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## CAN MUSIC EXPERIENCES CONTRIBUTE TO THE WELL-BEING OF FACULTY MEMBERS?

*Penn State University, USA*

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### ЧИ МОЖЕ МУЗИЧНИЙ ДОСВІД ДОПОМАГАТИ РОЗВИТКУ НАВИЧОК, ЯКІ СПРИЯЮТЬ БЛАГОПОЛУЧЧЮ ВИКЛАДАЧІВ?

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У цьому інтегративному огляді літератури обговорюються існуючі теорії та результати досліджень щодо впливу музичного досвіду на якість життя, здоров'я і стан щастя професорсько-викладацького складу вишів. Недостатність знань та інформації щодо того, як музичний досвід може допомагати розвитку навичок, які сприяють благополуччю викладачів, зумовлює необхідність подальших досліджень за цією темою.

**Ключові слова:** благополуччя, музичний досвід, професорсько-викладацький склад.

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This integrative literature review offers a look at theories and research findings about whether music experiences can contribute to the quality of faculty members' well-being. Further research is needed on this topic due to the lack of knowledge and information about the extent to which music experiences can contribute to the development of skills promoting the well-being of faculty members.

Key words: Well-being, music experiences, faculty members.

#### Introduction

Faculty members' ability to improve their professional and personal well-being — the sense of being happy, healthy, socially connected, and purposeful — is becoming increasingly challenging for many reasons. For instance, their workload can require a significant commitment of available time. Further, they may lack the skills to manage stress, and to embrace emotions and relationships that could promote their well-being, which in turn influences the quality of their health and, overall, their life.

How do faculty members develop the skills needed to promote their well-being? According to several recent studies, music experiences during childhood, adolescence and young adulthood may contribute to an improved quality of adult work and life skills for both musicians and non-musicians alike.

This article has three purposes, which are to: (a) analyze the ideas, theories, and methods offered in research on the connections between music experiences and well-being, (b) identify gaps in the work on this topic, and (c) place research on the effects of music experiences on well-being into the context of the relevant existing literature.

Most of the information presented here was collected from multiple sources. An exploration of the academic literature was conducted through search engines that included Elsevier, Emerald, ProQuest Central, PsycINFO, SAGE Premier, Science Direct, and Google Scholar. The search was restricted to articles published within the last 10 to 15 years. Many of the identified articles cited additional literature pertaining to this topic. Relevant topics were bounded by the terms “music and well-being”, “music and work skills”, “music and life skills”, “music and health”, “high and low achievers”, “Type A and B personality”, and “work-life balance in academia”. This report of findings from the literature review is organized into two sections: (a) current state of faculty members' well-being, and (b) effects of music experiences on individual well-being.

#### Current State of Faculty Members' Well-being

The term “well-being” often is used interchangeably with such terms as happiness, wellness, health, positive functioning, optimal functioning, thriving, flourishing, harmony, quality of life, life satisfaction, and satisfaction in work and non-work arenas. In the literature analyzed, the definition of “well-being” was found to be multi-dimensional and complex.

The term refers to individual achievement of an optimal quality of life by fulfilling emotional and social, physical, mental, occupational, spiritual, and environmental health and needs; this was usually accomplished by effectively realizing talents and skills [1–4].

In recent years, attaining and maintaining well-being has become increasingly challenging for many occupational groups in many countries [5–9], and particularly for faculty members due to the nature of their work, which includes unbounded workloads, blurred lines between work and other parts of their life, personal lives squeezed for time and attention, and poor relationships with others [10–12]. Work-related stress contributes to low work productivity [13], low levels of work-life balance [14], low mood or depression [15], burnout [16], high turnover [17], low self-esteem [18], and low work and life satisfaction [19]. “Stressed-out, burned-out or dissatisfied employees can result in direct or indirect costs attributed to absenteeism, turnover, low motivation, morale and commitment with a variety of side effects also for the wider society” [20, pp. 94–95].

A high level of occupational stress not only prevents faculty members from having high-quality social and personal lives but can make the academic profession less attractive. Trower [11] reported six reasons why doctoral students are often more inclined to look for employment opportunities outside the academy: “the job market is dreadful; the academic lifestyle is no longer so attractive; the research/teaching equation is a trap; the tenure process is broken; comparatively speaking, the pay stinks; and more attractive options exist outside the academy” (p. 190).

Reports in the research literature indicate that in comparison with individuals in other occupations, faculty members are among the most stressed employees due to their (a) personality types, (b) age, and (c) inability to engage in well-being practices.

