

Youth orchestra participation and perceived benefit: A pilot study of the Tasmanian Youth Orchestra

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Abstract

Formed in 1965, and now including around 150 players and seven ensembles, the Tasmanian Youth Orchestra (TYO) is the oldest state-based youth orchestra in Australia. This paper presents the findings from a 2018 survey of TYO participants, as one part of a broader qualitative pilot project into the perceived benefits of participation in TYO. Using inductive thematic analysis techniques researchers identified the following four themes from these data, which, in order of significance, are that participation in their TYO group: 1) was strongly identified as an embodied and emotional experience; 2) enables the development of specific, identified musical skills; 3) contributes to the making of, and maintenance of, important friendships; and 4) results in the development of non-musical skills such as personal organisation and learned social skills. The research team also found that many respondents demonstrated “growth mindset” thinking (Dweck, 2006) and resilient behaviours, perhaps indicating that there may be something in their experience that enables them to employ these characteristics in their learning in TYO groups. Funding has been provided to extend this research beyond the pilot stage to develop research informed resources to support learning and teaching for resilience in youth Arts organisations.

Keywords: Youth music; group music; ensemble; learning through music; growth

Introduction

Following the success of youth orchestra programs such as El Sistema, founded by José Antonio Abreu in Venezuela in 1975, research into the social and other benefits of participation in youth orchestras has increased (see for example: Barrett & Smigiel, 2007; Fairbanks, 2016; Glasgow Centre for Population Health, 2015; Hewitt & Allan, 2012; Hopkins, Provenzano & Spencer, 2016; Power & Powell, 2016). El Sistema programs have had life-altering effects on many young people worldwide (Holochwost, Palmer Wolf & Hill Bose, 2017; Majno, 2012; Tunstall & Booth, 2016), providing musical and non-musical skills leading to increased

opportunities in later life; although a different narrative is now emerging about this approach (see for example: Baker & Frega, 2018; Bergman, Lindgren & Saether, 2016). Whilst Australia does not have a formal El Sistema program, it has a history of youth orchestras dating back to the 1950s (Australian Youth Orchestra debuted in 1957), although research into the social and other benefits of participation in these orchestras has been limited. In addition, some Australian researchers have investigated El-Sistema ‘inspired’ programs (see for example: Osborne, McPherson, Faulkner, Davidson & Barrett, 2016; Power & Powell, 2016). This article reports the findings of a

2018 pilot study of participants in the Tasmanian Youth Orchestra (TYO) and their perceptions of the benefits of their participation. Initial findings from this pilot study indicate that participants perceived four main areas of benefit through their musical engagement: 1) an embodied and emotional experience, 2) orchestral/musical skill development, 3) friendship, and 4) non-musical skill development.

Formed in 1965, the TYO is the oldest state youth orchestra in Australia, with the Queensland Youth Orchestra following in 1966 (Collett, 2007). In recent years TYO has received funding increases from the Tasmanian Department of Education and Arts Tasmania that have enabled structural and organisational evolution including the employment of professional staff, and the expansion of its program of offerings. The TYO now includes more than 150 participants aged between 7 and 25 years in two orchestras, two string ensembles, a wind ensemble, a percussion ensemble, two choirs, and in 2019 a workshop program in the north of the state. In 2017, the TYO and researchers from the University of Tasmania established a partnership through which the authors (and others) could support TYO in the provision of targeted research projects. This article reports on the first stage of this partnership; a pilot study investigating the impact of youth orchestra participation on young people. In June 2019 the Tasmanian Community Fund, the Department of Education and the Australian Strings Association provided funding to move beyond the pilot study referred to here, to a three-year project to develop evidence-based materials to support resilience in young people through Arts participation.

Literature

The positive benefits conferred by active engagement with the arts at all life stages are widely recognised and increasingly being embedded in public health and educational policy, particularly in the United Kingdom (All-Parliamentary Group on Arts, Health & Wellbeing,

July 2017). In Australia the development of the National Arts and Health Framework (2013) has aimed to promote the benefits and integration of the arts for improved health outcomes, and has subsequently been the foundation for individual state frameworks. Although the Tasmanian parliament has not yet endorsed its own policy framework on arts and health, in 2017 a Youth Arts Strategy was adopted with the aims of providing training and employment in the cultural sector and improving social health and wellbeing.

