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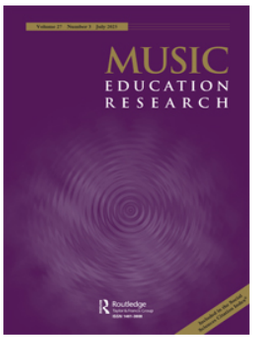

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Social and emotional traits and characteristics of wellbeing and resilience gained from participation in instrumental music in an Australian secondary education context

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ABSTRACT

This study sought to identify social and emotional traits and characteristics of wellbeing and resilience gained from participation in instrumental music in secondary schools in Victoria, Australia. This involved exploring student perceptions concerning learning experiences and relationships in instrumental music lessons and ensemble activity in Australian (Victorian) secondary school contexts. The extra-curricular Australian context of weekly instrumental lessons during school, and ensemble engagement beyond class time aims to provide engaging and developmental learning. This qualitative study used interviews with $n = 32$ final year secondary school students across six well-established music schools ($n = 3$ Government; 3 = Independent) to examine student perceptions of wellbeing and resilience derived from secondary school instrumental music experience. The study reports students' phenomenological lived experience accounts across four facets: the learning relationship, positive emotion, accomplishments and belonging, providing the basis to analysing perceptions of student wellbeing and resilience. Elements including teacher support, social connectedness, self-esteem and music department musicking ecologies highlight the complex and fragile nature of senior instrumental music students' experiences in instrumental learning, engagement and school music communities, their self-esteem and social connection with peers. This study points to social and cultural elements affecting sustained music learning, engagement, and wellbeing.

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Instrumental music; learning relationships; resilience; wellbeing

Introduction

The impact of instrumental music education in young people's lives can touch individual, social and cultural aspects of upbringing and enculturation. Instrumental music learning in school can offer a holistic approach to education, where students learn not only music performance competencies but also social and cultural development in studio and ensemble environments that are different from any other class (de Bruin 2018a, 2018b; Elliott 1995). The case for school-oriented instrumental music experiences is highlighted by research asserting a range of environment-specific benefits. Specific research of instrumental music participation in schools has asserted increased cognitive performance and reading skills (Bugaj and Brenner 2011). Costa-Giomi's (2004) study of children in Montreal public schools found piano instruction had a positive effect on children's self-esteem

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and school music marks. Schellenberg (2006) found a positive correlation between music lessons and IQ and academic ability among 6- to 11-year-old instrumental music students.

Instrumental music engagement can manifest enhancement in working memory in the way it engages multimodal cognitively demanding activities, with Roden et al. (2014a, 2014b) finding musical lessons on an instrument improved counting tests and complex span tests, and attention, processing speed and general cognitive ability. Instrumental music's collaborative one-to-one learning and ensemble activity engages multiple levels of cognitive and auditory malleability, developing more sophisticated switching of skill-acquiring modes earned from mental coordination of music learning (Moradzadeh, Blumenthal, and Wiseheart 2014). Instrumental musical experiences can lead to general inhibitory control advantages in adolescent learners (Moreno and Farzan 2015), with skilled sight-readers being able to fixate several notes ahead of where they are playing (Drake and Palmer 2000). A range of evidence supports the notion that musical experience and ability do predict performance on tasks involving switching and adaptability to acquiring skills, inhibition and the ability to update executive function to emerging cognitive demands.

Whitehead's (2001) high school study found that Orff-Schulwerk-oriented music instruction over 20 weeks rendered higher gain in mathematics than a control group. Larger population studies have asserted heightened general academic achievement from instrumental music across a Canadian secondary school setting (Guhn, Emerson, and Gouzouasis 2019), though a requisite high quality and developmentally oriented music engagement is required to facilitate many of these benefits (Hallam and Rogers 2016).

School-based learning can promote holistic approaches that extend beyond content knowledge, pedagogic and curriculum knowledge and encompass more deeply knowledge of learners that takes into account the emotional and social factors of students' learning (Shulman 1986). This involves interpersonal approaches and rapport, providing high-level teacher feedback, particularly in secondary school contexts (de Bruin 2023; McPherson, Blackwell, and Hattie 2022). The instrumental (and vocal) one-to-one learning environment is conducive to learning relationships formed with teachers that offer students a very different experience compared to general classroom activity.

