

Musicians' Health and Wellness Resources in Canadian Post-Secondary Music Programs

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Volume 11, numéro 1, juillet 2024

URI : <https://id.erudit.org/iderudit/1113316ar>

DOI : <https://doi.org/10.7202/1113316ar>

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Éditeur(s)

Observatoire interdisciplinaire de création et recherche en musique (OICRM)

ISSN

2368-7061 (numérique)

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Citer cet article

Tinoco, C., Traube, C. & Guptill, C. (2024). Musicians' Health and Wellness Resources in Canadian Post-Secondary Music Programs. *Revue musicale OICRM*, 11(1), 138–154. <https://doi.org/10.7202/1113316ar>

Résumé de l'article

La recherche suggère que plus de 80 % des musicien-ne-s professionnel-le-s rencontreront des problèmes de santé liés à la performance qui affecteront négativement leur capacité à travailler. La littérature suggère que ces conditions sont répandues parmi les étudiant-e-s en musique de niveau postsecondaire. Les études existantes examinent un petit nombre d'écoles de musique postsecondaires qui ont mis en place des cours de promotion de la santé dans leurs programmes d'études et qui ont par la suite démontré des améliorations de l'auto-efficacité et de la connaissance perçue des stratégies de promotion de la santé. Nous avons cherché à examiner quelles offres de promotion de la santé ou d'éducation à la santé sont offertes dans les programmes de musique postsecondaires canadiens. Les membres du nouveau Réseau canadien pour la santé et le bien-être des musicien-ne-s (RCSBM) sont au centre de cette étude. Il-elle-s ont répondu à un sondage, puis ont été interviewé-e-s pour discuter plus en détail de leurs offres de formation. Tous les établissements d'enseignement postsecondaire interrogés proposent des cours d'éducation à la santé aux étudiant-e-s. Quatre d'entre eux ont intégré des cours dans le programme d'études ; un autre propose aux étudiant-e-s un large éventail d'initiatives liées à la santé.

Musicians' Health and Wellness Resources in Canadian Post-Secondary Music Programs

Carlos Tinoco, Caroline Traube,
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Abstract

Research suggests that more than 80% of professional musicians will encounter performance-related health conditions that negatively affect their ability to work. Current literature suggests that these conditions are prevalent amongst post-secondary music students. Existing studies examine a small number of post-secondary music schools who have implemented health promotion courses in their curricula and have demonstrated improvements in self-efficacy and perceived knowledge of health promotion strategies. We sought to examine health promotion and health education offerings in Canadian post-secondary music programs. Members of the new Canadian Network for Musicians' Health and Wellness (CNMHW) were the focus of this study. Members completed a survey and were then interviewed to further discuss their educational offerings. All the post-secondary institutions examined have health education offerings available to students. Four institutions have courses implemented within their curricula; the other institution has a sizeable selection of health-related initiatives available to students.

Keywords: education; health; music; post-secondary; wellness.

Résumé

La recherche suggère que plus de 80 % des musicien·ne·s professionnel·le·s rencontreront des problèmes de santé liés à la performance qui affecteront négativement leur capacité à travailler. La littérature suggère que ces conditions sont répandues parmi les étudiant·e·s en musique de niveau postsecondaire. Les études existantes examinent un petit nombre d'écoles de musique postsecondaires qui ont mis en place des cours de promotion de la santé dans leurs programmes d'études et qui ont par la suite démontré des améliorations de l'auto-efficacité et de la connaissance perçue des stratégies de promotion de la santé. Nous avons cherché à examiner quelles offres de promotion de la santé ou d'éducation à la santé sont offertes dans les programmes de musique postsecondaires canadiens. Les membres du nouveau Réseau canadien pour la santé et le bien-être des musicien·ne·s (RCSBM) sont au centre de cette étude. Il·elle·s ont répondu à un sondage, puis ont été interviewé·e·s pour discuter plus en détail de leurs offres de formation. Tous les établissements d'enseignement postsecondaire interrogés proposent des cours d'éducation à la santé aux étudiant·e·s. Quatre d'entre eux ont intégré des cours dans le programme d'études ; un autre propose aux étudiant·e·s un large éventail d'initiatives liées à la santé.

Mots clés : bien-être ; éducation ; musique ; postsecondaire ; santé.

INTRODUCTION

The emergence of musicians' health and wellness as a distinct topic of discussion, research, and clinical interest has been pursued in earnest since the 1980's and is becoming more important in musicians' lives. Though performing arts medicine is a relatively new field compared to specialties such as sports medicine, the medical problems of musicians are alarming and career threatening ([Wijsman and Ackermann 2018](#), p. 869). Research over the last 30 years has determined that during their careers, more than 80% of professional musicians will encounter performance-related health conditions to a degree that negatively affects their ability to work ([Ackermann, Driscoll and Kenny 2012](#), p. 181; [Kok et al. 2016](#), p. 374). The existing literature also indicates that these conditions are increasingly prevalent amongst post-secondary music students upon entry ([Chesky, Dawson and Manchester 2006](#), p. 142; [Wijsman and Ackermann 2018](#), p. 871). Alice G. Brandfonbrener (2009) showed that 79% of 330 first-year post-secondary music students had already dealt with a playing-related musculoskeletal disorder (PRMD). Tim Morse (2000) reported a rate of upper-extremity PRMDs amongst post-secondary music students ranging from 34% to 62%. Students entering post-secondary music education are already highly skilled musicians. This is also a time when students are invested in learning, and education need not compete with workplace demands. As such, post-secondary education is an ideal time for health promotion interventions for musicians ([Stanhope 2018](#), p. 30).