While our world has become more 'connected' through technology, issues of social isolation persist. In a national survey, younger Australians (18-25) report higher levels of loneliness, depression and social anxiety than other age groups (Lim, 2018) and the wellbeing and resilience of rural and regional young people has become a serious concern for researchers (Houghton, Hattie, Carroll, Wood, & Baffour, 2016; Noble-Carr, Barker, McArthur & Woodman, 2014).

Engagement with music has been identified as playing an important role in the development of identity during adolescence and can provide opportunities for the fulfilment of basic psychological needs such as 'competence, relatedness and autonomy' (Evans & McPherson, 2017, p. 229) underpinning development of a more unified sense of self and intrinsic motivation (Evans, 2015). Interviews with adolescents have identified social and emotional benefits associated with their engagement with music and the life skills that it helps to develop, and their responses have endorsed the role of music in personal growth and the navigation of adolescence (Campbell, Connell & Beegle, 2007). Participation in youth orchestras offers unique opportunities for young people to develop social networks and employability skills such as creativity, collaboration, communication and critical thinking (Jefferson & Anderson, 2017). The most widely publicised programs of orchestral playing for youth are associated with the El Sistema movement, focussed on addressing social inequity through sponsorship, specialised training

and role models and reporting positive results for ameliorating impacts of poverty and social exclusion, with participants less likely, for example, to be involved in criminal activity (Tunstall & Booth, 2016). Osborne, McPherson, Faulkner, Davidson and Barrett (2016) in their study of two El Sistema-inspired, primary school, group music programs, found some evidence for non-musical outcomes from participation. They write that, in the context of low SES students, "exposure to formal music learning opportunities offers numerous personal and social benefits, through improved problem solving skills, academic achievement in language and maths, self-esteem, self-regulated behaviour and social responsibility" (p. 172).

Increased stress levels and mental health issues have a noticeable impact on adolescent health (Cohen & Cohen, 2013) and recent research indicates that active music making in a group setting can assist to ameliorate stress and promote resilience, mental health and well-being for young people (Rodgers & Varvarigou, 2016), even for those who are in the youth justice system (Daykin, de Viggiani, Moriarty & Pilkington, 2017). Investigation of the action of music on neurotransmitters has provided understanding of both its pleasurable and even addictive effects through the release of dopamine, the reduction of stress hormones and release of oxytocin that promotes social bonding (Chanda & Levitin, 2013). Recent reviews of the literature on the use of music by adolescents as a strategy for coping (Miranda 2015, 2019) identify the inherent complexities of how this might operate in various modes of engagement, and researchers have indicated both potential benefits and risks. The mechanisms underlying the association between engagement with music and well-being in adolescents are also being investigated through a focus on the emotions evoked by music, and through the process of music training and development of emotional awareness (Leung & Cheung, 2018). As well as musical training, youth orchestras can provide a community of support for adolescents that promotes resilience, but students

report that the role of group dynamics in shaping that engagement experience, whether in rehearsal or performance situations, is very important and linked to how they feel about the experience and themselves (Monkhouse & Forbes, 2017). Arts participation through community-based programs has also been correlated with improved academic outcomes for children and adolescents, benefitting self-esteem and satisfaction with life (Martin, Mansour, Anderson, Gibson, Liem, & Sudmalis, 2013), and reducing the incidence of risk-taking behaviours and use of alcohol, tobacco and illegal drugs (Daykin, Orme, Evans, Salmon, McEachran, & Brain, 2008), suggesting improvements in emotional self-regulation, stress response and reduced susceptibility to peer pressure.

In research into Sistema Scotland's 'Big Noise' orchestral program, Harkins, Garnham, Campbell & Tannahill (2016) state that the positive relationships between young players and adult musicians was "pivotal" to improving health outcomes (p. 33). Measuring the perceptions of primary and secondary students of their orchestral experience in community and school-based programs, King found, using a devised Orchestra Meaning Scale, that the most positive responses were in the areas of music learning, but also identified the contribution to other non-musical skills (King, 2014). Musical benefits are likely to be foregrounded in responses to questions about the perceived value of music making activities, but other researchers have also identified, using different survey tools, that young people also perceive a range of social benefits as an outcome of their participation (Kokotsaki & Hallam, 2007, 2011).

