK.

As suggested above, these findings may be attributable to differences between music education systems in the three countries. Because most students in Poland have already undergone extensive training in classical music in the context of formal music education, unlike those in Australia and the UK whose pre-tertiary training consisted of weekly lessons with a private teacher (perhaps in combination with weekend classes, and local or national choral or orchestral courses during the school holidays), they may be better equipped to deal with the demands of the conservatoire. This could explain why they demonstrated more positive attitudes towards playing or singing as compared to their Australian and UK counterparts. It is also plausible that students in Poland make more informed decisions, based on their past experiences, as to whether they continue their music education at the tertiary level. Thus, those who are highly engaged with performing and have not already experienced symptoms of burnout may be more likely to enter a conservatoire. Because they have spent several years undergoing formal music education in company with others with the same interests and commitment, music has become a central aspect of their self-identity: they demonstrate a positive attitude towards playing or singing and are proud of their involvement in music and music-making. It is also worth noting that a majority of students at conservatoires in Poland enjoy free education, while funding is a major concern for students in Australia and the UK (Lebler et al., 2009), potentially affecting their well-being in negative ways. Respondents in Australia reported a higher sense of accomplishment in relation to playing or singing. This may be because there were more women in the Polish and UK samples than in the Australian one, and, as we shall see, women tend to feel less efficacious at playing or singing.

Women reported being more burned-out and exhausted than men, which confirms previous research in music education indicating that female students are more susceptible to negative experiences (e.g., Hildebrandt et al., 2012). In line with past empirical work in music education (e.g., Ginsborg et al., 2009) and other domains (e.g., Heidari, 2013), they had more negative perceptions of their own competence at music. Burnout develops as a response to chronic stress (e.g., Maslach et al., 2001) so the differences found could be partly explained by sex-dependent biological mechanisms underlying responses to stressors (Goldstein, Jerram, Abbs, Whitfield-Gabrieli, & Makris, 2010). The process of socialisation plays a key role, encouraging social dependability in women, and independence associated with the sense of competence in men (Dedovic, Wadiwalla, Engert, & Pruessner, 2009). The findings of the present study are, however, in contrast to Hamann and Daugherty (1985), who did not show major differences between the levels of burnout experienced by female and male music students; this discrepancy could stem from the different experiences of university and conservatoire students.

### *Limitations of the study and future research*

First, because the study was conducted on a relatively small scale, it is not clear whether its findings could be generalised to wider populations of music performance students in Australia, Poland, and the UK. Moreover, respondents in Poland and the UK were recruited at a small number of institutions, while those in Australia studied at a single conservatoire. Specific cultures characterising tertiary music education institutions may determine students' attitudes towards music (e.g., Papageorgi et al., 2010), which could have affected the present results. Further studies involving more respondents at a range of tertiary schools are therefore warranted. Second, the study was confined to students at conservatoires in three countries: future studies could include university students and in more countries. Third, levels of burnout and engagement in the wider population of music performance students may be different from those suggested by the findings of the present study because of self-selection bias (e.g., Wilson & Joye, 2017), whereby respondents were most likely to be those students with a particular interest in the topic. In future research it would be worth tracking response rates and exploring the characteristics of those who do not initially respond so as to determine the nature of the potential differences between respondents and non-respondents. Fourth, there may have been variations between the proportions of home and international students in each of the samples. In the academic year that started in 2013, 25% of tertiary-level students in Australia (Australian Government, 2014) and 19% of tertiary-level students in the UK (Higher Education Statistics Agency, 2015) were classed as international,<sup>5</sup> in contrast with only 2% of tertiary-level students in Poland (Education Foundation Perspektywy, 2014). Although studying abroad can be an enriching experience, it poses many challenges for students, leading to psychological distress (Mori, 2000). The cross-national differences found in the present study could be therefore associated with potentially greater proportions of international students in the Australian and UK groups when compared to the Polish sample. Future research could control for the status of the respondents (i.e., home/international), and focus on potential differences in the experiences of burnout and engagement between them. Fifth, according to Hodge et al. (2008), there are no clear criteria for interpreting scores on the ABQ (Raedeke & Smith, 2001). The cut-off points for high burnout established in this study seem reasonable given those used in previous research on athlete burnout (Raedeke, 1997) and the criterion of 'three' (Eklund & Cresswell, 2007). They are, however, based on arbitrary criteria for detecting burnout and should not therefore be treated as the basis for its diagnosis (Maslach et al., 1996). It would be well worth studying potential interactions between country and sex in shaping students' burnout and engagement. This was not possible in the present study due to the non-parametric properties of the data. Pointing to cross-national and sex

differences in students' burnout and engagement, this preliminary study provides the rationale for their further investigation to shed more light on the processes underlying these under-researched phenomena. The study yielded acceptable internal consistencies of the measures of burnout and engagement adapted to performance students, thus supporting their use in future research.

## Implications for music education

The study paints an optimistic picture of music performance students in Australia, Poland, and the UK. Nevertheless, given that one in ten students could be classified as burned out, it highlights the importance of raising awareness of the symptoms of burnout among students and music educators, and developing strategies to manage them. It appears especially important for those 10% of students to receive support with identifying and managing the challenges of the conservatoire environment, such as perceived inadequacy by being surrounded by talented peers or the expectation to be more independent that could contribute to burnout. These recommendations may apply particularly to women, who seem to be at higher risk of burnout.

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## Notes

1. Depersonalisation is originally referred to as 'depersonalization' (Maslach & Jackson, 1981) in line with the American spelling. In this paper, the British spelling is used throughout.
2. Vigour is originally referred to as 'vigor' (Schaufeli & Bakker, 2004) in line with the American spelling. In this paper, the British spelling is used throughout.
3. The subscale originally labelled 'emotional/physical exhaustion' (Raedeke & Smith, 2001) assesses both emotional and physical exhaustion.
4. The data regarding nationalities of respondents in each of the three countries were not collected. For simplicity, however, they are referred to as 'Australian/Polish/UK group/respondents/sample/students' throughout.
5. Students in the UK from European Union countries are sometimes considered as local. In the current paper, only UK students are classed as local.

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