Australian context

In Australia, general classroom music activities engage in class participatory activities such as guitar, djembe, garageband, informal popular music making (Green 2017) and soundscape creations – the work of Schafer remains foundational in many Australian music classrooms (see McMillan 2022). In Victoria, most schools provide a minimum compulsory arts provision by allocating certain hours of class time to music/arts classroom music learning. This may be met through various scheduling- only one semester of music, or modules in both 7 and 8, across the first 2 years of secondary education, from which it may be selected as an elective in the middle years (usually by those engaged in instrumental learning). Instrumental music education in an Australian context refers to the separate delivery of practical instrumental music lessons and instrumental music ensembles (Lierse 2017). The 2013 Victorian Parliamentary Inquiry described how;

> Schools can choose to provide co-curricular music activities such as instrumental music lessons, ensembles and choirs. These activities operate outside of the core curriculum and are optional for students … However, instrumental music lessons are often only provided to students on a user-pays basis … Most government secondary schools in Victoria offer optional instrumental music programs to students on a subsidised basis. (Masson 2013, p. xvii)

This programme44666 in Victoria continues to rely on a specialist peripatetic workforce travelling between schools providing tuition and ensemble direction. Schools often blend their government-funded resources (e.g. one day per week, a brass teacher, a flute/saxophone teacher and a percussion teacher) with a lesser proportion employed and renumerated casually through the school (e.g. a specialist saxophone, double reed or low brass teacher).

Instrumental music education in Australia engages over 200,000 students nationally (Yamaha Australia 2023) and is a significant but inconsistent aspect when considered across urban and rural Government and Independent education sectors. Funding for Government schools' provision in 2013 was seen to be at 2000 funding levels – with still no movement since (Parliament of Victoria 2013). Whilst a western art music orientation provides emphasis to skills taught (notation, conducted ensemble guidance, solo and small group repertoire performance), the Victorian Curriculum and Assessment Authority (VCAA) has evolved to provide assessment for a range of instruments including bagpipes, tabla and DAWS (digital audio workstations) in final years external performance assessment requirements (VCE study design, VCAA 2023)

By 'opting in' to instrumental music lessons, usually in their first year of secondary school, students engage in guided mastery of technical work, studies, solo works and ensemble parts within a 30–45-minute lesson, and ensemble (concert band, stage band, choirs, contemporary ensembles). Whilst a generic arts curriculum (VCAA 2016) provides scoping strands involving exploring, developing practices, creating, and presenting, instrumental music teachers apply this via goal-oriented outcomes incorporating internal and external board examinations, and a range of ensemble rehearsals and performances (Pascoe et al. 2005). Some instrumental music teachers (IMTs) are highly trained in performance teaching, whilst many solely complete a generic classroom teacher accreditation degree. Senior students will have more time devoted to solo works and assisting technical studies as they prepare for high-stakes end-of-year competitive external performance recital exams at year's end. Many students will have begun their first lesson with an instrumental teacher who will have guided them through instrumental performance for the whole 6 years of secondary schooling.

School learning environments

Instrumental music learning offers an intense learning environment (Pascoe et al. 2005), a learning experience that can under expert guidance explicitly guide instrumental music knowledge and skill (Masten and Motti-Stefanidi 2009; McPherson, Blackwell, and Hattie 2022). Whilst junior classes may be small groups, more senior students can enjoy a one-to-one learning environment that provides constant models, scaffolds and coaching approaches as personally oriented learning and interaction (Burwell 2016; de Bruin 2018c). This learning environment enables the development of refined planning and reflective processes (author 2017, 2019; McPherson, Miksza, and Evans 2017), connections with peers and teachers, and adult-led prosocial behaviours, of which positive autonomy is foundational and individual and collective wellbeing a prescient by-product (Pacherie 2014).

Music education can provide social and environmental factors that buffer against adversity by including peers, positive teacher interactions and opportunities for achievement (Panter-Brick and Leckman 2013). However, questionable lesson quality, teacher communication, teacher-centric delivery as well as a school's capacity to support and retain experienced teachers can all impact detrimentally on student learning, retention and wellbeing of students (Hamann et al. 2000). Implemented well, schools' instrumental music education can provide prolonged, relationally oriented, sustained proximal learning encounters that promote success (McPherson and Welch 2012), underscoring how school music departments and teachers, as dynamic music learning communities, can promote gateway engagement and behaviours that foster resiliency and wellbeing generally (Bond et al. 2004). The challenge of finding balance between musical and personal development (Mills 2002), skill development and personal pleasure (Cooper 2001) and connection between teacher involvement and student accomplishment (Duke 2000) highlight the complex experiences involved in teaching and retaining instrumental music students.

Wellbeing is a complex sensation, combining a person's physical, mental, emotional and social health factors. Wellbeing is strongly linked to satisfaction and happiness that promotes overall thriving and sustainability (Park et al. 2023). Resilience refers to adaptability, coping, and the ability to successfully adapt to stressors and maintain psychological wellbeing in the face of adversity (Fergus

and Zimmerman 2005). Of significance to this study of instrumental music learners in secondary schools are the individual, social and environmental factors that promote protective and challenge-based behaviour pathologies in the face of risk or challenge confrontations in their learning.

