Article Title

The Mental Health of Musical Theatre Students in Tertiary Education: A pilot study

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Abstract

This article seeks to illuminate questions of mental health in tertiary level musical theatre training. Professional performing artists, students of singing, dance and acting, as well as undergraduate university students are all at greater risk of mental health problems than the general population. At the nexus of these domains is the tertiary level musical theatre student. Through a survey conducted with recent musical theatre graduates in Australia, this study investigated the impact of tertiary level musical theatre study on the psychological wellbeing of its students, identifying relevant stressors and mitigating factors. The results demonstrate a higher instance of mental health concerns in this cohort than the general population and other tertiary level groups. Some solutions to mitigate the issue are presented.

Keywords

Musical theatre Tertiary education mental health university singing dance acting

The Mental Health of Musical Theatre Students in Tertiary Education: A pilot study Joel Nicholas Curtis, Griffith University

This article seeks to illuminate questions of mental health in tertiary level musical theatre training. Tertiary level musical theatre study is a uniquely varied, demanding and time-intensive endeavour. It represents the intersection of the undergraduate university environment and the performing arts disciplines of singing, dancing and acting. Mental health research regarding the study of each of these disciplines (Maxwell, Seton & Szabo 2015: 103; Perkins et al. 2017: 1; Quested & Duda, 2011: 3), undergraduate level study in general (Bewick et al. 2008: 1; Lovell et al. 2015: 134) and the performing arts sector as a whole (van den Eynde, Fisher & Sonn 2016: 1), have pointed to decreased psychological wellbeing outcomes for their respective populations when compared with statistics of the general populace. As yet, the impact on mental health that occurs at this intersection of at-risk populations is unknown.

Studies have shown a connection between the prevalence of mental health symptoms in persons working in creative industries and many occupation-related exacerbating factors, including financial stressors, social isolation and instability, overload, competitive and negative culture, unhealthy lifestyle choices and employment uncertainties (Bridgstock 2005: 10; Cumming & Duda 2012: 729; Percival & Hesmondhalgh 2014: 190; van den Eynde, Fisher & Sonn 2016: 1). The factors attributed to negative mental health outcomes in tertiary education students show significant alignment with those affecting professional performing artists (Lovell et al. 2015: 134; Macaskill 2013: 435; Said, Kypri & Bowman 2013: 935; Schofield et al. 2016: 135).

Many health and lifestyle factors have been correlated with higher incidence of mental health symptoms in both students and performers. These include binge drinking, physical inactivity, dieting, poor body appreciation and loneliness (Lovell et al. 2015: 134; Schofield et al. 2016: 135). In performers, these stressors reportedly manifest as a direct result of their busy, unorthodox and irregular work schedules (van den Eynde, Fisher & Sonn 2016, 1). The lifestyle and schedule of students reflects a similar rigour and variability (Schofield et al., 2016: 139). Fluctuating work or study overload and underload may also lead to sleep deprivation and financial stressors associated with mental health problems (Lovell et al. 2016: 134).

Current research specific to tertiary musical theatre programs is sparse. Wanke et al. (2012: 210) have reported on the physical health problems of tertiary musical theatre students in a German context, with only cursory discussion regarding increased body image issues and high stress. There has, however, been research conducted on the training of actors, dancers and singers as separate cohorts and the impact that studying in these areas has had on students'

psychological wellbeing. The tertiary musical theatre student trains in each of the triple threat disciplines and, consequently, may encounter similar risk factors to those identified in research findings about these groups.