Methodology

This research was initially conceived as a mixed methods study, designed to use a two-stage survey, and photo-elicited focus groups, to collect data from orchestra participants and their parents/carers. However, this structure changed as the needs of the project evolved. The perspectives

of parents/carers were ultimately not solicited essentially due to time constraints on the research team. Although loosely in line with the findings of the survey, the detailed results of the photo-elicited focus groups present a more nuanced picture of participation, and these will be reported in another article at a later date. This article is concerned with reporting the survey findings only.

The online survey housed in SurveyMonkey was designed in two stages using two forms of the Motivation and Engagement Scale or MES (Martin, 2011): the MES (High School) and a slightly modified music form of the MES, that also included eleven unique questions designed by the researchers. The MES is a scale devised to quantify school students' motivation on eleven factors including: self-efficacy, valuing, mastery orientation, planning, task management, persistence, failure avoidance, uncertain control, anxiety, self-handicapping and disengagement. By administering the MES (High School) and then the music form of the MES, the researchers sought to establish if TYO participants used similar patterns of behaviour for their participation in school and their participation in TYO, hypothesising that their behaviour at TYO may be different, thus suggesting TYO specific behaviours.

However, the analysis of the two surveys, including unpaired T-tests, did not find any statistically significant differences between the two survey data sets. Comparisons between the two survey data sets and the norm, indicated that for nine of the eleven factors the results are better than the norm. This may be important as it determines the 'above norm' characteristics of the TYO respondents. Beyond this the comparison of the two data sets did not produce any noteworthy differences. However, the eleven unique questions designed by the researchers and appended to the music form of the MES produced very interesting qualitative responses that were of value and that are reported in the data section of this article.

The funding for the pilot study was granted by the University in October 2017, and ethical clearance

for the research took some time to secure, but was obtained from the Human Research Ethics Committee (Tasmania) Network in May 2018. The research team consisted of academics from the Faculty of Education, the Conservatorium of Music and the School of Social Sciences, and Professor Michael Anderson (University of Sydney, School of Education and Social Work) agreed to mentor the team. The General Manager and the Program Coordinator of the TYO advised the research team throughout the project. The surveys were administered in May and June of 2018, and an interim draft report released in December 2018. Re-analysis of data not including the photo-elicited data set and Wind Ensemble data proceeded until August 2019.

The potential purposefully selected survey sample (Creswell, 2012; Denscombe, 2007; Hatch, 2002; Patton, 1990; Sarantakos, 2005) consisted of members of four TYO groups – the principal ensemble the TYO (29 members, aged 12-26), the Philharmonic Orchestra (35 members, ages 12-17), Academy Strings (28 members, ages 10-16), and Wind Ensemble (14 members, ages 10-16), with total potential participants being 106. To focus on orchestral perspectives, for this article, data identified as originating from Wind Ensemble respondents was not included. Potential participants were contacted by the researchers by email with details of the study prior to then attending rehearsals to answer questions about the study and to collect informed consent forms. There were 26 respondents to the survey that included the eleven unique questions analysed herein. The Manager of the TYO was consulted throughout the project to ensure that recruitment and collection procedures aligned with TYO policies.

Ten of the 11 unique questions were open ended and asked questions about: why they choose to play in their TYO group and what keeps them coming back, the musical and other skills they believe they have refined or developed in their group, how they feel before and after TYO rehearsals and concerts, and what activities if any they may forfeit in order

to attend TYO rehearsals. The final statement for response started "I think participating in TYO helps with" and was followed by seven stems, including "meeting friends with common interests", "working with other people" and "making me feel better about myself", with a seven-point Likert scale from Strongly Disagree to Strongly Agree.

These data were analysed using a thematic, inductive approach (Baker, Hunter & Thomas, 2016; Braun & Clarke, 2006; Miles & Huberman, 1984; Hatch, 2002; Sarantakos, 2005), using data matrices, and alpha-numeric/colour coding of potential themes before ultimately arriving at a set of trustworthy final themes. The analysis process was iterative, returning time and again to the survey data subset searching for patterns of meaning in the words and phrases contained therein. Sarantakos (2005) calls this approach "inductive category construction" (p. 306). The analysis of data informed hierarchies of significance based on the number of times a data extract was coded as significant, and the number of respondents who mentioned that significant idea or concept. The final trustworthy themes evolved over multiple readings of data, searching for both latent and semantic meaning. Three or fewer references to an idea or concept across the data sub-set were initially coded, but ultimately deemed not sufficiently significant for this article, and thus not included as part of the final themes or sub-themes. Four main themes were thus identified containing a total of 16 sub-themes.