The literature shows that individuals with high levels of education possess high achiever personalities, also often known as Type A personalities. There are two contrasting personality types — A and B. Type A personalities are more competitive, and sometimes more hostile, impatient and aggressive, than Type B personalities. Type A personalities are often perceived as high achievers, likely to realize a greater performance level and exhibiting high creativity and advanced citizenship behaviors, which are linked positively to core task performance [21]. Thomas Ng and Feldman [21] found in a meta-analysis of 293 empirical studies that education level also may be linked to on-the-job substance use, workplace

aggression and absenteeism (p. 109). Type A individuals sometimes tend toward perfectionism, high achievement-orientation, dominance, and competitiveness, which hinders their well-being and causes ill-health, heart disease, social isolation, work stress, and work-life conflict [13; 22; 23].

The research also shows links between age and well-being. According to recent statistics, most faculty members in universities are middle-aged (see, e. g., [24]). Those aged 40 to 65 tend to seek greater productivity, accomplishment, commitment and contributions to organizations both in the workplace and in society overall. Individuals who fail to realize their personal and professional potential feel stagnant, unproductive, and dissatisfied with work and the rest of their life, which affects negatively their well-being. Middle age also is associated with crises and changes in physical, emotional, cognitive, and social spheres. As people age, they can face multiple challenges, including lack of flexibility, slow adaptation to change, possession of less relevant skills in comparison with younger employees and being less responsive to training [25–27]. The good news is that breadth and depth of knowledge do not decline until very old age, especially among those who have continuing access to intensive and focused professional practice [28].

All arenas of well-being benefit from the acquisition of skills such as emotional awareness, emotion management, positive thinking, relaxation, relationship management and stress management. A lack of these skills makes it difficult to handle increased workplace stress and to achieve optimal well-being [29; 30].

The literature also reveals that working individuals need to learn resilience and flow skills to improve their well-being. In *Building happiness, resilience and motivation in adolescents: A positive psychology curriculum for well-being*, MacConville and Rae [31] defined resilience as “a cognitive skill that enables us to climb over life's obstacles rather than be defeated by them” (p. 24). Those who lack resilience skills cannot adapt to hardships, difficulties, and challenges in both work and life. MacConville and Rae recommended learning problem-solving skills, the ability to express feelings, the acquisition of relaxation techniques, and involvement in meaningful activities.

It is important to remember that meaningful or flow activities are done “not with the expectation of some future benefit, but simply because the doing itself is the reward” [32, p. 67]. Csikszentmihalyi [32] suggested that most life experiences, including work, family, friends, and leisure, are flow experiences if they

possess the following seven characteristics: (a) concentration — being completely involved in what you are doing, concentrated and focused; (b) merging of action and awareness — being outside of everyday reality and experiencing ecstasy; (c) clarity of goals — possessing great inner clarity, understanding what has to be done, being clear about the process of attaining goals; (d) the adequacy of skills and tasks — experiencing the perfect alignment between the difficulty of the task and skills to accomplish this task; (e) loss of self-consciousness/a sense of serenity — being so much involved with an activity that worries and frustrations are forgotten and growth occur beyond the boundaries of ego; (f) transformation of time — forgetting about the time, engaging in what feels to be a timeless process, and focusing on the present moment; and (g) autotelic experience — feeling rewarded as a result of following intrinsic motivation (see also [33]).

Notable individual variations may be found in the formation and utilization of well-being skills by working people, and, depending on the effectiveness of their usage, their quality of life. How are these skills developed? And what is the best time for their formation? The literature points to a recent new wave of research interest in the effects of after-school activities on the development of skills related to quality of working life experiences and quality of life. This includes formal and informal music experiences at all phases of life.

### **Effects of Music Experiences on Well-Being**

Recent studies have shown that youth who engage in after-school activities enjoy an improved quality of life in adulthood [34; 35; see also 36; 37; 38; 39] and better working experiences [36; 40; 41]. Music experiences, often described as music education, are among those that contribute to the development of abilities applicable to both work and well-being [42–44]. Other activities can have positive effects as well, even though those related to music training may be stronger and most valuable to different occupations [31; 45; 46].