Research into the study of the separate disciplines that comprise musical theatre indicate their own challenges regarding mental health. Acting training has been shown to carry inherent psychological risk, as it can often blur the boundaries between character and self and asks students to be emotionally vulnerable (Brandfonbrener 1991: 102; Maxwell, Seton & Szabo 2015: 71; Prior et al. 2015: 59; Burgoyne, Poulin & Rearden 1999: 160). Dance literature cites high occurrences of eating disorders, maladaptive perfectionism, low self-esteem and depression (Quested & Duda 2011: 3; van Staden, Myburgh, & Poggenpoel 2009: 20). These traits have been linked to traditional, authoritarian teaching environments (Quested & Duda 2011: 7; Roche & Huddy 2015: 145). Both acting and dance research discuss a lack of teacher understanding and formal training in psychology, despite working in psychologically high-risk environments. Instead, teachers form their teaching methodologies based on past experience, relying on outdated practice and a piecemeal approach to managing the psychological needs of their students (Burgoyne, Poulin & Rearden 1999: 160; Klockare, Gustafsson & Nordin-Bates 2011: 289; Maxwell, Seton & Szabo 2015: 71).

Similarly, the life of the singer in the tertiary conservatoire environment has been described as 'psychologically loaded' (Hildebrandt, Nübling & Candia 2012: 43), where competition, isolation, authoritative teaching and an intolerance for stress-related error-making was identified as common (Demirbatir 2015: 2198). In contrast to challenges faced by singers in conservatoires, many studies have shown that singing, particularly in a group, can be beneficial to an individual's mental wellbeing – increasing self-belief, engendering positive emotions like joy while countering the negative effects of stress and anxiety (Clift, Manship, & Stephens 2017: 58; Linnemann, Schnersch & Nater: 2017, 195; Pearce et al. 2016: 518).

It is evident that, whilst previous research has identified numerous issues that may also pertain to tertiary musical theatre students, it has not yet fully identified the extent to which these students experience negative health effects as a result of their unique type of training. Due to the context in which they find themselves, it could be argued that musical theatre students are an at-risk population in terms of mental health problems and, therefore, this article is principally concerned with investigating the impact of tertiary musical theatre training on the psychological wellbeing of its students. Specifically, it is concerned with the prevalence of clinical and subclinical mental health symptomologies and the various factors that may contribute to or mitigate the presence and severity of these symptomologies.

Methodology

The participant pool was comprised of attendees of Australian undergraduate musical theatre courses who graduated between the years of 2014 to 2017, inclusive. Graduates were targeted for participation in the study rather than current undergraduate students. This was deemed necessary to eliminate the possibility of a negative impact on their studies and mitigate psychological health risks through chronological distance. As the study required participants to recall information about past events, a three-year limit was imposed to ensure that participants' memories of these events were relatively recent. The participant pool was sourced from six institutions around Australia that offer an undergraduate degree in musical theatre.

Participants were invited to complete an anonymous, 49-question, online survey by their respective institutions. The specific method of contact utilized by each institution varied and included email, Facebook message and posts in relevant Facebook groups. Ethical clearance was provided by Griffith University prior to the commencement of the study. Participants were provided with an information and consent document prior to commencing the survey and links and contact details of relevant counselling services were presented at the beginning, end and throughout the survey.

The level of participants' psychological wellbeing and distress were measured using a modified version of the seventeen-item Mental Health Inventory (Hays, Sherbourne & Mazel 1995: 9). This study used a fifteen-question instrument containing five questions each for the subscales of psychological wellbeing, depression/behavioural emotional control, and anxiety. This change was made to reduce the overall number of questions, maximize the ratio of positively to negatively worded questions and include an equal number of questions for each subscale. Despite this change, all the questions that comprise the original psychological wellbeing, anxiety and 5-question overall mental health subscales, were retained.

The fifteen-question instrument used in this study and each of the subscales were tested for internal consistency. Further, to ensure the validity of the new subscales, comparisons were made between subscales from the original instrument and the ones used in this study. It was not possible to complete this calculation for the depression/behavioural emotional control subscale as only five of the eight questions were preserved in this study; however, the original

¹ Chronbach's alpha was calculated for the full fifteen-question mental health score (α =0.92), psychological wellbeing (α =0.80), depression/behavioural emotional control (α =0.84) and anxiety (α =0.85), indicating high internal consistency for each subscale.