There is recognition that health promotion and education are not the responsibility of the health sector alone. Rather, they require intersectoral action and approaches that use multiple strategies at various levels of influence ([Ottawa Charter for Health Promotion 1986](#); [Baadjou et al. 2019](#), p. 105). The physiological and psychological mechanisms associated with performance-related injuries are multifaceted, and are often influenced by external variables such as social, environmental, and cultural ([Chesky, Dawson and Manchester 2006](#), p. 142). As such, effective musicians' health education must supersede traditional dissemination and delivery of information, and requires addressing underlying issues such as values, beliefs, and motivation of students and their teachers (*ibid.*; [Matei et al. 2018](#); [Perkins et al. 2017](#)). Including health and wellness support in the core curricula as a mere "add-on," while failing to promote sources of information and health, is a potential barrier to optimal health and engagement with health content within music institutions ([Zavitz 2022](#); [Matei and Philips 2023a](#) and [b](#)). Health promotion initiatives should focus on improving "the broader socio-economic, political and environmental living conditions to build supportive environments, encouraging community action" ([Matei et al. 2018](#)). Rosie Perkins and colleagues indicate that health education and promotion within a music institution should be congruent with individual lifestyle, support services, and environmental conditions. Moreover, Perkins and colleagues add that the "components of conservatoire life, including provision available, organizational culture, and health awareness levels among students and staff" ([Perkins et al. 2017](#), p. 11) should be considered, because these structural components acted as perceived enablers and barriers among participants in their study. The culture within music institutions must

change “to allow for wellbeing within wider performance practice time” rather than to just “provide information” ([Matei and Phillips 2023b](#), p. 9).

Vocal and instrumental teachers believe that it is their responsibility to ensure students have an awareness of performance health, and to be a source of health information, despite acknowledging that they do not have the training and understanding to do so ([Norton et al. 2015a](#) and [b](#); [Matei and Phillips 2023b](#)). International organizations and initiatives such as the Health Promotion in Schools of Music (HPSM) Project, the Canadian University Music Society (MusCan), the Performing Arts Medicine Association (PAMA), and the National Association of Schools of Music (NASM) have recommended that post-secondary music programs include education on health and safety issues ([Chesky, Dawson and Manchester 2006](#), p. 143; [MusCan 2014](#); [NASM 2024](#)). In the most recent revision of the *Standing Committee of Institutional Members: Guidelines*, MusCan included the following recommendation:

All students, faculty, and staff in music programs should be apprised of musicians' health and safety issues inherent in practice, performance, teaching, and listening... this includes but is not limited to information regarding hearing, vocal and musculoskeletal health, and injury prevention. ([MusCan 2014](#), p. 3)

Similarly, the 2023-2024 edition of the *National Association of Schools of Music Handbook* states that:

Students enrolled in music unit programs and faculty and staff [...] must be provided basic information about the maintenance of health and safety within the contexts of practice, performance, teaching, and listening. For music majors and faculty and staff, general topics include [...] basic information regarding the maintenance of hearing, vocal, and musculoskeletal health and injury prevention. Beyond the provision of basic general information, and the identification of available resources [...] are normally correlated with the nature, content, and requirement of specific areas of specialization. ([NASM 2024](#), p. 69)

Workshops from Matei and Phillips ([2023a](#) and [b](#)) explored the potential contents of ideal health education for post-secondary music students with 67 experts in relevant fields (including musicians, academics, and health professionals). Mental health, mindfulness and yoga, physical activity, injury management, and time management and irregular schedules were among the range of topics that were deemed important to include in health education for musicians. Experts also agreed that musicians should be equipped with critical appraisal tools to help with treatment selection and with questioning resources or information presented to them. While these workshops explicitly discuss higher education in the UK, the fundamental ideologies reflect a larger necessity for a global approach to musicians' health and wellness. With these recommendations for specific content in hand, and with the increase of research in this field in recent years, many educators and researchers agree with Gail Berenson ([2014](#), p. 19), who stated: “With our professional associations leading the way, every teacher has the ability to access the essentials of wellness information, helping to ensure a healthy future for performers everywhere.”

Several conservatoires and post-secondary music programs in the United Kingdom, Europe, Australia, and the United States have begun to implement curriculum-based

or external health education courses in their curricula ([Barton and Feinberg 2008](#); [Ginsborg *et al.* 2009](#); [Zander, Voltmer and Spahn 2010](#); [Fraser 2016](#); [Árnason, Briem and Árnason 2018](#); [Matei *et al.* 2018](#); [Matei and Ginsborg 2022](#); [Araújo and Spahn 2022](#)). These studies have demonstrated that participation in health-promotion courses improves subjective body awareness and attitude toward prevention strategies; decreases stress; and increases self-efficacy, perceived knowledge of health promotion strategies, and awareness of the health risks associated with performing music ([Barton et Feinberg 2008](#); [Ginsborg *et al.* 2009](#); [Zander, Voltmer and Spahn 2010](#); [Árnason, Briem and Árnason 2018](#); [Matei *et al.* 2018](#)). Catherine Fraser (2016) provides a survey of American post-secondary music programs accredited by NASM that offer health and wellness resources, indicating that 387 institutions (60%) offered resources in the form of website information, courses, and workshops. Presently, no studies have explored the range of health education opportunities offered in Canadian post-secondary music programs.

METHODS

The principal author conducted semi-structured interviews with post-secondary educators who are members of the new Canadian Network for Musicians' Health and Wellness (CNMHW) about the health promotion or health education offerings at their respective institutions. This study was approved by The Conjoint Faculties Research Ethics Board (CFREB) at the University of Calgary (REB# 20-1325). This research was completed in partial fulfillment of the degree of Master of Music at the University of Calgary.

