



AMA Journal of Ethics®

July 2022, Volume 24, Number 7: E584-589

ORIGINAL RESEARCH: PEER-REVIEWED ARTICLE

How a Medical Orchestra Cultivates Creativity, Joy, Empathy, and Connection

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Abstract

Background: Inspired by research indicating that exposure to humanities correlates with reduced burnout, the Nebraska Medical Orchestra was founded in 2018 as a collaboration between the University of Nebraska Medical Center and the University of Nebraska at Omaha School of Music.

Methods: Semistructured interviews about orchestra participants' experiences were conducted with 9 musicians and recorded and transcribed. Transcripts were analyzed using the constant comparative method.

Results: The interviews suggested that participants are drawn to the orchestra to pursue a love of music, to be part of an ensemble, and to connect with others in an environment that provides a lighthearted, nonjudgmental, noncompetitive forum in which to create and enjoy music for its own sake.

Conclusions: This study has implications for designing arts-based wellness activities for clinicians and scaling them nationwide.

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Engaging Music

Burnout, a common phenomenon among medical students and clinicians, is associated with depression, a decline in job performance and empathy, and elevated levels of salivary cortisol, a stress hormone.^{1,2,3,4,5} Engaging in music and other creative activities can help manage symptoms of burnout by reducing levels of cortisol and fostering social bonding.^{5,6,7,8}

Inspired by research indicating that exposure to the humanities correlates with **reduced burnout**,⁹ the Nebraska Medical Orchestra (NMO) was founded in 2018 with 55 members as a partnership between the University of Nebraska Medical Center and the

University of Nebraska at Omaha School of Music. The orchestra was conceived as a wellness initiative that would help alleviate symptoms of stress and burnout by providing health care professionals a space for creativity and engaging with a community.¹⁰ This volunteer orchestra, specifically for health care professionals, is unique in that it is open to participants with varying skill levels—those with or without degrees in music, those with some or no experience performing, and even those who are novices or recently returning to their instruments.

In a 2019 survey of this orchestra's participants conducted by the second author (M.J.B.), 78% (28 of 36 respondents) reported that participation in the orchestra was very or extremely beneficial for their sense of well-being.^{10,11} However, this survey only asked about what aspects of the NMO were important to participants but not *why* they perceived the orchestra as having a positive impact. Moreover, the brief nature of the survey could not yield in-depth responses from participants about their experiences—for example, how and why does the orchestra positively impact well-being? Therefore, this study builds on this survey by investigating, via semistructured interviews, how participation in the NMO was beneficial for participant well-being.

Methods

In spring 2021, participants were recruited from a pool of 18 of the total 55 members of the orchestra, as these 18 individuals were the only active members of the orchestra during the COVID-19 pandemic. Of these, 9 consented to participate in this study. These participants represented both string musicians (4 violinists and 1 double bassist) and wind musicians (3 flutists and 1 trumpeter) and the following health care professions: medicine (oncology, surgery), nursing, allied health (pharmacy, dietetics), patient care support, and medical research. Participants' years of experience playing their instrument ranged from about 15 to 40 years, but all were amateurs. Semistructured interviews were conducted with these 9 musicians and recorded and transcribed (see the [Supplementary Appendix](#) for a list of sample interview questions). Transcripts were analyzed using the constant comparative method, which involved an iterative process of reading the interview transcripts to understand the meaning of participants' responses, comparing and contrasting the responses, and then categorizing similar responses into themes.¹²

Results

Analysis of the interview transcripts revealed 4 themes.

Playing music is a chance to pursue a joyful and creative passion. Most participants expressed a deep love for music that was an intrinsic part of their identity but for which there was no outlet in their professional life. Indeed, some had been music majors, and all had been playing their instrument since childhood. Some said that they were not able to pursue a career in music because of the demands of their health care jobs and, in 2 cases, because of an injury. Participants also alluded to how their work lives involved a focus on technical detail rather than creativity. The orchestra served as an outlet for both their passion for music and their desire to connect with the creative part of their identity. A quotation from one participant illustrates these points:

I have always loved flute.... As an adult having a super stressful professional life, having the luxury to practice just takes my mind away. I just love playing, and sometimes I think about what if I had pursued music instead of what I am doing. The reality is that I cannot change things, and I have a very rewarding professional life, but I would really feel like a part of me was missing if I was not able to play. (participant 6)

Creating music in an ensemble is a uniquely joyful experience. Participants said they were drawn to the orchestra because they had a particular interest in performing with others. Participants' reflections indicated that playing in a group was an ethereal, intangible experience, one that cultivates joy, community, humility, and purpose through members striving in unison to achieve a challenging goal, one that they couldn't achieve alone. Two participants expressed appreciation for different aspects of the orchestra experience.