This study sought to identify social and emotional traits and characteristics of wellbeing and resilience gained from participation in instrumental music in secondary schools in Victoria, Australia, gathering data from students across years 7–12. Whilst gathering single snapshots rather than longitudinal data from each student, it points to potential discerning trends and attitudes that such cohorts experience across 6 years of secondary schooling. This study focused on music learning across three significant areas of engagement evident in secondary schooling: the instrumental music lesson (individual), peer connectedness and ensemble activity (social) and prevailing music department cultures (environmental). These domains are selected because, as educational and social meeting points, they offer conspicuous educational and relational qualities of engagement, drawing closely from resilience theory and facets most impacting learning and wellbeing (Dewey 2018).

Research suggests that learning cultures provide promotive and protective factors that can implicate 'a set of fundamental adaptive systems that keep human development on course' (Masten et al. 2008, 4.) theoretically underscored through observing, modelling, and imitating desired behaviours (Bandura 1985). These benefits include motivations derived from the fulfilment of emotional needs (North, Hargreaves, and O'Neill 2000), self-esteem (Tarrant, North, and Hargreaves 2002), and the developing senses of belonging and community cohesion (Ferguson 2006). These traits emphasise the experiential and situated approaches to music education in which specific values and qualities of music engagement are directly related to activities and concrete acts (Dewey 2018). Bowman (2018) further asserts the social development of self and others, pointing to how music learning can provide more accurate understandings of how learning and wellbeing are nourished through learners' unique experiences with music teachers, peers and environment. This requires an explanation of the learning-teaching dynamic, in which the students' interactions with the teacher, content, pedagogy and environment are all important for building positive interpersonal interactions (Martin and Collie 2019).

Instructional climates, strategies, and relationships

The importance of personal properties and traits of motivation, positive autonomy and wellbeing asserted by Ryan and Deci (2017) and Sternberg (2000) highlights the wider impacts teacher practices and learning cultures create within schools. Elements of support can span connective instruction (Martin and Dowson 2009) that includes the interpersonal relationship occurring between student and teacher; the substantive relationship between student and the content; and the pedagogical relationship between the student and the provided instruction (de Bruin 2018b). These facets can all contribute to a supportive environment that can promote experiences of positive outcomes (Dignath-van Ewijk, Dickhäuser, and Büttner 2013). Teacher–student learning relationships involve students' perceptions that their teachers listen to them, care about them and apply a range of supports for students' learning (Ryan and Deci 2017). This includes a utility of engagement in which students perceive that their endeavours are relevant, valued and beneficial, as well as deriving enjoyment and engagement from the content (Pedler, Hudson, and Yeigh 2020).

Teacher–student relationships have been shown to set the interactional groundwork for positive outcomes associated with students' application of learning strategies and achievement (Blömeke et al. 2022). The interpersonal dynamic within the instrumental lesson is dynamic and evolving, moving across elements of authority, affiliation, support, and discipline in assisting learners achieve learning outcomes (Bandura 1985; de Bruin 2018c). Central to this are strategies in which the expert assists the learner to become a master of skills through modelling, scaffolding, fading and coaching techniques (de Bruin 2018c). These strategies engage feedback, student self-regulation and motivation/goal setting. They thread planning and in-the-moment mediation of thoughts that can assist

students to navigate everyday challenges encountered at school and evolving personal influence over anticipated academic outcomes (Zimmerman and McPherson 2002).

Identifying investment from learning music and the wider wellbeing and resilience benefits has utilised a number of theories and models. The PERMA model, rooted in positive psychology (Seligman 2011), theorises positive emotions and character traits for the optimal functioning of individuals, groups and institutions. Utilised previously in music education research (Croom 2015; Custodero 2002; Custodero and Stamou 2006; Noble and McGrath 2008) and in music therapy (McFerran 2010), the PERMA model provides an elegant model though which musical participation can be investigated through lenses of happiness, connectedness, belonging to school, pride in success, optimism and wellbeing.

What is evident is that students feel more engaged and are more goal-oriented if they are motivated, with Howard et al. (2021) suggesting that more autonomous students have a more positive outlook towards outcomes, satisfaction, positive affect, and sense of wellness. Literature also points to music departments as communities of practice that instil zones of peripheral participation and cross-age dynamics (Heath 2016) that enhance evolving capacities that students can utilise to navigate their personal learning experiences (Martin and Collie 2022).

Purpose

The primary purpose of this qualitative study was to identify social and emotional traits and characteristics of wellbeing and resilience gained from participation in secondary school instrumental music. This study explored student perceptions concerning the educational, relational, and environmental qualities and context of instrumental tuition and the learning relationships that occur in these secondary school contexts. The learning variables of teacher support, social connectedness, self-esteem, and music department belonging were hypothesised to affect wellbeing and resilience. The study was driven by the research questions of:

(a) What factors do students identify as influencing their learning, enjoyment and wellbeing through music making?
(b) What relationships and support systems shape the perspectives and attitudes of instrumental music students in a school music learning environment?