According to learning transfer theory, “learning in one context ... enhances a related performance in another context” and “aspires to impact on contexts quite different from the context of learning” [47, p. 2]. Music experiences can contribute to near and far transfer, where: (a) near transfer is defined as a transfer “to closely related contexts and performances” [47, p. 2], and (b) far transfer is defined as transfer “to rather different contexts and performances” [47, p. 2]. Dockwray and Moore [48] defined far transferable skills as “non-subject-specific skills”, “generic

skills”, “soft skills”, “key skills”, and “personal skills” (p. 2). Perkins and Salomon [47] suggested that “while transferable skills are linked to potential employability, the skills developed are not exclusive to employment and are important in other aspects of work and life” (p. 3). Despite several studies showing a link between far transfer and music experiences, findings “are not always consistent” [49, p. 2]. After all, some skills may be transferred automatically without conscious awareness, while others require reflection on their utilization in a new situation. This may apply to well-being skills learned through music practice [39; 50] that may not have been transferred to work and non-work arenas and therefore are not being used to improve well-being.

The literature has shown that music experiences can contribute to the development of skills related to all arenas of well-being: emotional, social, intellectual, mental, occupations, physical, spiritual and environmental. Music contributes to emotional well-being skills by (a) strengthening individual confidence in own abilities and qualities, (b) enhancing persistence and resilience through hard work and internal motivation, and (c) managing disappointment through error acceptance, criticism, and self-assessment [32; 46; 50].

Further, music experiences refer to autotelic or flow experiences that help individuals cope with stress and pressure. Studies show that the learning process is an enjoyable one that contributes to higher-quality experiences and continuous growth. For example, music listening obviates boredom and anxiety, and when taken seriously and not replaced with just “hearing”, can evoke feelings and induce flow experiences that are positively associated with happiness and life satisfaction [32, pp. 109–111]. Additionally, flow activities help to “achieve an ordered state of mind that is highly enjoyable” [32, p. 72]. This state of mind also can be described as mindfulness or present moment awareness, which also contributes to better mental well-being. Seligman [3], in an exploration of the impact of music practice and participation on psychological well-being, found that both can positively contribute to a flourishing life by positively influencing emotions, engagement, relationships, meaning, and accomplishment.

Group music activities encourage social skills and make it possible to: (a) enter and build relationships, (b) acknowledge standards and codes of conduct (e. g., respect for others’ efforts and time, (c) take complete responsibility for personal mistakes and actions, (d) maintain the highest professional standards of accuracy, (e) develop a sense of belonging to a group, (f) express personal interests and rights in an adequate manner, and (g) accept advice and crit-

icism [45; 46; 50]. Moreover, music experiences teach individuals how to see “fellow students as partners rather than competitors” [51, p. 57], “take over someone’s perspective” [51, p. 57], and put “own interests back for the benefits of the common goal” [51, p. 57], and how to use time effectively—an effective stress management technique [55; 56].

Intellectual well-being and cognitive development can be improved by music experiences, making it possible to: (a) judge own and others’ progress, (b) evaluate and monitor what is happening during the practice, and (c) prioritize among events or ideas that might be difficult to predict, and so forth [50, p. 47]. Most studies of the relationship between active engagement with music and general achievement indicate that students who participate in music education have higher rates of academic achievement than their peers, particularly in language, math, history, and science [39; 51; 56]. The LangLang International Music Foundation [56] also reported that:

Considering the vast skill set that a music education delivers to students, it should be no surprise that students who receive a music education outperform their peers later in life on measures of professional success. A 2007 Harris Interactive poll revealed that 88 % of people with graduate degrees had past music education experience. Further, 83 % of individuals with incomes above \$150,000 participated in music. As communities consider what they can do to improve their children’s future, music education should be at the top of the list (Paragraph 32).

Occupational well-being skills also can be developed through the music education process. For example, music experiences can contribute to the development of leadership skills and creativity. Jacobson [46] investigated the perceived effects of music experiences on workplace leadership and concluded that music training positively influenced “leadership success traits, skills, and characteristics” as well as such skills and abilities as situational decision-making, creative thinking, confidence, acceptance of challenges, and persistence despite challenges (pp. 180–181). Mintzberg [57] compared the way a conductor leads his or her orchestra with the way a manager works since both must often empower and inspire their followers to reach the end of the “symphony”. Over the past twenty years, several examples have emerged of ways in which the music world has contributed to the world of leadership through leadership trainings and seminars. For example, a corporate training program on *Encore Leadership* in 2005, in Melbourne, Australia, by the Hay Group and the Melbourne Symphony Orchestra, was conducted to train middle and senior managers from different in-

dustries to become stronger leaders; activities included beating on plastic drums and playing toy trumpets [58].