Data

The four main themes evident from the analysis of data, in order of significance, are: 1) An embodied and emotional experience, 2) orchestral/musical skill development, 3) friendship, and 4) non-musical skill development.

1. An embodied and emotional experience

Including 137 distinct references, in six sub-themes, this theme was the strongest, both

numerically and semantically, to be coded. It encompassed responses essentially relating to the affective nature of orchestral music-making, including: happiness, excitement and enjoyment; nerves; pride and a sense of achievement; tiredness (and giving something up in order to attend); frustration/boredom; and, feeling at peace or relaxed. A sense of obligation to attend was also mentioned once. Responses to the Likert scale statement "I think participating in TYO helps with making me feel better about myself" resulted in a 76% agreement.

1.1 Happiness, excitement and enjoyment

With 23 of 26 (88%) of survey respondents making a total of 63 references to this theme, this was the most referred to characteristic of the TYO experience. Interestingly, there were some very revealing statements made by respondents that indicated maturity beyond their years in understanding of the embodied experience of orchestral music making. One such statement, made by a 13-year-old playing in the Academy Strings group, stood out as particularly worthy of note, the respondent wrote that "I've learnt about how music can sweep you up and take you to places I never knew existed" (Respondent 9). A statement by a 16-year-old, playing in the Philharmonic Orchestra group, is illustrative again of many respondents' perceptions of TYO as an embodied and, most importantly, shared experience: "When I'm playing, I feel excited and as though I am a part of the whole, working to create a wonderful sound" (Respondent 11).

In responding to a question asking how they feel after rehearsal, a 15-year-old member of the Tasmanian Youth Orchestra group locates the experience as the highlight of their week: "Very happy because I enjoy it but sad I have to wait another week for TYO because its [sic] fun and one of the highlights of my week" (Respondent 3). This 15-year-old member of the Philharmonic Orchestra in responding to the same question highlights a significant "growth mindset": "Every

week I go home feeling like I've learned something new, and learning makes me feel successful and happy. I feel like I have not wasted a weekend like I probably would have if I didn't have a rehearsal" (Respondent 15). A 14-year-old member of the Philharmonia Orchestra in responding to a question about how they feel during a rehearsal highlights the embodied nature of the experience: "I feel very happy! eg [sic] sometimes the music sounds especially good so I get the goosebumps!" (Respondent 6). In response to the same question, this 13-year-old member of the Philharmonic Orchestra also suggests a strong "growth mindset": "Overall, its [sic] a good feeling that hard work brings, and especially when we're playing well, satisfaction" (Respondent 17).

1.2 Nerves

The next important sub-theme, referred to by 15 out of 26 (58%) of respondents, was coded simply as "nerves", and was referred to in both positive and negative ways. For example, in response to the prompt "Describe how you usually feel during a TYO group concert", a member of both the Philharmonia Orchestra and the Tasmanian Youth Orchestra groups stated: "Surprisingly not nervous, feel open to trying my best even if I make a mistake" (Respondent 7), thus illustrating the positive, "growth mindset" thinking (Dweck, 2006) that the researchers determined in many responses throughout the data set. The seemingly contradictory emotions simultaneously present in the embodied experience are illustrated by Respondent 3, a 15-year-old playing in the Tasmanian Youth Orchestra group, who, responding to the prompt "Describe how you usually feel during a TYO group concert" stated: "Very very [sic] excited. I love to perform with my friends and share the excitement at the concert. Also nervous to play for an audience". Further evidence of a "growth mindset" and reference to nerves is found in this statement by a 13-year-old member of the Academy Strings group, who in response to the prompt "Describe how you

usually feel during your TYO group rehearsals" stated: "Sometimes I feel a little nervous because I don't want to play out of tune! I completely understand that everyone makes mistakes though" (Respondent 9). This statement by a 13-year-old member of the Philharmonic Orchestra group illustrates their individual self-awareness and the seemingly contradictory emotions simultaneously present in their experience, in responding to the prompt "Describe how you usually feel during a TYO group concert", stating, "a bit nervous (I'm self-conscious) as well as excited to perform my pieces to my friends and family" (Respondent 2).