When you're in an ensemble or in a full orchestra, you're able to play more difficult music and definitely recognize the talent of others.... I remember at one point I just kind of kept my violin up and stopped playing. I just was listening and I was like, this is so cool to be a part of and see all these other very talented people doing something they love. (participant 8)

There's something comforting about being in a large group of people who are all doing the same thing. They all have the same goal and so that's pretty nice. It's different than a sports team or something like that because you're not competing against anything. You're just trying to make something nice, and I really appreciate that. (participant 7)

The empathetic atmosphere of the orchestra enhances enjoyment. Participants described the orchestra as a safe, lighthearted, nonjudgmental, noncompetitive environment where they were able to play music for its own sake. They credited the conductor for playing a critical role in fostering this environment, especially given that participants are at different skill levels. As participant 6 put it:

[He tries] to select music that will be possible. It might be a bit of a reach for the least skilled, but not too tedious for skilled people. A lot of it is really thinking about the musical selection and trying to get a good mix of pieces.... I have been thinking back on other orchestras and other bands and situations [ensembles] where there was a lot of pressure in the conductors, and their purpose was to try to get perfection.... His [our conductor's] purpose is to make sure that people are enjoying it and that we do sound good. It is not going to be haranguing at an individual because they are out of tune or coming in late, which is what you get from top-notch conductors if you are in a serious musical ensemble. That is not the venue. That is not us. It is about creating a rewarding experience and making it worthwhile for us after a very long day. (participant 6)

This open, nonregimented atmosphere in turn heightened participants' enjoyment of playing because it gave them space to make mistakes, a welcome contrast from their health care professional lives. As participant 7 noted:

There's really no consequence if it goes poorly, right?... It's just the feeling of this is a pure artistic outlet. It doesn't matter how well I do. The stakes are so low, if I made a huge mistake during the performance, people seem to understand.... When you're working with reagents and samples that can cost you 1000s of dollars, there's a very large consequence if things go wrong. (participant 7)

The laid-back atmosphere of the orchestra, however, doesn't promote shoddy work. On the contrary, one participant commented on how members are intrinsically motivated to do good work:

The personalities of the group itself take care of holding the group to a high standard because everybody wants to be good. Everybody wants to do their best.... So, it all works out—being able to play at a pretty high level but we don't have to be pushed really hard by our conductor to do that. (participant 1)

Playing with other health professionals fosters connection. Participants said they appreciated that they shared with their orchestra colleagues an understanding of the stresses of working in the health care field. Participant 1 noted that this shared experience provided common ground for connection and commiseration outside of the

workplace and a chance to have open discussions about issues that work environments may not inspire:

Often the stress that comes with working in health care is something that's difficult to release.... But I think in a group that's all health care providers, where they're doing something creative, that's a very different setting. A different environment that's more welcoming to understanding what you're going through. So, it provides a whole network of people that you could talk to about things that are bothering you and also a whole group of people that you can just make music with. And I think that has huge role to play and positively impacting mental health. (participant 1)

Discussion

Our findings indicate that the orchestra delivered on its wellness mission in 3 ways: (1) by harnessing participants' intrinsic motivation to pursue an artistic, creative passion; (2) by cultivating an empathetic, noncompetitive space to engage in this passion, wherein the focus is pleasure, not perfection; and (3) by fostering kinship and connection with other individuals who have dual identities as musician and health professional. Our findings suggest, as other research has noted,¹³ that because wellness is a highly individualized process, **wellness programs** that are anchored in activities that participants find intrinsically joyful—in this case, making music—are more likely to be received enthusiastically. In other words, wellness programs that are tailored to the lived experiences of participants, instead of generic self-care skills (eg, exercise), may be more intrinsically engaging.

It's important to note that though individual-focused wellness promotion interventions, such as the NMO, are beneficial, they are unlikely to be effective in eliminating symptoms of burnout, especially if burnout results from systemic factors such as chronic imbalance between job demands (eg, excessive workload, administrative burden, moral distress) and job resources (eg, access to social support, meaningful work).¹⁴ Having said that, the NMO does embody the guidelines proposed by the National Academies of Sciences, Engineering, and Medicine for designing well-being systems in health care organizations to combat burnout.¹⁴ These recommendations, as embodied in the NMO, include university leadership commitment to the orchestra's mission of well-being and an orchestra culture that permits vulnerability and fosters peer support. Although there are roughly 35 medical orchestras across the United States,¹⁵ few garner the same support as the NMO for financial and human resources from their affiliated institutions, and few have "wellness" as a primary goal.¹⁶ The characteristics of the NMO would be worth taking into consideration if it were to serve as a foundation for other similar national or international arts-based initiatives. Future studies of medical orchestras should incorporate larger samples and a longitudinal approach for a more robust evaluation of the orchestra's impact.

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Editor's Note

This study was approved on January 6, 2021, by the University of Nebraska Medical Center Institutional Review Board.

Citation

AMA J Ethics. 2022;24(7):E584-589.

DOI

10.1001/amajethics.2022.584.

Acknowledgements

We thank participants who shared their experiences playing in the orchestra and Steven Wengel, MD, for supporting the Nebraska Medical Orchestra as a campus wellness initiative.

Conflict of Interest Disclosure

The author(s) had no conflicts of interest to disclose.

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