 $^{^2}$ Pearson's correlation co-efficient was calculated for the anxiety subscales (r=0.925, p<.001), and for the original 5-item overall mental health subscale and the fifteen item instrument used in this study (r=0.925, p<.001), indicating a very strong and significant relationship between these scales.

design of the MHI allows for calculation of a subscale with up to half of the items missing (Hays, Sherbourne & Mazel 1995: 19). The psychological wellbeing subscale used for this study is identical to the subscale from the original MHI.

In order to investigate possible links between graduates' work, housing, financial situations, and health behaviour and their reported MHI scores while attending their course, participants were asked a series of questions regarding these factors.

To assess the support – financial and interpersonal – participants received during their time studying musical theatre, respondents were asked to indicate who they lived with while attending university (parents, other students from their course, others not from their course, alone or on campus), if they received financial assistance from their family, the government or another third party and whether they had to relocate a significant distance to attend university. A significant distance was defined as interstate or overseas relocation, or any distance that would make it difficult to return home frequently during semester.

Participants' eating behaviour was assessed by asking how many servings of fruit and vegetables were consumed on an average day and how often they ate breakfast. Serving sizes were described as half a cup of vegetables or a medium sized piece of fruit, based on descriptions provided by the Australian Dietary Guidelines (NHMRC 2013). Participants who indicated they had eaten more than five servings of fruit and vegetables per day and consumed breakfast daily were assessed as having met the relevant guidelines. These questions were modelled on the approach by Lovell et al. (2015: 136) and the ABS Australian Health Survey (ABS 2013).

The question measuring alcohol consumption was also modelled on Lovell et al. (2015: 137). Provided with a guide of what constitutes a standard drink based on the Australian government guidelines (NHMRC 2009), participants were asked how many standard drinks they would usually consume in one session of drinking. Respondents who indicated five or more were assessed as meeting the criteria for binge drinking (ABS 2006; NHMRC 2009).

Participants' sleep habits were assessed by asking how long they slept per night on average during their musical theatre course. Those who indicated that they slept under seven hours or over nine were assessed as under- or over-sleeping, as both have been linked with mental health problems (Allgöwer, Wardle & Steptoe 2001: 223; SHF 2015: 1).

Participants were also asked how many hours of employed work they undertook per week on average while attending their course. This metric, together with questions regarding their total weekly contact hours, hours spent on their coursework outside of official classes and additional exercise undertaken, provided an indication of busyness and work-life balance—an important indicator of stress and burnout (Pocock, Skinner & Williams 2007: 8). Because

musical theatre students already partake in frequent, strenuous exercise as a part of their studies, assessing physical activity against current guidelines was redundant. Consequently, existing methodologies regarding physical activity were rejected in favour of simply asking how much additional exercise participants undertook during their course.

Participants answered seventeen questions about specific components of their musical theatre course and the effect each had on their state of mind. Each question was answered on a seven-point Likert scale from "very relaxed, happy and/or calm" through to "very anxious, stressed and/or sad". Each course factor was selected for inclusion in the survey based on either previous literary evidence of its impact on mental health (e.g. body image, financial situation, work-life balance) (Bridgstock 2005: 10; Pocock, Skinner & Williams 2007: 8; Quested & Duda 2011: 3; van den Eynde, Fisher & Sonn 2016: 1) or course events hypothesized as calming or stressful (e.g. private singing lessons, casting announcements, classes in a various disciplines), based on the researcher's experience and expertise working with tertiary musical theatre students.

Finally, participants were asked to rank their ability in each of the triple threat disciplines. Doing so made it possible to account for this when analysing responses to the question, "When I attended a class in the discipline of acting/dance/singing..." and allowed comparison with MHI scores.