1.3 Pride and a sense of achievement

This sub-theme gathers together data that illustrate a sense of achievement or reward from rehearsing or performing with TYO. These range from simple comments such as "I always feel proud to have been a part of a proper orchestra" (Respondent 4), through to very personal expressions such as "Not that it's over, but that I have shared my music with my family and friends, just as music is meant to be" (Respondent 11). This 16-year-old Philharmonic Orchestra member highlights the affective nature of this achievement, stating, "The feeling when everything is coming together, when you can finally play that hard bar of the piece and everything seems to make sense." (Respondent 11). "Tiredness" (see also sub-theme 1) was also mentioned here 12 times, sometimes also being linked to the sense of achievement, highlighting the affective nature of the experience for many. This 13-year-old member of the Academy Strings group illustrates all of these characteristics in one response, stating that after rehearsals "I usually feel happy and fresh, but also a little tired. It is the kind of tiredness you can enjoy though, and I usually feel proud of myself" (Respondent 9). This sense of achievement and pride in achievement is redolent in the comments of this 15-year-old student from the Philharmonic Orchestra group, who in response to the question "Describe how you usually feel during a TYO group concert" stated

"I feel an overwhelming sense of accomplishment. We work hard on making ourselves sound the way we are proud to perform, and performing is just showing off to the audiences. I am almost always smiling while I perform with TYO" (Respondent 15).

1.4 Tiredness (and giving something up in order to attend)

A 16-year-old, playing in the Philharmonic Orchestra group highlighted the positive affect of performing in a group, but in doing so also comments about the early morning commitment required of participants. They wrote that "It [sic] can be a bit tired so early in the morning but each time I play in a group I feel happy in hearing the potential of the group and power of music" (Respondent 18). This respondent was not alone in expressing this sentiment, and the sense of having "given up" something, in this case sleep, in order to participate was expressed by a number of respondents. The researchers had a sense that such comments suggested a greater valuing of the TYO experience as a result of the perceived sacrifice. In fact, 6 out of 26 respondents (23%) made 6 references to "missing out" on meeting with friends due to their TYO commitment. This 15-year-old member of the Philharmonic Orchestra group also highlights the impact of membership on other commitments, stating that "My friends often invite me out to their sports games and other various activities, and I miss out on shifts at work sometimes because of rehearsal and/or concerts" (Respondent 15).

1.5 Frustration/boredom

In response to the question asking how they feel during TYO rehearsals one respondent referred to feeling bored and frustrated, stating that they are "Thoroughly bored as the music and teaching, as nice as my conductor is, is clearly aimed at a younger audience" (Respondent 16). This same respondent also referred to a sense of commitment to their parents for paying a year's fees and thus wrote that they felt obliged to continue to attend this group. The age of this

respondent, 14-years-old, and their participation in the Academy Strings group consisting mostly of younger members, probably accounts for these comments, and perhaps signals potential issues with teaching style and repertoire for foundation groups when promoting students through the ensembles is based on audition performance. Retention of older students who began instrumental study later or are technically not as proficient may be problematic unless ensemble direction and repertoire choice takes into account the upper age bracket as well as the mean.

1.6 Feeling at peace or relaxed.

In contrast to Respondent 16, some responses (5 of 26, or 19%) included reference to feeling relaxed or "peaceful" during or after a TYO group rehearsal or performance, such as this 15-year-old member of the Philharmonic Orchestra who states "I feel more relaxed than in other parts of my life. While I am under the same pressure to perform and play well, I feel more at peace. It's like a break from everything" (Respondent 15). In response to the prompt "Describe how you usually feel during a TYO group concert" Respondent 14 (no TYO group identified) replied "Focused, relaxed, but still very alert" thus once again highlighting the seemingly contradictory emotions perceived to exist simultaneously in the experience.

2. Orchestral/musical skill development

With 120 references and four sub-themes, this is the second strongest theme to emerge from data, perhaps unsurprisingly as musical development is intrinsic to the orchestral experience! Answers to the Likert response statement "I think that participating in TYO helps with...developing my playing skills...learning new music, and...playing in concerts" resulted in a 93% agreement, again perhaps not surprising. This theme included skills such as: orchestral/ensemble skills; diverse musical skills including counting, musicality, timing and subdivision; sight-reading/repertoire development; and, history/theory. These

diverse skills and understandings referred to by respondents perfectly illustrate the multifaceted nature of orchestral participation, and the many perceived musical outcomes resulting from their participation.