A recruitment email was sent out to all founding members of the CNMHW (the Network) in November 2020. The email included a link to a health and wellness survey created by the second author. The results of the survey will be used by [second author] and the Network for the purpose of sharing resources and information and generating further research. The survey results were collected using Microsoft Office Forms, through [second author]'s institutional subscription, and stored on Microsoft One Drive.

An English version of the survey was sent to McGill University, University of Ottawa, University of Manitoba, University of Lethbridge, University of Toronto, Concordia University, University of British Columbia, University of Calgary, University of Alberta, University of Prince Edward Island. The French survey was sent to: Université de Sherbrooke, Université du Québec à Montréal, Cégep de Sainte-Foy, Conservatoire de musique and the Université de Montréal. Following the completion of the survey, participants were asked if they were willing to participate in a semi-structured interview where we would use the results of the survey to guide more in-depth questioning about the programs and offerings at their institution; interviews were only conducted in English. Those participants choosing to take part in the interview process were sent a second letter of information and consent, specific to the interview portion of the study. Participants indicating that they did not wish to remain anonymous are named throughout this study; confidentiality was adhered to

for participants requesting anonymity. The interviews lasted about 60 minutes each and were recorded via Zoom; these interviews were completed by January 1, 2021.

For this study, a thematic analysis approach was used. Through thematic analysis, we sought to employ a realist method by reporting on the experiences and realities of the participants through the data collected from the surveys and interviews ([Braun and Clarke 2006](#)). Moreover, we looked to understand professors' experiences in their delivery of musicians' health education, as well as how students engaged with the health and wellness offerings.

RESULTS

At the time of recruitment, participants from the following eight Canadian post-secondary institutions completed the survey: University of Manitoba, University of Lethbridge, University of Ottawa, McGill University, Université de Sherbrooke, Université du Québec à Montréal, Cégep de Sainte-Foy, and Université de Montréal. The different types of resources available at these institutions include credited courses, non-credited courses, non-credited workshops, and other resources. All (100%) of the institutions offered one or more of these resources. Six (75%) of the participating universities offered credited courses; three (38%) institutions offered non-credited courses. All (100%) institutions offered non-credited practical workshops. All (100%) institutions offered other resources that fall outside of traditional course and workshop offerings. Table 1 shows the resources offered by their respective institution. Health promotion and health education offerings at these post-secondary institutions started as early as twenty years ago, and these institutions have since expanded their offerings to introduce new initiatives for students' health and well-being.

Representatives from the following five institutions completed interviews with the first author: University of Manitoba, University of Lethbridge, University of Ottawa, McGill University, and Université de Montréal. Appendix 1 shows the interview questions. There are five categories of offerings and resources that emerged from the interviews, as displayed in Table 2: course material (credited/non-credited), practical workshops, research labs, graduate student contribution, and other resources. Concurrent with the results displayed in Table 1, four (80%) institutions indicated having formal musicians' health course offerings implemented in their respective curricula; of those four, all (100%) offer credited courses while only two (50%) offer non-credited courses. All (100%) institutions offer non-credited practical workshops. Two (40%) institutions indicated having research labs dedicated to music performance and musicians' health and wellness. Four (80%) institutions have graduate students who are involved in research and the development of educational resources on musicians' health. All (100%) institutions offer other health initiatives in their programs (described in more detail below).

Universities	Musicians' Health Resource Offered? (Yes/No)	Credited Courses Available? (Yes/No)	Non-Credited Courses Available? (Yes/No)	Practical Workshops Available? (Yes/No)	Other Offerings?	Frequency of Resources Offered?	Topics in Physical Wellness? (Yes/No)	Topics in Mental Wellness? (Yes/No)	Topics in Body Awareness (Alexander Technique, Feldenkrais Method, Yoga, etc.)? (Yes/No)
University of Manitoba	Yes	No	No	Yes	Yes	2-5 times per semester	Yes	Yes	Yes
University of Lethbridge	Yes	Yes	No	Yes	Yes	Courses offered yearly; other events offered intermittently	Yes	Yes	Yes
University of Ottawa	Yes	Yes	Yes	Yes	Yes	Two credited courses per semester; Workshops/Other events offered intermittently throughout the year	Yes	Yes	Yes
McGill University	Yes	Yes	Yes	Yes	Yes	Course offered yearly; Other resources offered weekly	Yes	Yes	Yes
Université de Sherbrooke	Yes	Yes	Yes	Yes		Course offered yearly; Workshops/Other events offered intermittently throughout the year	Yes	Yes	No
Université du Québec à Montréal	Yes	No	No	Yes	Yes				Yes
Cégep de Sainte-Foy	Yes	Yes	No	Yes		Four times a Semester	Yes	Yes	Yes
Université de Montréal	Yes	Yes	No	Yes		Credited courses offered yearly; non-credited workshops offered each term	Yes	Yes	Yes

Table 1: Catalogue of musicians' wellness educational opportunities offered by participating post-secondary institutions within the CNMHW.

University	Course Offering (Credited/Non-Credited) (Yes/No)	Practical Workshops	Research Labs	Graduate Student Contributions	Other Musicians' Health-Related Resources/Initiatives
University of Manitoba	No	Yes	No	No	Yes
University of Lethbridge	Yes	Yes	No	Yes	Yes
University of Ottawa	Yes	Yes	Yes	Yes	Yes
McGill University	Yes	Yes	Yes	Yes	Yes
Université de Montréal	Yes	Yes	Yes	Yes	Yes

Table 2: Musicians' wellness offerings by institutions participating in interviews with first author.