Methodology

Instrumental music learning activities relevant to this study include the engagement in a weekly instrumental music lesson (one-to-one or small group), and at least one scheduled ensemble rehearsal leading to a performance agenda. Ethical approval (UMHERC) was granted to approach schools and music departments that were recruited to participate in this study. The schools were asked to invite senior (year 12) students involved in instrumental music studies to participate, with 32 students from six schools participating. The schools involved were well-established, sizeable music departments in both Government and Independent schools offering upper-middle socio-economic status and homogeneity (ADET 2017). The students selected were viewed as articulate, mature music makers who had remained in the programme and were seen as successful within its structure, and available on the day/time the researcher visited the music department. Contingent on this tight frame of engagement, Heads of Music disseminated the study information to a number of parents, who, with their children's consent to take part in the study if they were available.

Data gathering and analysis

Qualitative data were gathered from semi-formal interviews with the 32 senior students, aged 17/18 and purposively sampled in coordination with the Head of Music, as a senior student available

during the researcher's visitation window at the school. Senior students were selected as the most mature and articulate and having experienced at least six years of instrumental music education in school. Interviews were conducted face-to-face on-site in a secure room within the music administration area.

The study sought to understand the dynamic and fluid exposures of the student and teacher, peers and music department community, and their effect on senses of wellbeing, examining a phenomenon, population and general condition (Stake 2000). The semi-formal interview provided a relaxed mechanism through which students could discuss their perceptions about factors affecting their instrumental music experiences. The chief researcher asked an initial five questions, including (a) Why do you participate in instrumental music education? (b) Has instrumental music affected your learning generally? (c) How have these qualities evolved over time? (d) Describe the type of learning and engagement experienced in the instrumental music lesson? (e) Describe the sense of community within the music department – how is it different from the rest of the school? and (f) Have you experienced any barriers or promotors to instrumental music engagement here in this school? The researcher brings 25 years of instrumental teacher experience to working with high school students, establishing a calm, inquisitive but appropriately objective approach essential for this rigorous qualitative venture (Zahle 2021). These questions provided a structured approach moving from general to specific incidents and events, aimed at eliciting rich, vivid occurrences and personalised accounts and attributions.

Textual analysis

The study utilised a phenomenological approach to understanding lived experience accounts of participants. Analysis of this kind emphasises participants' subjectivities, their 'cognitive, meaning-disclosing contribution to what we experience' (Gallagher and Zahavi 2008, 24). Rather than inductively overlaying predetermined facets of the PERMA model, this research implemented a four-step coding procedure that firstly familiarised and then organised transcripts into learning incidents. A second process of 'abstraction and interpretation' (Spencer, Pryce, and Walsh 2014, 279) sifted data for general themes, meanings and key phrases. These were then extracted and catalogued in a Figure (see Figure 1) from which emergent themes were grouped together and placed into hierarchical trees, revealing categories of experience. This deductive approach and analysis fore-fronted participant experiences and ideas rooted in their social world (Sandstrom et al. 2019).

Inherent to all research are concerns relating to validity and trustworthiness regarding credibility, transferability, dependability and confirmability (Lincoln and Guba 1986). Rigour was maintained using various criteria in which: all conscious biases towards engagement and perspectives were noted and recorded prior to data collection and reviewed during data analysis; an audit

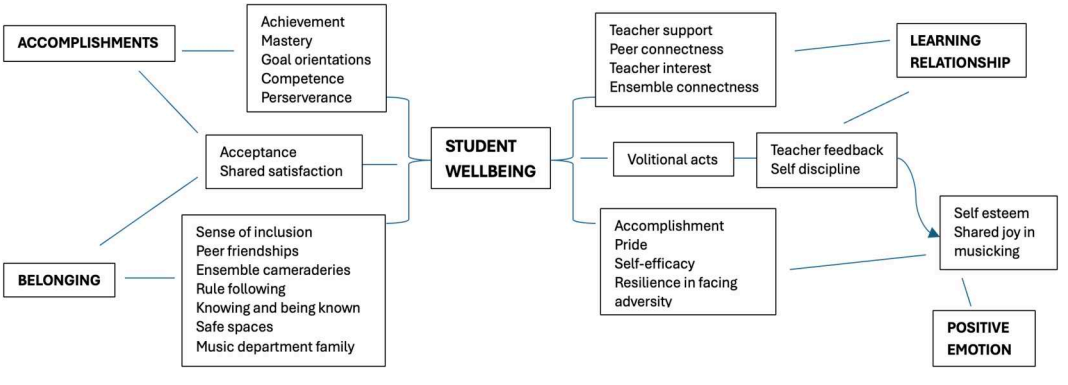

Figure 1. Mapping of thematic analysis.