2.1 Orchestral/ensemble skills

This included skills that were specific to orchestral music making and was the second strongest to emerge from the data set, with 22 of 26 respondents (85%) making 51 references to this. This theme is well illustrated in the comments of a 15-year-old member of the Tasmanian Youth Orchestra group who, in responding to a question asking them to identify the skills they have learned or refined through their participation, identified “articulations specialised to the orchestra, precision, ensemble skills, intonation” (Respondent 13). In answering the same question, a 16-year-old member of the Philharmonic Orchestra commented that “They are hard to name. But, I’ve learned how to listen to everyone, and how to balance. Everything I’ve learned, I’ve learned through band [orchestra]” (Respondent 21). This comment by a 13-year-old member of the Academy Strings, about musical development also refers to the unique sound of the orchestra, with the respondent stating that “I love how much my playing is improving and I just love hearing the orchestra together every week. I would never stop coming to hear the harmonious sounds” (Respondent 9).

Recognising improvement as a result of effort is also a “growth mindset” characteristic (Dweck, 2006). This 15-year-old member of the Tasmanian Youth Orchestra group highlights the inspiration and motivation that results from playing in the TYO, stating that “Being in the TYO and playing with good musicians has a special prestige about it that inspires me to always do better and work harder” (Respondent 13). The unique skill of blending instrumental tone colour is referred to by this 13-year-old member of the Philharmonic Orchestra group who writes that “TYO has helped

me a lot with my aural part of music because you have to try and blend with a large variety of sounds” (Respondent 4).

2.2 Diverse musical skills

Some respondents referred to more broadly stated skill development such as “musicality”, such as this 15-year-old member of the Philharmonic Orchestra group. In response to a question asking respondents to identify new skills they have developed in their TYO group Respondent 15 states that “I believe that my musicality has progressed in a way that wouldn’t have been possible without TYO”. In response to the same question this 15-year-old member of the Philharmonic Orchestra group writes “Music doesn’t end at the notes, it’s more about everything else, like dynamics and phrasing” (Respondent 8). Others, such as this 13-year-old member of the Academy Strings group identified numerous specific musical skills, stating “sight reading and just playing better and understanding more about music and about how to play as a group. I have also improved my musical theory” (Respondent 20). Rhythm, sub-division and timing were common themes to emerge from data, with 11 out of 31 (35%) of respondents making 16 references these skills. These ranged from simple statements such as this by a 14-year-old Philharmonic Orchestra group member “Counting and keeping in time” (Respondent 10), to more universal statements such as this by a 16-year-old member of the Philharmonic Orchestra group, “The importance of individuals counting for a group to sound good together” (Respondent 18).

2.3 Sight reading and repertoire development

Twelve of 26 respondents (46%) made 16 references to sight reading or repertoire development. There were 9 references to sight reading, including statements such as this by a 13-year-old member of the Philharmonic Orchestra group who stated that “My sight reading

skills have definitely improved" (Respondent 1). This 12-year-old member of the Philharmonic Orchestra group included both sight reading and repertoire development in one statement, writing in response to a question asking respondents to identify new skills they have developed in their TYO group "sight-reading and playing a range of repertoire" (Respondent 23). In response to a question asking respondents what keeps them coming back each week to their TYO group, this 13-year-old member of the Philharmonic Orchestra group links the unique orchestral sound to repertoire development, stating "to have fun producing a nice sound and learning new and exiting [sic] pieces" (Respondent 2).

2.4 History/theory

Twelve of 26 respondents (46%) made 12 references to history or theory learned through their participation. These ranged from "a few fancy musical terms" (Respondent 5, Academy Strings 14-year-old) to Respondent 13 who writes "different composers from different eras all have completely different styles and different ways to play them" a 15-year-old Tasmanian Youth Orchestra group participant. In responding to a question asking respondents to identify what they know about music now that they did not before their participation in TYO, this 16-year-old playing in the Philharmonic Orchestra demonstrates a seemingly sophisticated understanding of musical form, writing that "I have learnt a lot about the interconnected nature of orchestral pieces and how they are structured" (Respondent 11).

3. Friendship

With 55 references, and four sub-themes, the theme of "friendship" is the third most numerous theme to emerge from the data set. References coded to this theme included data coded as: making music with friends and sharing a powerful experience; making new friends and learning social skills, commitment to their group (as in not letting

friends down); and, time with or without friends. There were no responses with 3 or less references in this theme. The Likert scale question linked to friendship, "I think participating in TYO helps with meeting friends with common interests", resulted in an 81% agreement, suggesting to researchers the importance attributed to this outcome by respondents.