Data was collected using LimeSurvey via the Griffith Survey Tool and subsequently analysed using the software Statistical Package for the Social Sciences (v25). MHI results for each participant were calculated according to the instructions provided with the instrument (Hays, Sherbourne & Mazel 1995: 7). A higher score, closer to 100, indicates better mental health. Various statistical analyses, as indicated in the results tables below, were undertaken to compare participants' MHI scores with normative data and the various demographic, lifestyle and course factors to find significant interactions.³

Results

The survey yielded 175 unique responses, of which 117 were included in the results. The criterion for inclusion was completion of the MHI section of the survey with no more than 3 missing data points. Of the included respondents, 48 were male, 62 were female and seven failed to indicate their sex. The age range of respondents was 19 to 32, with a median age of 23. Responses were generated from every state that offered an undergraduate musical theatre course at the time of data collection.

³ Two-tailed tests of significance were used in the execution of all statistical tests.

Separate means were calculated for each of the original MHI subscales for comparison with normative data. Normative data means were obtained from the original Medical Outcomes Study (Hays, Sherbourne & Mazel 1995: 63) for which the MHI was developed, and compared with the calculated means for musical theatre students. Where possible, scales containing identical questions were compared. In two cases, this was not possible due to the design of this study—the seventeen-question overall mental health scale was compared with this study's fifteen-question total mental and the original eight-question health score depression/behavioural control subscale was compared with this study's 5-question depression/behavioural control subscale.

Table 1
MHI Scores Comparison with General Population Normative Data
(One Sample t-test)

(One Sample i lest)						
Scale	Mean	Mean	Mean	SD	t	df
	(nor	(MT)	(diff.)			
	m.)					
15-item overall mental health*	71.30	50.15	-21.15	15.76	14.51	116
5-item overall mental health	70.40	52.35	-18.05	17.75	11.00	116
Psychological wellbeing	61.50	54.47	-7.03	15.48	4.92	116
Depression/behavioural control*	77.30	57.59	-19.71	18.46	11.55	116
Anxiety	73.10	38.81	-34.29	19.91	18.62	116

All tests significant at p<.001

The tests indicate that Australian musical theatre students score more poorly on all measures of mental health compared to the normative data. Highlighted in table 1 (bold) is the comparatively large mean difference for the anxiety scale, indicating much poorer anxiety scores for musical theatre students than any of the other scales.

A very limited number of studies have been conducted with general tertiary student participants using the MHI, none of these from Australian populations. Houghton et al. (2010: 43) and Burris et al. (2009: 540) provide 5-item overall mental health subscale data from Ireland and psychological wellbeing subscale data from the United States, respectively. The table below outlines the results of comparing these MHI scores from general tertiary student populations and the scores of the musical theatre students from this study.

^{*}indicates a scale with a reduced number of questions

Table 2
MHI Scores Comparison with Tertiary Student Normative Data
(One Sample t-test)

(One sumple i-lest)						
Scale	Mean	Mean Mean		SD	t	df
	(tertiary)	(MT)	(diff.)			
5-item overall mental health	72.68	52.35	-20.33	17.75	12.392	116
Psychological wellbeing	67.20	54.47	-12.73	15.48	8.900	116

All tests significant at p<.001

The tests indicate that Australian musical theatre students score significantly more poorly than general tertiary students from Ireland in overall mental health and more poorly than general tertiary students from the United States on psychological wellbeing.

Housing, Financial and Lifestyle Factors

The responses of each question regarding housing, finances and lifestyle were compared with regard to their respective mean MHI scores using appropriate statistical tests as indicated in the tables below. Sleep duration, breakfast frequency and alcohol consumption correlated with significant differences in mean MHI scores. All other housing, financial and lifestyle factors tested proved not significant.

The mean MHI scores for respondents who met the Australian guidelines for sleep duration were significantly better than those who did not. The majority of participants (59.48 per cent) did not meet these guidelines.