trail was maintained comprising audiotapes, transcripts, notes; and consistent mapping of steps taken during the analytic process. Credibility was enhanced by a systematic search for themes and relationships (Stake 2000). A constant comparative approach was taken with the data across schools and an additional researcher independently coded 50% of the interview transcripts (Strauss and Corbin 1998). Confirmability was evidenced through multiple locations, and participant pools for various schools being involved, supporting the findings are a result of the phenomenon being studied rather than singular biases or preferences. Implicit in the data is the bias of students describing their personal perspectives on learning and engagement. As outlined in Figure 1, the qualitative themes are reported on (1) the learning relationship, (2) positive emotion, (3) accomplishments and (4) belonging.

Findings

Participant experiences are used as direct quotes to bring content to life (White et al. 2012), providing a vividness, accuracy and veracity to experiences encountered and meaning elucidated from participant emotions and experiences (Sainsbury 2008). Quotations from a range of participants add transparency and trustworthiness to findings and interpretations of the data (Côté and Turgeon 2005).

Learning relationships

Relationships encompass a range of interactions individuals have with teachers, friends, and their peer music community. Relationships refer to feeling supported and valued by others, and these social connections become particularly important through adolescence. Positive learning relations impacted engagement and positive autonomy to setting and achieving musical goals with their teacher. The accessibility, empathy and relationality discussed by students were a telling feature between student and teacher:

> Julie: My connection to my teacher developed over 6 years. They are more parent-like than other teachers. They've helped me negotiate life's stresses and challenges, teaching me how to manage time.

> John: Feedback in music is more intense- we get it more, we act on it more, its constantly provided and it helps me grow. I think feedback in a music sense is never negative … doesn't even necessarily feel like feedback … . it's non-confrontational.

> Peter: The lesson is so different to every other aspect of school. I have a teacher that listens, that is constantly engaged in me and is solely focused on getting the best out of me.

> Tran: My learning is more focused in lessons in my final year, less social, and more down to business. I enjoy the focus of my teacher.

> Judith: The strategies I use in music, both in the lesson and in ensembles … breaking things down, giving attention to detail, planning and thinking about improvement work for me, they are ingrained and help me approach other subjects.

The one-to-one lesson provides a quality of engagement that makes an affiliative mark on students' sense of engagement. The knowledge, beliefs and attitudes demonstrated by teachers through their behaviours can provide a powerful influence on their connections to students and the rapport that is cultivated. The performative and sharing nature within the lesson and ensemble provides a powerful conduit to cementing relationships and ways of learning, knowing and being. However, not all relationships are positive and can actually be limiting or destructive in nature.

> Elizabeth: I find my ensemble teacher more involved in my interests – my instrumental teacher is quite aloof and transactional.

> Katrina: Over time I got to know my teacher's quirks- most of my friends quit … but after 2 years I could understand the angle, the reasons behind his methods. Being self-directed is something a lot of kids don't have when they start off.

> Robert: My two high school teachers were so different- the first strict and demanding. I actually gave up but, the new teacher made learning, playing and striving for goals enjoyable again.

Teachers, as active agents in the learning relationship, can promote (or constrain) self-efficacy and learner beliefs about capabilities and their perceptions of effective application of skills and knowledge to produce desired outcomes. Schunk's (1989) self-efficacy model points to teacher attitudes, task engagement variables, which include variables related to the task and the individual's approach to the task and efficacy cues, which include performance outcomes, feedback that is specific, yet affiliative, and sustaining positive attributions with the student. These can either connect or disconnect the learning relationship and the ultimate motivation and volition to continue working with the teacher.

Positive emotion

Positive emotion can be reflected in the actual or vicarious experiences of exchange with a teacher, with peers, and a sense of accomplishment and wellbeing from music activities. Emotions such as happiness, joy, interest, excitement, gratitude and affiliation can diminish negative emotions such as anger, loneliness, jealousy, self-criticism and fear, and the pathologies that may arise through the constancy of these. Sustained positivity can broaden thought-action regulation, transforming motivation into volitional acts (Fredrickson and Levenson 1998). Student responses reflected positive experiences with their music teachers and peers. There was an indication of students supporting the assertion that they felt a close affiliation and camaraderie with their music teachers. Continuity and interpersonal connection beyond rapport pointed to particular facets of the learning relationship.

> Karen: I know my teacher works hard to support my learning, writing, transcribing, creating exercises, and I work hard for him too. It's an exchange of effort, we work hard and don't let each other down.

> Joe: I'm sometimes self-critical of my ability. The negative voices in my head are countered by the positivity I get from the band and my section. I'ts more than just teamwork. It energizes my belief that I can do it.

> Julie: I join my friends in concert band, we play and support each other. Playing music with my friends reinforces my love of music making and the friendships I have.