3.1 Making new friends and learning social skills

Sixty-two per cent (16 of 26) of respondents made 17 references to this sub-theme, and "Making friends" and "learning social skills" seemed to be used by respondents in essentially the same way. It was common for respondents to refer to making new friends with the characteristic of having a shared interest in music, and others referred to this as being an opportunity to meet people they would not otherwise meet. Most often responses to making friends was linked with the common love of music, such as this 15-year-old member of the Tasmanian Youth Orchestra group who wrote "I learnt that there are many people like me who love classical music, as not many in my school grade does music like I do. [sic] this helped me make new friends who I can talk to" (Respondent 3). This comment perhaps highlights the often isolating nature of instrumental music making, and the importance attributed to the orchestral experience by some. This 13-year-old member of the Philharmonic Orchestra group echoes these sentiments writing that "There are definitely social outcomes, meeting other young musicians is not easy to do outside of a youth orchestra group" (Respondent 17).

This 16-year-old respondent playing in the Philharmonic Orchestra group highlights the 'multi-age' nature of friendships in the TYO, stating that they had learned "to communicate with a variety of people who I would not get to at school, especially in getting to know some people who are younger than me" (Respondent 18). A sense of belonging comes through many of the responses, for example

by this 13-year-old respondent from the Academy Strings group who writes that “music is my passion and I love spending time with other kids who love the same thing as me - there’s a sense of belonging” (Respondent 9). A 15-year-old member of the Philharmonic Orchestra group, in responding to a question asking what kept them coming back to their TYO group each week, in writing about shared jokes, alludes to a sense of “shared membership” stating that “The people are all friendly and welcoming, and the in-rehearsal jokes” (Respondent 15).

3.2 Making music with friends and sharing a powerful experience

Eleven of 26 respondents (42%) made 18 references to “Making music with friends and sharing a powerful experience”. These two areas were difficult to separate in the data as both were to do with emotive, shared (with friends) music making, and were consequently combined, thus also retaining the semantic meaning of the data. This 14-year-old member of the Philharmonic Orchestra group states similarly that “I play with my TYO groups because I enjoy playing my instrument with like-minded people who enjoy playing music!” (Respondent 6). A 13-year-old member of the Academy Strings group echoes these sentiments in response to a question asking respondents to describe how they feel during their group rehearsals, writing that “I always feel like I’m doing the thing I know best, with other kids with the same passion as me” (Respondent 9). This 15-year-old member of the Philharmonic Orchestra group suggested that the support of friends was important because they shared a common vulnerability, stating that after a concert they were “able to laugh about any mistakes you’ve made with your friends”. (Respondent 15).

3.3. Time with or without friends

Twelve of 26 (46%) of respondents made 12 references to time with or without friends. When asked to identify the activities that they missed

out on due to their participation in TYO, 6 or 23% of respondents made 6 references to time away from friends, along with other activities such as with family, such as this 16-year-old member of the Philharmonic Orchestra group who writes that “I have less time to divide between my school obligations and spending time with family and friends, but this effect is negligible at worst” (Respondent 11). A further 6 or 23% of respondents made 6 references to time spent with TYO friends during rehearsals and concerts. In response to a question asking what keeps them coming back to TYO each week, this 13-year-old member of the Philharmonic Orchestra group illustrates this, writing that “It’s also socially, I don’t get to see most people i [sic] see at TYO very often anywhere else” (Respondent 17).

3.4 A commitment to their group

Seven of 26 respondents (27%) made eight references to a sense of commitment to their group and/or to their fellow players. This was often expressed as not wanting to “let down” their group or their friends. In responding to a question about why they keep coming back to their TYO group each week, this 15-year-old member of the Philharmonic Orchestra group writes that “There’s always something more to work on and I know that we will always leave rehearsal having achieved something and not going would be letting down my ensemble” (Respondent 8). This was also expressed as a “skill” and as a form of “team work”. This 14-year-old member of the Academy Strings group writes “I have learnt how to be a good team member (e.g., [sic] learning my music so I don’t let others in my section down)” (Respondent 12). Respondent 14, no TYO group identified, shows a sophisticated understanding of the importance of commitment to ensemble development, writing that “Commitment is a key part in making sure the ensemble is functional. Everyone has to put time and dedication into there [sic] role in the group if they want it to sound the best it can”. This 16-year-old member of the Philharmonic Orchestra

group links their commitment to a personal drive, and likewise expresses a “growth mindset” attitude, writing that “I always want to be the best, and I show that by committing” (Respondent 21). Finally, Respondent 17, a 13-year-old member of the Philharmonic Orchestra group referred to a commitment to themselves, stating “Dedication. I don’t want to let myself down by deciding not to do it after all the work that gets poured into it”.