Table 3
Sleep Duration and MHI Score (Independent Samples t-test)

Sicep Duration and MIII	Guidelines						
Scale	met?	M	SD	t	p	df	n
Overall mental health	N	45.86	13.60	3.484	.001	114	69
	Y	56.54	16.84				47
Anxiety*	N	33.65	15.18	3.383	.001	75.65	
	Y	46.09	21.87				
Depression/behavioural	N	53.62	17.76	2.894	.005	114	
control	Y	63.46	18.28				
Psychological	N	50.54	14.74	3.767	<.001	114	
wellbeing	Y	60.32	14.98				

^{*}Equal variances not assumed (Levene's test F(1,114)=9.360 p=.003)

Respondents who met the Australian guidelines for breakfast frequency reported significantly better MHI scores for depression and behavioural emotional control, psychological wellbeing and total mental health score than those who did not. 56.03 per cent of participants did not meet the Australian guidelines for breakfast frequency.

Table 4
Breakfast Frequency and MHI Score (Independent Samples t-test)

	Guidelines				•		
Scale	met?	M	SD	t	p	df	n
Overall mental health	N	46.83	15.53	2.941	.004	114	65
	Y	54.45	15.30				51
Depression/behavioural	N	53.35	18.91	2.883	.005	114	
control	Y	63.04	16.71				
Psychological	N	50.87	15.46	2.639	.009	114	
wellbeing	Y	59.14	14.50				

Respondents who met the Australian guidelines for alcohol consumption reported significantly higher MHI scores for anxiety, depression and behavioural emotional control and total mental health score than those who did not. The majority of participants (63.16 per cent) met the guidelines for alcohol consumption.

Table 5
Alcohol Consumption and MHI Score (Independent Samples t-test)

•	Guidelines						
	met?	M	SD	t	р	df	n
Overall mental health	N	46.19	14.51	1.991	.049	112	42
	Y	52.22	16.21				72
Anxiety	N	33.56	17.74	2.087	.039	112	
	Y	41.16	19.33				
Depression/behavioural	N	51.43	17.92	2.692	.008	112	
control	Y	60.83	18.04				

Course Experience

Figure 1 shows the percentage of strong positive and negative reactions to each of the scenarios in the course experience section of the survey. A strong negative reaction includes both responses "rather anxious, stressed and/or sad" and "very anxious, stressed and/or sad". A strong positive reaction includes both responses "rather relaxed, happy and/or calm" and "very relaxed, happy and/or calm". Scenarios are ordered left to right by highest to lowest percentage of strong negative reaction.

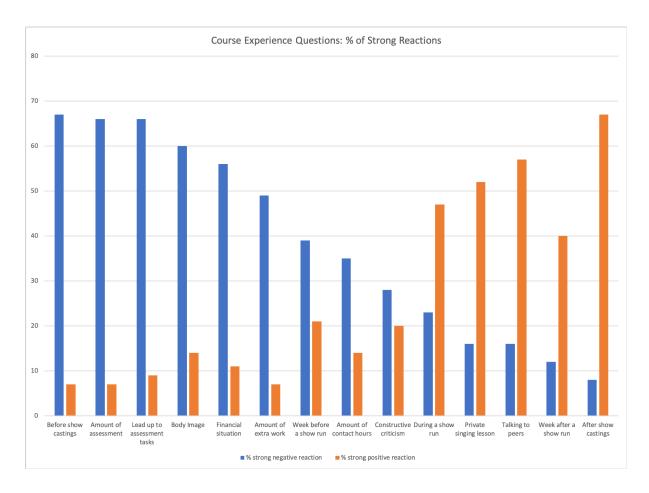


Figure 1: Course Experience Questions: Percentage of Strong Reactions.

Additionally, participants' reactions to classes in singing, acting and dance were examined in relation to their self-reported strongest and weakest skills when first entering their course. Participants generally reported positive experiences in classes where they identified as most skilled and negative experiences in classes where they identified as least skilled, with one exception. Those who reported singing as their weakest skill recorded a higher frequency of strongly positive responses compared to strongly negative responses when attending singing and music classes. In addition, dancers reported a high percentage of strong positive responses in all classes, whereas both singers and actors were far more likely to have a strong negative reaction than a positive one when attending dance classes. There was a distinct preponderance of participants with a lack of skill in dance and a notable majority of participants who considered themselves strongest in the discipline of singing.