> Maxim: I know everyone who walks through the doors of this music department. It's not a place where I feel scared. It's a very comfortable environment, I'ts taken time but I'm now confident in receiving judgement … as a group we seem to care about each other.

> Ralph: I usually meet my music friends at recess and lunch, we talk together, planning our ensemble pieces. Sometimes the teachers join in the conversation, and we get to know each other better.

Participants spent time with people they cared about (Kok et al. 2013), and places they felt safe and rewarded in, they engaged in shared activities that they enjoyed, and they reflected on things they were grateful for and what was going well in their life (Conner, DeYoung, and Silvia 2018). Sustained positive emotion can alleviate some of the more debilitating of performative requirements, such as suppression and control of psychological and physiological stressors and anxieties that may arise in a performance medium (Benz et al. 2020). Music experiences are many and varied and can include teachers or peers within the lesson, the ensemble, and beyond music making. When individuals can explore, savour, and integrate positive emotions into daily life (and visualisations of future life), it improves habitual thinking and acting, allowing for the recovering from any negative effects more quickly (Ong et al. 2006)

Accomplishments

Accomplishment refers to achievement, mastery, or competence. Senses of accomplishment are gained as a result of working towards and reaching goals, mastering an endeavour, and enacting self-motivation to finish what was set out to do. This contributes to wellbeing because individuals can look at their engagement with a sense of pride from self and others. What is evident is that students felt a sense of initial pride in beginning learning, and from sustained improvement in their music learning experiences. In this year 12 cohort sample, many students performed advanced repertoire and high-level capacities and attributes, with clear feelings of pride. These trends were reflected in the understanding and respect afforded to their accomplishments and ambitions. The student participants discussed accomplishments:

> Adam: In music, I'm 100% learning, skills, confidence, self-assurance. In music, we're always put on the spot to do something we haven't prepared, and initially I was so freaked out, but, I've become confident, and more prepared, and willing to show bravery and strength. It's scary but I think that's a really important to overcome.

> Joan: I feel a sense of determination. I take strategies suggested and try to apply them successfully. In ensemble I help the younger kids get it together … I feel satisfaction helping younger kids to succeed.

> Mary: The music department is a weirdly wonderful place- I'm constantly surrounded by expert players, adults, role models that shaped my attitude and determination to succeed. I have friends that wouldn't focus or connect, and they quit.

> John: I feel a sense of responsibility in ensemble … knowing we rely on each other and that there are no passengers at this level. I feel connected to my friends in orchestra but also independent and self-disciplined.

> Crystal: I've risen to the challenge and confrontation of not getting things right. I almost quit … but I persevered, and my band friends made the difference. Giving a performance where we create something great is a powerful experience. Looking at my friends, receiving applause from the audience, and thinking, wow, we made that!

Learning music requires a range of skills and resiliences, and the precarious nature of student mindsets can be overlooked as peer support provides a valuable learning benefit. Some students reflected on progression to the upper ranks of the music department, the esteem they felt, and the politics of advancement to the upper realms of the ensembles, and cultures set by ensemble directors.

> Peter: It's only in the last year that I've allowed myself to feel I've really accomplished. As a clarinet player I'm one of many and had to work my way and wait for the opportunity, it's been frustrating, not like trombone or tuba where I would be acknowledged earlier.

> Susan: There is a sense of competition to play the best to get first chair in band. We all auditioned and earned our place, but in practice its done with care- we share lead and responsibilities, we need each other to sound good, that's a quality our band director has encouraged, and we all pull together, it's a great feeling.

Accomplishment connects with perseverance and having a passion to attain goals. It can be articulated and experienced as a sense of individual and collective flourishing and wellbeing when tied to striving towards goal orientations. Positive musical events in learning, performance, and dialogic interaction with teachers or peers can enhance and promote an internal locus of control perception, which enhances intrinsic motivation. Events or policies that promote external locus of control perceptions can undermine intrinsic motivation. Ryan and Deci (2017) suggest that it is not the inherent characteristics of the events, but rather how they are perceived by the individual and the meaning or functional significance that is assigned to the events by the individual that influences intrinsic motivation.

Belonging

Belonging as a facet of social connectedness included traits of socialisation, peer-to-peer camaraderie, and acceptance. This incorporates perspectives and feelings associated with inclusion, being

welcome, and being part of a team, being valued, respected and deriving satisfaction from instrumental music participation. Belonging refers to connection and community in the music department and with peers and teachers. It infers a relatedness to others, where people feel connected and included with others. People thrive when they know they matter to others and thus feel respected and significant. Belonging and relatedness result from being cared for and caring for others, and from being able to help contribute to others – in an ensemble, a shared lesson or a performance.