Course Offerings (Credited/Non-Credited)

Four of the five participants interviewed indicated that their institutions offered courses relating to musicians' health and wellness in their respective curricula. Topics in physical wellness and mental wellness for musicians are addressed by all four of these institutions with their respective courses. The University of Lethbridge and McGill University each have one general course that covers both physical and mental wellness; the University of Ottawa and Université de Montréal both have separate courses for physical wellness and mental wellness. This course classification is shown in Table 3. The "Musicians' Health and Health Research" course at the University of Lethbridge is offered annually to undergraduate and graduate students from all disciplines. This course addresses musculoskeletal injuries of musicians, biomechanics of music performance, mental health, social determinants of health (e.g., income; education), and cognitive strategies to enhance practice and performance. The course also integrates a research initiative started by the third author that gives students access to the [Sound Performers online curriculum](#) developed by Drs. Wijsman and Ackermann. The physical and mental health classes at the University of Ottawa were introduced in Fall 2019 alongside the inauguration of the Musicians' Wellness Centre (MWC), under the umbrella of the Piano Pedagogy Research Laboratory. These courses were only offered in the fall semester initially, and were then extended to both fall and winter semesters. They are presented as a series of workshops by local health practitioners. Though these courses are not mandatory, they have seen maximum enrollment with both undergraduate and graduate students. McGill University offers a mandatory course for first-year performance students. This annual course, implemented in 2012, introduces students to topics related to health support, healthy practice, and injuries. It also includes coping strategies based on the theoretical framework of sports psychology such as stress physiological response, stress management, and cognitive and physiological techniques. The Université de Montréal offers two courses: a mandatory musicians' physical wellness (*santé corporelle du/de la musicien-ne*) course and an optional mental wellness course with topics in Mental Preparation for Musical Performance course (*préparation mentale à la performance*). The physical wellness course was made mandatory for all classical

performance students, covering approaches related to kinesitherapy, osteopathy, massage therapy, and basic information about the muscular and nervous systems.

University	Standalone Physical Wellness Course	Standalone Mental Wellness Course	General Wellness (Covers Physical and Mental Wellness)
University of Manitoba	No	No	No
University of Lethbridge	No	No	Yes
University of Ottawa	Yes	Yes	No
McGill University	Yes	Yes	Yes
Université de Montréal	Yes	Yes	No

Table 3: Course categorization according to institution.

Practical Workshops

All five institutions offer non-credited practical workshops to their students. Table 4 shows type of workshop per institution. The University of Manitoba, University of Ottawa, and McGill University offer workshops on Alexander Technique, Feldenkrais Method, Body Mapping, and yoga for musicians. The Université de Montréal offers workshops in all the above topics in addition to Tai Chi. Workshops at the University of Lethbridge include Alexander Technique and Body Mapping, all at an introductory level.

University	Alexander Technique	Feldenkrais Method	Body Mapping	Tai Chi
University of Manitoba	Yes	Yes	Yes	No
University of Lethbridge	Yes	No	No	No
University of Ottawa	Yes	Yes	Yes	No
McGill University	Yes	Yes	Yes	No
Université de Montréal	Yes	Yes	Yes	Yes

Table 4: Practical workshops organized by institution.

Research Labs

The participants identified two labs that engage in musicians' health research. The Piano Pedagogy Research Lab at the University of Ottawa is dedicated to investigating and promoting multidisciplinary research. Initially, the research lab's focus was piano pedagogy, but it has since been expanded to include performance-related health for musicians. The research typically involves students at the university, but has also been extended to musicians of a variety of ages and experiences, including community members. The Centre for Interdisciplinary Research Music Media and Technology (CIRMMT) based at McGill University is a large strategic cluster with funding from the Fonds de Recherche du Québec. It brings together researchers and students from different universities including McGill University, Université de Montréal, UQAM, Concordia University, and Université de Sherbrooke. CIRMMT's Research Axis 3: Cognition, perception & movement, one of their four areas of exploration, includes research on injury prevention and musicians' overall health and wellness.

Graduate Student Contribution

In the two identified labs, graduate students actively pursue research in musicians' health and wellness. Some of the research conducted by graduate students include: a systematic review of warmups, the translation of the Taubman method into biomechanical definitions, motion capture to measure the results of Feldenkrais and Alexander Technique body-awareness sessions, examining the impact of training in compassionate mindfulness on self-esteem and performance anxiety in musicians, how to define detrimental levels of tension, developing technologies in the areas of auditory health, and respiratory health ([Beacon 2015](#); [Sabo et al. 2023](#)). With the introduction of the Music and Health Research Institute, graduate students from a broad range of research interests now present at monthly seminars and receive feedback from Institute researchers.

Aside from the research conducted at their respective institutions, graduate students have also contributed to the creation of seminars. For example, a graduate seminar on piano technique and pedagogy was created together with a formal doctoral student at Université de Montréal and the third author. At the University of Lethbridge, a graduate student created presentations on string pedagogy for an online course for health professionals offered by the Performing Arts Medicine Association (PAMA) ([PAMA 2024](#); [Ackermann et al. 2022](#)). The students put together curricula, wrote scripts, and created filmed content for this course.