Discussion

MHI: Normative Data vs Musical Theatre Students

Musical theatre students scored significantly more poorly on all subscales of the MHI than the general population normative data. Further, Australian musical theatre students scored more poorly than the available general tertiary student population data on measures of overall mental health and psychological wellbeing.

The low mental health scores of musical theatre students across all domains indicate that this group is at greater risk of mental health problems than the general population and other tertiary student populations. 53.85 per cent of students reported a mental health score that indicated diagnostic levels of mental disorder according to the benchmark used by European Opinion Research Group (2003: 5). This proportion of the studied population is far greater than any found in the European study, where Great Britain showed the highest levels at 31.5 per cent. These findings support the hypothesis that the combination of at-risk demographics – tertiary students (Lovell et al. 2015: 134; Said, Kypri & Bowman 2013: 935), performing artists (van den Eynde, Fisher & Sonn 2016: 1), acting study (Maxwell, Seton & Szabo 2015: 103), dance training (Quested & Duda, 2011: 3; van Staden, Myburgh & Poggenpoel 2009: 20) and singing training (Hildebrandt et al. 2012: 47; Perkins et al. 2017: 1) – provides a nexus at which mental health problems can flourish.

The data points to anxiety as an area in which musical theatre students are especially vulnerable. This supports findings by van den Eynde, Fisher and Sonn (2016, 85), who noted similar high levels of anxiety in working professionals aged 18–29, from all areas of the performing arts. Because anxiety and depressive disorders are often comorbid, have a crossover in symptomology and share many risk factors (APA 2013), it is difficult, based on the data collected in this study, to definitively state what causes this vulnerability. Van den Eynde, Fisher and Sonn (2016) posit,

[18-29 year olds] are trying to establish themselves in their various roles, but do not have the depth of experience to draw on to demonstrate how well they may fit. This may reflect a higher level of performance and audition anxiety when competing against more seasoned personnel, and usually a much larger number of other performers for jobs. (p. 85)

It is possible that the practical and performance-based focus of musical theatre courses, as well as the transition into the high-level, high-competition tertiary environment may also provide a greater risk for performance anxiety and therefore, an increase in the preponderance of anxiety

symptoms for young tertiary musical theatre students (Helding 2016: 85; Kenny, Davis & Oates 2004: 758; Thomas & Nettlebeck 2013: 626). Additional study in this area is needed to determine a more definitive causality of anxiety symptom preponderance in tertiary musical theatre students.

Factors Associated with Mental Health Problems in Musical Theatre Students

The results of this study support the view of current literature that lifestyle factors including diet, sleep and alcohol use contribute to the presence of depression and anxiety symptoms (Kitchener, Jorn & Kelly, 2017: 46; Lovell et al. 2015: 134). Further, the findings also support the validity of current Australian Government guidelines for breakfast frequency, sleep duration and quantity of alcohol consumption in one drinking session and that adherence to these guidelines is associated with positive mental health in musical theatre students (ABS 2006; NHMRC 2009, 2013; SHF 2015). Specifically, eating breakfast daily, sleeping for seven to eight hours per night and limiting alcohol consumption to less than four drinks in one session were strong indicators of positive mental health in participants.

Importantly, the guidelines for sleep duration and breakfast consumption were not met by the majority of participants. This is higher than the general tertiary student population as reported by Lovell et al. (2015, 138). It is possible that the time pressures experienced by university students contribute to under-sleeping and skipping breakfast and that these pressures are greater for the musical theatre student. Contact hours in a musical theatre course are greater than those experienced by a typical tertiary student (Baik, Naylor & Arkoudis 2015: 15; Sabey 2014: 384) and, in this study, 72.6 per cent of participants reported spending more than 40 hours a week on their studies and paid work. 53.8 per cent reported exceeding 40 hours per week on coursework alone.