> Jude: most of my friends do music, are pretty much all my closest friends. We all met through music. I have friends outside of school but in music it's like a community that is really strong- I don't get that in any other subject.
>
> Elizabeth: It took me a few years to feel a part of the music (department). Most of my friends quit and I almost did to on a few occasions. I enjoy lessons but not so much the social aspect with others.
>
> John: Ive learned for six years now- and there is a difference between my musical and non-musical friends- there is a closeness and connection to each other and to the music, how we hear it, relate to it, are moved by it, and discuss it that's different to non-musical people.
>
> Sue: I join my friends in concert band, and we work together and support each other. It might be hot, 4pm on a Friday but we sense a common goal and strive to achieve. Playing music with my friends reinforces my love of music making and my friendships.
>
> Ken: I know everyone who walks through the doors of this music department, all the teachers know my name. It's not a place where I feel scared or like I'm going to be judged. It's a very comfortable environment, walking in puts a smile on my face.

Belonging for these participants emerges from feeling welcome, being part of a team, and connected to the community, with a concern for care rather than critique of each other. School friendship groups may play a part in resilience and the general retention of student cohorts. Students mostly asserted a warmth and inclusionary attitude but also opportunities to grow through performance and social connection. The music department is a place to meet, to socialise, to be in the company of like-minded others, which as a community of practice (Wenger 2000) includes music staff, receptionists and janitors who engage with students. Co-curricular organisation means rehearsals at lunchtime, before, and after school act as reinforcing social activities that promote a sense of belonging and identity within the music ecology of the school.

Discussion

Seeking to identify social and emotional traits and characteristics of wellbeing and resilience gained from participation in instrumental music**,** the study raises a range of educational, relational and environmental issues related to instrumental music learning. In regard to question (a) identify influences on student learning, enjoyment and wellbeing through music making, the data points to teacher support and belonging providing a pivotal and sustained effect on students' wellbeing. The joy and satisfaction of individual improvement and shared musicmaking offer a significant effect on positive emotion, which, together with impactful learning relationships, can be the foundations for sustained engagement and enjoyment. Confirming Ryan and Deci (2017) students psychological needs were met through perceptions of music participation that pointed to increased pride, respect, confidence, perseverance, inclusion and overall wellbeing.

Relationality and rapport between students and teachers provided a psycho-social incentive to students' goal setting. Conferring with Noble and McGrath (2008), relationships in schools can motivate students and contribute to a positive sense of school engagement. This further points to teachers' motivational engagement with students arousing action and reflection on refinement of skills, and to teachers being a motivator, understanding that learning is process-oriented, that motivation concerns choice, direction and goals, and requires the application of relational and interpersonal communication. It also points to the quality of dialogue, particularly how feedback

provided to the student by the teacher may be critical in determining how students form attributions and perceptions, and how these can promote intrinsic motivation- or demotivation and apathy. The findings of this study suggest further longitudinal research is needed into the teacher–student dynamic in the instrumental music lesson and the blend between authority and affiliation (author 2018) and applying motivational thought that focuses on how positive student behaviour is started, sustained or stopped.

Regarding question (b) regarding relationships and support systems that shape perspectives and attitudes of instrumental music students, the findings suggest that learning relations with teachers, ensemble directors and peers are evolving, impactful facets of their music education. Students responded to feeling cared for, respected, and engaged with teachers and peers. This duality of friendships and teacher support provides a complexity to wellbeing. They spoke passionately about their internal dynamics and how teachers and friends impacted their inner lives. The teacher's guided learning relationships across 6 years, in which basic modelling and scaffolding experienced in the early years gave way to more critical evaluation of practice techniques, time management, reflection, the meeting of commitments in and beyond music, and the fading of teacher support as students stepped up to the demands of high-stakes performance and examinations at the end of their final year.

Participants revealed a sense of student-teacher teamwork and camaraderie that was also emergent in students' perceptions of working and being with their musical friends in ensembles, driving personal accomplishments and belonging. Learning music offers a range of challenges, but over time, learners' skills, coping mechanisms and self-regulatory capacities can evolve to accommodate such challenges. Concomitant to this are students' more mature concepts of challenge, application, and community. Senses of self-esteem, accomplishment, respect from peers and perseverance reflected – for these cohorts, a committed involvement in their music learning. Participants articulated pride in their accomplishments, with music departments potentially creating a general convergence of like-minded people engaged in similar learning activities. The nature of music departments, bringing a wide range of age groups and actually implementing cross-age ensemble activities, points to how established music departments can be powerful mechanisms for community building and entrainment. Impactful music departments can be powerful ecological sites of musicking that enable both a sync and swarm of student endeavour and possibility (Borgo 2005).