4. Non-musical development

Surprising the research team, with just 16 references and 2 sub-themes, this was the weakest theme to emerge from the data. It included data about a social skills learned; and improved personal organisation skills. The Likert scale question including I think participating in TYO helps with ... working with other people resulted in 89% agreement. Other areas referred to included: a perceived academic benefit, personal inspiration, patience, teamwork, personal investment, and self-discipline.

4.1 Learned social skills

Eight of 26 (31%) of respondents made 10 references to social skills, and mostly this is referred to as “learning” a skill. Of this theme this is by far the strongest sub-theme, and by its nature, can be aligned with the theme of friendship also, thus possibly reinforcing the importance of friendship to this group.

In identifying the other skills (not musical) learned through participation in TYO this 13-year-old member of the Philharmonia Orchestra group expresses this as “When I first joined, I didn’t know anybody, so it was a good way to test my social skills” (Respondent 4). In response to the same question Respondent 5 a 14-year-old member of the Academy Strings writes that “I’m slowly getting better at socialising” perhaps acknowledging that for them this is a skill that requires development.

4.2. Improved personal organisation skills

Four of 26 (15%) of respondents made four references to improved personal organisation. Respondent 25, a 12-year-old member of the Academy Strings relates their improved organisation directly to their musical practice, writing that “I have learned personally a lot about organising practice times”. Respondent 7, a 13-year-old member of the Philharmonia Orchestra group however, indicates that they transfer this skill to their academic studies and that this has impacted their wellbeing, writing that “My time management has improved, this means that there is a lot less stress to complete homework”.

Conclusion

This paper has presented the results of a pilot study into the perceived benefits of participating in an out-of-school youth orchestra. Some of these findings were unexpected considering the initial motivation for undertaking the research was to investigate the anecdotal evidence of non-musical outcomes. As it turns out, these were the least significant, reported outcomes for these respondents. Instead the analysis of data has indicated that it is the embodied and emotional experience of orchestral music making which is perceived as most important by respondents. This is extremely positive as it suggests that participants play with the TYO because it is intrinsically satisfying to them. This embodied experience along with the development of musical skills seem to be the principal outcomes for these members. However, the importance of friendship (itself an embodied and emotional activity), was also a powerful reminder to the researchers of the essentially human nature of “musicing” (Elliot, 1995, p. 40) and endorsed the role that participation in a youth orchestra might play in expanding social networks with attendant benefits to social skills and resilience in the navigation of adolescence (Campbell, Connell & Beagle, 2007; Jefferson & Anderson, 2017). The high proportion

(76%) of participants who indicated that playing in TYO ensembles raises their self-esteem (“makes me feel better about myself”) correlates with findings of other recent studies showing that active engagement in group music making has positive benefits for resilience, stress reduction and mental well-being (Rodgers & Varvarigou, 2016; Daykin, de Viggiani, Moriarty & Pilkington, 2017; Monkhouse & Forbes, 2017). The emphasis placed by respondents on musical skill development through orchestral participation was expected and aligns with findings of King (2014).

While this survey of TYO participants has provided a snapshot, the complexities of building resilience and navigating the emotional challenges of adolescence suggest that conducting a longitudinal study of TYO participants may provide valuable data on the longer term extrinsic benefits of group music making in a youth orchestra.

One particularly surprising element of this pilot study has been the presence of “growth mindset” thinking and resilient behaviours in many of the comments of respondents, perhaps indicating that there may be something in their experience that enables them to employ these characteristics in their experience of TYO. It will be interesting to explore this element further and to establish how behaviours like these can be taught in an ensemble music context. Funding has now been provided to extend this pilot study to explore the behaviours of tutors, leaders and conductors that particularly enable resilient behaviours in these young people.

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