Research shows that creativity can be learned and encouraged through music practice [59]. Along with intelligence and wisdom, creativity is an important element in achieving workplace success. To be creative means to be able to find effective and creative ways to engage in problem identification and problem-solving. Workplace-based creativity requires developing new and original ideas and insights and restructuring and inventing new artistic ideas, objects, and products [60]. It also means developing the capacity to solve important problems innovatively in order to meet organizational expectations and overcome challenges.

Physical, spiritual and environmental well-being skills also can be developed through engagement in music. Physical well-being can be positively affected by music experiences due to their contribution to better health and quality of life. Exploring the transfer of skills from musical experiences, Wolff [61] found that participation in a choir benefits “the immune system, breathing, adopting good posture, improved mood, and stress reduction” (p. 3). Becoming “aware of specific standards, judgments, values, preferences, landmarks, achievements, rules, through learning music, students gain “the value of living” [50, p. 28), music experiences contribute spiritual well-being. Music experiences also enhance one’s ability to control one’s life and to feel like they can make a difference in life and the world [50, p. 29), which can contribute to environmental well-being.

Finally, the literature shows that the best time for well-being skill formation is in the early years [63, 64] and the best format is extracurricular or after-school activities [34, 35; see also 32; 36; 37; 38; 39; 46; 51; 64]. Unfortunately, those who enter working life have fewer opportunities to invest in skill development [63]; the investment in skill development in adulthood is lower than in the early years [62].

## Conclusion

This literature review on the links between faculty well-being and music experiences offered six main findings:

(a) a platform is needed that facilitates discussion of the current condition of well-being in academia, and the possible effects of musical experiences on the development of well-being skills;

(b) existing theories and research findings need to be examined for lessons learned on how music experiences can contribute to the quality of faculty members’ well-being;

(c) most existing research has been dominated by experimental investigations into benefits for children, adolescents and youth, and mainly with regard to their academic performance;

(d) few studies have been conducted on the effects of musical experiences on life quality, mainly of the elderly, which means that other adulthood stages have been given limited or no attention;

(e) few studies have been conducted of music experiences and professional success and the contribution of music experiences in developing work-related skills in leadership and creativity, which means that the connection between music experiences and other work and non-work-related attributes and skills have received limited attention; and, finally,

(f) no research has been conducted on the links between the effects of music experiences and the development of faculty members' well-being skills in non-musical fields.

Further research is needed to collect missing data and organize it around faculty members' well-being — both professional and personal — to fill gaps in existing knowledge.

**Ключові слова:** благополуччя, музичний досвід, професорсько-викладацький склад.

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## **ПРОЛЕГОМЕНЫ К СИСТЕМНО-АНТРОПОЛОГИЧЕСКОМУ АНАЛИЗУ ТРАНСФОРМАЦИИ ПРЕПОДАВАНИЯ НЕЙРОНАУК**

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### **ПРОЛЕГОМЕНЫ К СИСТЕМНО-АНТРОПОЛОГИЧЕСКОМУ АНАЛИЗУ ТРАНСФОРМАЦИИ ПРЕПОДАВАНИЯ НЕЙРОНАУК**

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Рассматриваются предпосылки, необходимые для трансформации преподавания нейронаук, что является необходимым условием выхода из парадигмального кризиса. Используется теоретико-системное моделирование антропологического и методической части институционального факторов искомой трансформации. Обсуждается роль философских дисциплин.

**Ключевые слова:** преподавание нейронаук, системные дескрипторы, типы студентов, фреймовое мышление.

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### **PROLEGOMENA TO THE SYSTEM AND ANTHROPOLOGICAL ANALYSIS OF THE TRANSFORMATION OF TEACHING NEUROSCIENCE**

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The article is devoted to the consideration of necessary presuppositions of the transformation of teaching neuroscience that is very important condition of its overcoming of paradigm crisis. System modeling of anthropological and methodical aspect of institutional factors of the transformation under question is used. The role of philosophy is revealed.

**Key words:** teaching of neuroscience, systems descriptors, types of students, frame thinking.

### **Введение: парадигмальный кризис в нейронауках**

Современное научное знание претерпевает значительные трансформации. Наряду с революционными прорывами в тех или иных областях существует значительное отставание или, скорее, некоторая неопределенность в фундаментальных положениях многих наук. В частности, это про-

является в одной любопытной тенденции современной науки — наличии контroversивных процессов интеграции и дифференциации научного знания (см. в [3]). Например, так называемая нейронаука (neuroscience) представляет собой междисциплинарную область исследования, объединяющую нейробиологию, нейропсихологию, нейролингвистику, нейрофилософию, когнитивные науки, computer science. Собрано уже значительное количество фактов о функционировании