The study exposes instrumental music learning as far more complex than what may seemingly transpire in a high school instrumental music programme (Sala and Gobet 2020). The results provide a range of information regarding student connectedness to teachers, to peers, and the music department as a vital community. It concurs with Lee, Krause, and Davidson (2017) who assert the synergetic power of musical investment in school-community collaborations. The students asserted beliefs of music as a self-substantiating and socialising force. The data revealed that the learning relationship, environment, and musical cultures often embedded in school music engagement are all important factors involved in students' developing senses of happiness, satisfaction and wellbeing in music learning, though this is not the case for all.

The data showed that music education enacts learning, at times formidable challenges to be overcome, and shapes emotional control and developing maturity. As with Busseri, Choma, and Sadava's (2012) study, this study found that music practice and participation can contribute to positive emotions, which in turn contribute to psychological wellbeing. Providing a physiological approach, Seligman (2011) asserts that wellbeing 'is about flow: being one with the music, time stopping, and the loss of self-consciousness during an absorbing activity' (11), as evidenced by the participant encounters.

It also shows that music learning cultivates resilience through support by teacher and environment, but also satisfaction and self-efficacy from skills and knowledge development. Improvement is not easy, nor is it guaranteed, but overcoming adversities by being within an ecology that assists with maintaining goal orientations contributes to resilience and the satisfaction gained from

success. The participants described music as a social glue that brought them together with friends who cared for them, and of teachers who guided their learning journey. Students emphasised the place music played in the making of their personal and collective identities as adolescents (Hargreaves, Miell, and MacDonald 2002).

Students attributed beliefs about sustained learning, positive emotion, accomplishments and belonging as a reciprocal form of agency between teacher, student and peers. This intra-active dynamic may provide a locus of control to the student, rather than being out of control of the student. This facet of interconnectivity reinforces that for those who succeed, there are positive causal antecedents and causal ascriptions. These have psychological consequences for music learners, which in turn effect behavioural consequences to future actions- that is, resilience and wellbeing through music participation and the syncing with fellow school musickers – or stress, disconnection and eventual rejection of music engagement.

Implications

The study offers implications to instrumental music educators and the nuanced approaches to discussing improvement, happiness, and resilience in this and similar music education contexts. The data reveals insights into the minds of how students feel about instrumental music engagement and the learning relationships and environments that facilitate this. The study indicates how instrumental music teachers in school environments, but also in private studio contexts, may consider engaging in purposeful discussion regarding students' shorter and longer-term learning journeys involving:

- The importance of the relational difference instrumental music education offers and the consideration of maximising this;
- The links between learning in the lesson, learning in ensembles, and personal character and growth;
- The idea that student happiness and senses of resilience may be fluid, fragile and fleeting;
- The promotion of instrumental music participation beyond high-level performance attainment, emphasising student growth from the collaborative, relational and creative experiences on offer;
- The promotion of music departments as a community of practice that supports wellbeing, resilience and flourishing in schools.

Limitations of this study reside in the generalizability of findings and the specific Victorian secondary education context, and the opt-in approach to instrumental music education, pointing to wider study in rural centres and compulsory education contexts. This sample utilised well-established high socio-economic status instrumental music departments with sizeable cohorts continuing into final years of music study, necessitating further studies including less homogenous samples. The participant set of final year instrumental/vocal music students – represents those who have succeeded in making it through at least six years of music study. These participants received quality sustained tuition within well-resourced and developed music departments with an established culture of music performance. A small percentage of students faltered yet found a reason to continue despite duress. This is a rare phenomenon. The aspect of repertoire orientations did not feature in the data- the VCE study design is largely unchanged for 50 years in maintaining a 20–25 min solo repertoire or small group high-stakes performance exam, and the participants were from schools with well-developed or established cultures of music performance in either western art and/or jazz music.

However, the vast majority of students in Australia who commence instrumental music education in year 7 have quit by year 12 (Pascoe et al. 2005). The reasons are complex, but equity and access to sustained and developmental music education remain a patchwork of passionate

teachers, and well-endowed schools and sustained underfunding. Similar studies in less resourced music departments will provide further nuance to these presented findings.

The findings in this study provide valuable insight into the variables that affect connectedness, self-esteem, belonging and overall wellbeing from instrumental music participation in these Victorian secondary schools. The study informs music teachers of the care and concern we draw upon in teaching the student in front of us, and not just the instrument. It resonates with various studies that render complex the crystalline, multifaceted world of music, adolescents and emotions (Richardson 2000) and the need to find *each student's* sense of equilibrium between testing of music skills and expressive potentials that learning an instrument allows to burst to the surface (author 2023; McFerran et al. 2018). It informs school administrators and educational policy makers of the expressed social and emotional traits adolescents perceive in the learning climates evident in their instrumental music education. Resilience and wellbeing may be a benefit promoted by positive learning relationships, but these are delicate and at times precarious facets of our work in teaching and sustaining adolescent musical engagement in schools.

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