Student Response to Course Experience Factors

In investigating specific course-related factors that may have an impact on students' mental health, this study found that anticipation of show castings, assessment and homework, body image and students' financial situation all contributed negatively to students' overall psychological wellbeing. In contrast, multiple factors were found to contribute in a positive way, including one-to-one singing lessons and talking to peers, as well as the times during and after the run of a show. Participants also reported positive reactions to the release of show casting announcements when they felt they were given a role that allowed them to make use of and extend their skills.

The factor that was found to have the most negative impact on mental health was anticipating show castings. A negative reaction to future uncertainty is common in performing artists, who also report stress related to auditions and the uncertainty of future employment (van den Eynde, Fisher & Sonn 2016: 12). It is vital that students develop resilience to this uncertainty during their formative time at university, so that they are prepared for life beyond graduation where possible rejection represents, not only a threat to ego, but also to future income.

A cluster of factors related to assessment and homework was also found to have a negative impact on student mental health. These factors include the amount of assessment and homework, as well as the period in the lead up to assessment tasks. This corroborates findings by Austin, Saklofske and Mastoris (2010: 48), which indicated that assessment and assessment heavy periods provide the potential for significant stress in tertiary students. Further, the performative nature of much of the assessment in musical theatre courses may provide a high risk for performance anxiety-related experiences (Helding 2016: 85; Kenny, Davis & Oates 2004: 758; Thomas & Nettlebeck 2013: 626).

Participants' reactions to their individual financial situation and body image were also significantly negative. This reflects the findings in previous studies on tertiary students' finances (Macaskill 2013: 435; Said, Kypri & Bowman 2013: 939) and negative body image in dancers (Bettle et al. 2001: 297; Ringham et al. 2006: 503). Further, although this study found that receiving financial support did not correlate with mental health outcomes, the majority of participants reported a strongly negative response to their financial situation. This indicates that, regardless of financial support received, generally musical theatre students were in a financial position that caused significant stress. Long course hours, significant homework loads and the after-hours variability of schedules throughout semester can contribute to the frequency and regularity with which students are able work and may have an impact on their financial position.

Participants reported feeling strongly positive when talking to their peers and in their one-to-one singing lessons. The social support offered by communication and relationships with peers, particularly those with whom there is a shared experience, has been shown to have a protective factor against mental health problems (Macaskill 2013: 437; Kitchener, Jorm & Kelly 2017: 8). Similarly, Carey and Grant (2015: 18) found that the one-to-one context allows for the development of a unique relationship between student and teacher that extends beyond musical instruction to professional and personal mentorship. Through this, teachers are able to foster positive personal skills like resilience, while also "guiding students in connecting their conservatoire learning to real-world contexts and professional pathways" (Carey & Grant

2015: 14). Additionally, the individualized attention afforded in this context, allows teachers to monitor student wellbeing more closely than in larger classes (Macaskill 2013: 435).

Currently, not all musical theatre courses in Australia offer one-to-one lessons as a part of the formal course structure, as these are the most cost-intensive classes. Some offer private singing lessons at an extra cost to the student, often with a teacher recommended but not officially employed by the university. These findings, coupled with other recent research on the benefits of one-to-one teaching (Carey & Grant 2015: 18) and the negative impact of increasing class size and decreasing student-teacher contact (Macaskill 2013: 435), point to the valuable role that this kind of tuition may provide in terms of student psychological wellbeing.

Dancers, Singers, Actors - Skills Acumen and Mental Health

Generally, participants that reported dance as their best triple threat skill were more likely to have a positive reaction to classes in any discipline, whereas singers and actors were more likely to find dance classes distressing.

Several possible explanations for these findings can be extrapolated from the literature. Firstly, dancers may have developed a better set of skills for coping with the rigour of musical theatre training, including a strong sense of discipline and an affinity with routine (Berardi 2004: 207; Vicario & Chambliss 2001: 13). Secondly, it is possible that dancers are more aware of the benefits of nutrition and exercise and display a higher level of fitness than singers and actors, all of which have been shown to have a protective effect against mental health problems (Kitchener, Jorm & Kelly 2017: 7; Lovell et al. 2015: 134).