Other Resources/Initiatives Relating to Musicians' Health

The University of Manitoba does not offer formal coursework in musicians' health and wellness. When speaking to the participant from this institution, they felt that "adding another class would ask too much of the students", instead, they offer several health-related initiatives that have been built into the curriculum of the music program. As part of their noon-hour recital series that takes place three times a week, there are six sessions at the beginning of each term to talk about health-related topics. Students are required to attend thirty "events" (noon-hour recitals, student recitals, ensemble concerts) throughout the academic year; of those thirty events, the Faculty of Music has determined that ten events should be sessions on musicians' health and wellness. With the help of successful grants, the students' association has been able to support workshops on the Alexander Technique, Feldenkrais method, and a yoga series. The lobby of one of their floors was transformed into a green space for students. There is also a second green space with no internet access that acts as a quiet room where students can do yoga and mindfulness practice. The students and faculty have also started a running and walking club. The participant reported that these six initiatives have greatly changed the dynamics of the school and have resulted in positive signs of student engagement and overall wellness.

Like the musicians' health and wellness presentations for the students at the University of Manitoba, there is a yearly health and wellness presentation at the University of Lethbridge. Some of the topics included are hearing health, ramping up practice schedules to avoid sudden increases in playing or singing time, and the types of injuries that are mechanical and biomechanical in nature. In the past, there

have been collaborations with an audiology clinic that offered the music students custom ER-15 ear plugs at a greatly reduced cost. The Université de Montréal and the University of Ottawa have also collaborated with their respective audiology programs, allowing music students to have their hearing screened by audiology students. At McGill University, they have implemented a health week where practitioners and lecturers come in to speak on the topic of musicians' health and wellness. World Voice Day and World Hearing Day are two days where students can have their voices and hearing screened. These two days have been provided every year since 2016 and offer students a series of workshops and conferences on their respective topics. In addition to this, students are also able to take six subsidized Alexander Technique lessons a year with an Alexander practitioner. The Musicians' Wellness Centre at the University of Ottawa continues to bring in a variety of local health practitioners, with some offering free consultations or discounted rates for University of Ottawa music students. Alongside the online yoga series presented by the Musicians' Wellness Centre, the aim is to have all their online workshops available to anyone in Canada. All the post-secondary institutions represented in these interviews also provide musicians' health and wellness masterclasses and workshops for the students and faculty.

THE IMPACTS OF COVID-19

COVID-19 greatly impacted the delivery of a lot of musicians' health and wellness content. Hands-on workshops such as body-mapping and mindfulness practices saw the biggest restrictions across the post-secondary institutions interviewed. However, each institution found different ways to continue providing these resources to students. The University of Ottawa and the Université de Montréal were able to offer some workshops such as a yoga series over Zoom. The University of Manitoba introduced a weekly mental wellness session starting in January of 2021. McGill University was also able to bring a masterclass on body-mapping that was presented over Zoom, and a weekly virtual Feldenkrais Method workshop was also offered to the students.

DISCUSSION

It is important to note that while data collection for this study concluded in January 2021, course availability and information remain accurate (at the time of writing in November 2023) as the respective course catalogues and calendars have been referenced to ensure accurate representation of resources offered. It was encouraging to discover that all the post-secondary institutions interviewed provide one or more types of wellness offerings for their music students. The most common type of resource amongst the five institutions are non-credited practical workshops delivered by local health practitioners, with all institutions offering workshops on Alexander Technique. As workshops are presented intermittently and do not occupy space on the university calendar, this may allow institutions to offer workshops more readily. Additionally, techniques such as Alexander Technique are not strictly for musicians; these workshops can be provided to music students in tandem with other performing arts programs such as dance or drama.

While most of the resources offered across the different categories (courses, workshops, etc.) are not an obligatory part of their music programs, the participants shared that their students and faculty showed great interest in the topics and took advantage of the offerings; all wellness courses and workshops across the institutions generally saw maximum enrolment. Despite the encouraging signs of engagement with these resources, poor health literacy amongst musicians and a lack of scientific rigour behind musicians' health education were points of concern amongst the participants. Moreover, they alluded to the need for intersectoral collaboration. It was the participants' belief that most musicians in their programs have a basic understanding of musicians' health. It is therefore important to have health education that is effective and informative for all levels of performers. Caroline Traube at the Université de Montréal indicated that the information passed on to music students needs to be introductory because most musicians are at a basic level of understanding with regards to musicians' health. Caroline stated:

The bridge to cross is getting students and performers more engaged with the scientific side of things. It's hard to bring that science back into the class... you can read those articles and papers that might pertain to you, but the language and understanding isn't there. They need to have that basic knowledge to be able to make decisions for themselves... to involve performance with science to be able to find more research questions for the benefit of musicians.

While the resources offered include topics on physical, mental, and hearing health, there is a call for these offerings to also include a health literacy component. This addition would allow musicians the tools they need to understand and access the appropriate health services. Students and faculty are generally concerned with, and interested in, the topic of musicians' health and wellness, but they can only express those concerns in terms of how well they are educated in the field. And to be educated in the field, there must be a way to effectively communicate with other disciplines so that all parties involved can understand. Peter Visentin expresses his concern about the communication bridge between the musical and the scientific:

Transdisciplinary research is something like a polka dot dress, where individual disciplines can be represented by the polka dots. Each dot encloses the knowledge of the disciplines, the methodology used by a discipline, and the ways of thinking about information that those disciplines value. Transdisciplinary knowledge is looking at that dress not from the standpoint of the individual polka dots, but from the spaces in between the dots. The distance between each dot includes all those questions that the individual disciplines either don't have the tools to address or the cultural loading to want to address. Musicians' health must be fundamentally transdisciplinary because if it doesn't have scientific rigor, it's not about musicians' health. If it doesn't talk to musicians, it's useless being a part of musicians' health.

SUGGESTIONS FOR EDUCATION IMPROVEMENT

Participants offered some suggestions for content they would like to see integrated into their musicians' health and wellness curricula. Firstly, all professors felt that there could be better integration of musicians' health and wellness throughout all the

curricula. One suggestion was for an entry-level course that would teach students the foundations of musicians' health and greater body awareness. Another suggestion was to give the music faculty foundational knowledge in mental health and mental health first aid to be able to better support the students. These additions would allow for better health literacy not only amongst students but faculty as well.

LIMITATIONS

There were a few limitations to this study that should be considered. As previously mentioned, there were eight institutions that responded to the survey at the time of initial data collection and recruitment. Of those eight, four of the institutions were anglophone and the other four were francophone. As the interviews were only conducted in English, this limited the participation of French-speaking individuals.

COVID-19 hindered the ability for all these institutions to deliver in-person health and wellness offerings. Though we were able to get a sense of what they offer when the institutions are working at full capacity, the COVID-19 restrictions still proved to be a challenge. As this study was conceived after the first major Canada-wide quarantine in March of 2020, we anticipated that many of the interactions with the institutions would be through a virtual meeting platform. It is possible that the perceptions, priorities, and approaches in performance health have changed or even increased because of the pandemic.

CONCLUSION

This paper has outlined musicians' health-related educational resources provided by post-secondary institutions in Canada. Five participants from recruited institutions in the Canadian Network for Musicians' Health and Wellness agreed to be interviewed for the purposes of learning about their respective offerings. The offerings from these institutions can be categorized into five types of resources: courses (credited or non-credited), practical workshops, research centers, graduate student contributions, and other. All institutions interviewed offer one or more of these resources at least once per academic year. A future study looking at student engagement and their perceived experiences with available health resources would provide insight in the efficacy of health promotion within institutions. While this paper highlights *what can be done* to promote health education and resources for post-secondary music students, it is also important to highlight the importance of educating instructors and administrators. By fostering a culture of health and wellness, instructors and administrators can help to mitigate the prevalence of injuries among musicians. We encourage interested colleagues to contact the [Canadian Network for Musicians' Health and Wellness](#).

BIBLIOGRAPHY

- Ackermann, Bronwen, Tim Driscoll, and Dianna T. Kenny (2012), "Musculoskeletal Pain and Injury in Professional Orchestral Musicians in Australia," *Medical Problems of Performing Artists*, vol. 27, pp. 181–187, <https://doi.org/10.21091/mppa.2012.4034>.
- Ackermann, Bronwen J., *et al.* (2022), "An Intensive Continuing Education Course to Enhance Care of the Performing Arts Athlete. The 'Essentials of Performing Arts Medicine'," *Current Sports Medicine Reports*, vol. 21, n° 12, pp. 454–459, <https://doi.org/10.1249/JSR.0000000000001021>.
- Árnason, Kári, Kristín Briem, and Árni Árnason (2018), "Effects of an Education and Prevention Course for University Music Students on Their Body Awareness and Attitude Toward Health and Prevention," *Medical Problems of Performing Artists*, vol. 33, n° 1, pp. 131–136, <https://doi-org.proxy.bib.uottawa.ca/10.21091/mppa.2018.2021>.
- Araújo, Liliana S., and Claudia Spahn (2022), "Promoting Health-Related Lifestyle," *The Oxford Handbook of Music Performance*, vol. 2, pp. 280–306, <https://doi.org/10.1093/oxfordhb/9780190058869.013.14>.
- Baadjou, Vera A., *et al.* (2019), "Health Education Literacy and Accessibility for Musicians. A Global Approach," *Worldwide Universities Network Project, Medical Problems of Performing Artists*, vol. 34, n° 2, pp. 105–107, <https://doi.org/10.21091/mppa.2019.2011>.
- Barton, Rebecca, and Judy R. Feinberg (2008), "Effectiveness of an Educational Program in Health Promotion and Injury Prevention for Freshman Music Majors," *Medical Problems of Performing Artists*, vol. 23, n° 2, pp. 47–53, <https://doi.org/10.21091/mppa.2008.2010>.
- Beacon, Jillian (2015), *Assessing 2D and 3D Motion Tracking Technologies for Measuring the Immediate Impact of Feldenkrais Training on the Playing Postures of Pianists*, Master's dissertation, University of Ottawa, <https://piano.uottawa.ca/wp-content/uploads/2016/04/Publications/Physical%20aspects/20.%20Beacon%20Jillian%202015%20thesis.pdf>, accessed March 28, 2024.
- Berenson, Gail (2014), "Professional Associations. Lead The Way," *American Music Teacher*, vol. 64, n° 1, pp. 17–19, <https://www-jstor-org.proxy.bib.uottawa.ca/stable/43543768?sid=primo>, accessed on April 2, 2024.
- Brandfonbrener, Alice G. (2009), "History of Playing-related Musculoskeletal Problems in 330 University Freshmen Music Students," *Medical Problems of Performing Artists*, vol. 24, n° 1, pp. 30–36, <https://doi.org/10.21091/mppa.2009.1007>.
- Braun, Virginia, and Victoria Clarke (2006), "Using Thematic Analysis in Psychology," *Qualitative Research in Psychology*, vol. 3, n° 2, pp. 77–101, <https://doi.org/10.1191/1478088706qp0630a>.
- Chesky, Kris, William J. Dawson, and Ralph Manchester (2006), "Health Promotion in Schools of Music. Initial Recommendations for Schools of Music," *Medical Problems of Performing Artists*, vol. 21, n° 3, pp. 142–144, <https://doi.org/10.21091/mppa.2006.3027>.
- Fraser, Catherine (2016), *Wellness Resources at Postsecondary Music Schools. A Survey of How this Information is Being Offered*, research paper presented in partial fulfillment of the requirements for the Degree Doctor of Musical Arts, Arizona State University, <https://keep.lib.asu.edu/items/154358>, accessed March 28, 2024.
- Ginsborg, Jane, *et al.* (2009), "Healthy Behaviours in Music and Non-music Performance Students," *Health Education*, vol. 109, n° 3, pp. 242–258, <https://doi.org/10.1108/09654280910955575>.
- Kok, Laura M., *et al.* (2016), "The Occurrence of Musculoskeletal Complaints among Professional Musicians. A Systematic Review," *International Archives of Occupational and Environmental Health*, vol. 89, n° 3, pp. 373–396, <https://doi.org/10.1007/s00420-015-1090-6>.
- Matei, Raluca, *et al.* (2018), "Health Education for Musicians," *Frontiers in Psychology*, vol. 9, n° 1137 (July), pp. 1–17, <https://doi.org/10.3389/fpsyg.2018.01137>.
- Matei, Raluca, and Jane Ginsborg (2022), "Health Education for Musicians in the UK. A Qualitative Evaluation," *Health Promotion International*, vol. 37, n° 2, pp. 1–14, <https://doi.org/10.1093/heapro/daab146>.