Thirdly, singers and actors may find dance classes to be disproportionately distressing. The design of this study does not allow insight as to the reasons for this, though traditional authoritarian modes of teaching, common in dance, may contribute (Quested & Duda 2011: 7; Roche & Huddy 2015: 145). Dancers are likely to feel more comfortable in this environment due to their more developed skill base and familiarity with this teaching style, whereas other students may be confronted by it.

Finally, regardless of self-reported best triple threat skill, all participants were more likely to have a strong positive reaction to classes in singing than a strong negative reaction. This supports findings in the literature that singing, particularly in a group, can be beneficial to psychological wellbeing (Clift, Manship, & Stephens 2017: 58; Linnemann, Schnersch & Nater 2017: 195). It also adds further weight to the possibility of the positive impact of one-to-one lessons, although as not all institutions offer this type of tuition, no definitive conclusions can be reached.

Limitations

Several limitations arise from the design and execution of this study. Primarily, the cross-sectional nature of the research did not allow for inferences regarding possible causal relationships between the various lifestyle and course-related factors and mental health scores. Future research may include a longitudinal methodological approach in order to investigate this further. Secondly, it is important to note that the comparisons with normative data are limited by methodological changes in the application of the instrument used to measure participants' mental health and by the lack of recent Australian data available for comparison. Additionally, the retrospective nature of this study – asking participants to recall events up to three years prior – may affect the accuracy of responses and has an unknown impact on the MHI. Finally, this study did not ask participants to identify pre-existing mental health conditions or seek to identify single institutions or teachers and their relationship with mental health outcomes. Further research may seek to investigate these areas further, utilising methodologies that cater to the ethical considerations involved in using current student participants, as well as studying teacher and institutional practices.

Conclusion

This research indicates that tertiary musical theatre students in Australia are likely to experience poor mental health. In particular, anxiety symptoms were found to be widely present. The reported mental health scores are significantly lower than data from the general population and from general international tertiary populations. In addition, when significant lifestyle and course-related factors are considered together, the data points to an experience that is time-poor and highly stressful for the tertiary musical theatre student. The time pressures associated with undertaking tertiary musical theatre study may influence lifestyle choices that are less conducive to positive psychological wellbeing. These time pressures may also make it difficult to undertake sufficient employment and contribute to a financial situation that most participants viewed as stressful.

The most important issue arising from this research is the need for institutions, teachers and students to address the poor mental health of tertiary musical theatre students. It is evident that this population experiences psychological wellbeing challenges and course and assessment design must acknowledge this. Mental health-related training for teachers and students alike may have a positive impact, though the exact nature of this training is cause for further investigation. Certainly, students must be provided with opportunities to develop positive cognitive habits like resilience that will serve them well, both during their time at university and in the wider industry. Students should also be educated regarding positive lifestyle habits,

particularly regarding sleep, eating and alcohol consumption, as well as time management skills.

The positive impact of individual teacher-student attention on student psychological wellbeing, particularly in the one-to-one teaching studio, is an area that demands further research. Maintaining small student cohorts is financially difficult for a tertiary sector facing continued funding cuts (Carey & Grant 2015: 6) and research in this area may provide an evidence base for the benefits of such an expense. Conversely, this research did not investigate the impact that teachers and teaching styles may have on psychological outcomes for students; however, this may be an area worthy of further investigation under a different methodological approach that caters to the ethical considerations involved in studying teacher practice.

The ability to understand and look after their own psychological wellbeing is an invaluable skill for future musical theatre professionals to develop, particularly in a highly competitive industry that also faces significant mental health challenges (van den Eynde, Fisher & Sonn 2016: 1). Bearing in mind the results presented here, educators can help students develop a strong level of resilience and foster an atmosphere that encourages open communication about mental health. Peers and colleagues play a role in contributing to a future performing arts industry with lower levels of mental health stigma and more positive psychological wellbeing outcomes.

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