- Matei, Raluca, and Keith Phillips (2023a), "Critical Thinking in Musicians' Health Education. Findings from Four Workshop with Experts (Part 1)," *Health Promotion International*, vol. 38, n° 2, pp. 1–19, <https://doi.org/10.1093/heapro/daac187>.
- Matei, Raluca, and Keith Phillips (2023b), "Health Education in Conservatoires. What Should it Consist of? Findings from Workshops with Experts (Part II)," *Health Promotion International*, vol. 38, n° 1, pp. 1–16, <https://doi.org/10.1093/heapro/daac179>.
- Morse, Tim (2000), "A Pilot Population Study of Musculoskeletal Disorders in Musicians," *Medical Problems of Performing Artists*, vol. 15, n° 2, pp. 81–85, <https://doi.org/10.21091/mppa.2000.2017>.
- MusCan (Canadian University Music Society) (2014), *Standing Committee of Institutional Members. Guidelines*, <https://muscan.org/wp-content/uploads/SCIM-Guidelines.pdf>, accessed March 28, 2024.
- NASM (National Association of Schools of Music) (2024), *National Association of Schools of Music. Handbook 2023-2024*, https://nasm.arts-accredit.org/wp-content/uploads/sites/2/2024/01/M_2023-24_Handbook_Final_01-11-2024.pdf, accessed March 28, 2024.
- Norton, Naomi, *et al.* (2015a), "Health and Wellness Education for Musicians. Investigating Music Teachers' Perspectives," in Jane Ginsborg *et al.* (eds.), *Proceedings of the Ninth Triennial Conference of the European Society for the Cognitive Sciences of Music*, pp. 612–615, https://www.gsmnd.ac.uk/sites/default/files/2022-02/ESCOM9_Manchester_2015_Abstracts_Proceedings-web.pdf, accessed April 2, 2024.
- Norton, Naomi, *et al.* (2015b), "Instrumental and Vocal Music Teachers' Views on a Multi-disciplinary Team Approach to Health Promotion for Musicians," in Jane Ginsborg *et al.* (eds.), *Proceedings of the Ninth Triennial Conference of the European Society for the Cognitive Sciences of Music*, pp. 605–611, https://www.gsmnd.ac.uk/sites/default/files/2022-02/ESCOM9_Manchester_2015_Abstracts_Proceedings-web.pdf, accessed April 2, 2024.
- Ottawa Charter for Health Promotion (1986), *The 1st International Conference on Health Promotion, Ottawa, 1986*, <https://www.who.int/teams/health-promotion/enhanced-wellbeing/first-global-conference>, accessed March 28, 2024.
- PAMA (Performing Arts Medicine Association) (2024), *Essentials of Performing Arts Medicine Certificate Course*, https://artsmed.org/events/essentials_of_performing_arts_medicine/, accessed March 28, 2024.
- Perkins, Rosie, *et al.* (2017), "Perceived Enablers and Barriers to Optimal Health among Music Students. A Qualitative Study in the Music Conservatoire Setting," *Frontiers in Psychology*, vol. 8, n° 968, pp. 1–15, <https://doi.org/10.3389/fpsyg.2017.00968>.
- Sabo, Jeffrey, *et al.* (2023), "Translating Piano Pedagogy into Biomechanical Language. A Qualitative Framerwork for Interdisciplinary Knowledge Exchange," *International Journal of Qualitative Methods*, vol. 22, pp. 1–13, <https://doi.org/10.1177/16094069231159975>.
- Stanhope, Jessica (2018), "University Woodwind Students' Playing-related Injuries. A Pilot Study Investigating Beliefs, Attitudes and Prevention Strategies," *Australian Journal of Music Education*, vol. 51, n° 1, pp. 29–42, <https://go-gale-com.proxy.bib.uottawa.ca/ps/i.do?p=AONE&u=otta77973&id=GALE%7CA665883402&v=2.1&it=r&aty=ip>, accessed on April 2, 2024.
- Wijsman, Suzanne, and Bronwen Ackermann (2018), "Educating Australian Musicians. Are we Playing it Safe?," *Health Promotion International*, vol. 34, n° 4, pp. 869–876, <https://doi.org/10.1093/heapro/day030>.
- Zander, Mark, Edgar Voltmer, and Claudia Spahn (2010), "Health Promotion and Prevention in Higher Music Education," *Medical Problems of Performing Artists*, vol. 25, n° 2, pp. 54–65, <https://doi.org/10.21091/mppa.2010.2012>.
- Zavitz, Kyle (2022), *Exploring Musical Knowledge Within One Canadian School of Music. Ideology, Pedagogy, And Identity*, PhD dissertation, The University of Western Ontario, <https://ir.lib.uwo.ca/etd/9004>.

APPENDIX 1: INTERVIEW QUESTIONS

Information About You

1. What is your post-secondary institution?
 - a. City, province?
2. What is your role or roles? (administrator, studio/classroom teacher, what subjects/instruments, department/division—e.g., performance, history, theory, musicology, etc.)
 - a. Has your role or roles changed since you arrived at your post-secondary institution?—e.g., sessional instructor to full-time faculty member, sessional instructor to performance chair, etc.
3. How long have you been in your position?

Information About Your Program

4. What educational offerings exist that are related to musicians' health and wellness?
 - a. Courses for credit?
 - i. Is the course new?
 - ii. Is the course offered once a year? Once a semester? Every two years? Fall and winter semesters only?
 - iii. Is the course a full credit course? Half a credit? Multi-term course?
 - iv. Are there prerequisites to the course?
 - v. Are there multiple courses that require prerequisites?
 - vi. Average student enrollment?
 - vii. Are the courses part of the music division or are they part of another program?—e.g., health sciences, kinesiology, etc.
 - b. Workshops/lunch and learn?
 - i. Frequency of workshops?
 - ii. Faculty involvement in workshops?
 - iii. Average student participation?
 - iv. Are the workshops part of the music division or another program?
 - c. Masterclasses?
 - i. Taught by yourself? Other faculty members? Guest speakers?
 - ii. Frequency of masterclasses?
 - iii. Average student participation?
 - iv. Are the masterclasses part of the music division or another program?
 - d. Integration with studio lessons?
 - e. Online—during and outside of COVID-19?
 - i. Average student participation?
 - ii. Is it a course? Online workshops?

- f. Outside of the department/faculty/school of music?
 - g. Is there written material at your post-secondary institution's library that students can access?—e.g., books, studies, reports, etc.
5. Are these offerings a core part of music education at your post-secondary institution?
- a. If no, is it an option (an elective)?
6. Did these offerings exist before your arrival at your post-secondary institution?
7. What have you contributed to your post-secondary institution to promote musicians' health and wellness?
- a. An offering in the works?
 - b. Plans for future educational offerings, and what are they?
8. Have you had a position at another post-secondary institution where you had offerings related to musicians' health and wellness?
9. Have you produced any written works that offer information on musicians' health and wellness?—e.g., books, studies, reports, etc.
- a. If no, do you have plans for future contribution to written works on musicians' health and wellness?
 - b. If yes, what are they?
 - c. If yes, do you use that information as part of your teaching/course offerings?
 - d. If yes, have you presented them at any conferences?
 - e. If yes, do you have plans to present them at any conference?
10. Have you attended any musicians' health and wellness conferences?—e.g., MusCan, PAMA, NASM, etc.
- a. If no, do you have plans to go?
 - b. If yes, have you brought anything that you learned to your post-secondary institution?
11. At your post-secondary institution, is there student interest in learning about musicians' health and wellness?
- a. Have you found a higher student interest percentage with a specific instrument grouping—e.g., brass, woodwinds, percussionists, vocalists, string players, pianists?
 - i. Is interest higher with general music students? Performance students? Music education students?
 - ii. Generally, first years? Second years? Third years? Fourth or higher?
 - iii. Are students interested generally undergraduate or graduate students?
 - iv. Are students interested generally from the music department?
 - b. Are students generally focused on maintaining good playing/singing habits throughout their education or is interest a case-by-case basis?

12. Are students from other faculties/divisions/programs able to partake in the educational offerings on musicians' health and wellness at your post-secondary institution?
13. Are you the only faculty member at your post-secondary institution that offers educational material related to musicians' health and wellness?
 - a. If no, what are other faculty members doing to promote musicians' health and wellness?
14. Do you find that your educational offerings related to musicians' health and wellness are effective and well-received?
 - a. Well received by students?
 - b. Well received by faculty members?
15. Have there been any graduate students pursuing studies in this area within your program?
 - a. If yes, what degrees did they pursue and with which programs were their committee members affiliated? (e.g., MMus, MA, PhD, DMA, Interdisciplinary degrees, degrees in other programs, e.g., rehabilitation sciences, medicine, kinesiology, psychology, etc.?)
 - b. If yes, have they contributed to the offerings at the post-secondary institution on musicians' health and wellness?

Canadian Network for Musicians' Health and Wellness

16. When did you join the Canadian Network for Musicians' Health and Wellness (CNMHW)?
 - a. Why?
17. As part of the CNMHW, is there something that you wish to accomplish?
 - a. Something you would like to address?
 - b. Something that you would like to contribute?
 - c. Something that you would like to promote?
18. How has the CNMHW helped you in promoting musicians' health and wellness at your post-secondary institution?
19. Have you collaborated with other members of the CNMHW and/or post-secondary institutions to bring something new back to your post-secondary institution?
 - a. If yes, what is it?
20. Have you collaborated with other members of the CNMHW and/or post-secondary institutions to bring something new to another post-secondary institution?
 - a. If yes, what is it?