Behavioral Change Approach to Health Promotion among Musicians: Pilot study of a brief online intervention

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Background and Objectives

Music-playing can be physically and mentally demanding, as playing-related health issues have been reported in various literature. In order to help nurture healthier musicians, health promotion efforts aimed at education and early intervention have been becoming more widespread in western countries. However, such efforts are not yet seen in Singapore's music education scene.

The aim of this study was to assess the usability, acceptability and effectiveness of a health promotion program developed for tertiary-trained classical instrumental musicians in Singapore.

Methods

Participants were recruited using purposive sampling and snowballing method. Inclusion criteria for this study were: aged 18-65 years; trained in classical instrument(s) in music performance in Singapore; and had ready access to the internet and email. Recruitment, intervention and data collection were carried out from November 2019 to December 2019. The objectives and information about the study were explained to each participant, who gave their informed consent. This study was a pretest-posttest design with the experimental group acting as their own control group.

Ethical approval was granted by the Waseda University Ethics Review Committee on Human Research (2019-154).

Participation included filling in an online baseline outcome measure form, then receiving a one-time health advice email message tailored based on their playing-related health behaviors and filling in a feedback form which was embedded in the email, and finally filling in a follow-up outcome measure online, two weeks after receiving the email.

The outcome measure included questions on demographic information, current and lifetime occurrence of a playing-related musculoskeletal disorder (PRMD), transtheoretical model (TTM) stages of change of health behaviors related to music-playing, the Health-Promoting Lifestyle Profile II (HPLPII), and the Kenny Music Performance Anxiety Inventory (K-MPAI). The feedback form included questions on the relevance, understandability and importance of the advice, attitudes towards the advice, and intention to adopt the behavior advised.

The HPLPII contains 52-items rated on a 4-point scale (1-never, 2-sometimes, 3-often, 4-routinely), measuring the frequency of engagement in health-promoting behaviors. This tool provides a total score for health-promoting behaviors, as well as six subscales: Health Responsibility; Physical Activity; Nutrition; Spiritual Growth; Interpersonal Relations; and Stress Management.

The K-MPAI contains 40-items rated on a 7-point Likert scale, and assesses anxiety in the context of music performance. Higher scores mean greater levels of anxiety and psychological distress. This tool gives a total score and scores for eight subscales: Proximal somatic anxiety and worry about performance; Worry/dread focused on self/other scrutiny; Depression/hopelessness (psychological vulnerability); Parental empathy; Memory; Generational transmission of anxiety; Anxious apprehension; and Biological vulnerability.

Results

11 participants (5 females), aged 22-31 (mean = 25, SD = 2.85) volunteered to take part in the study.

Results from the feedback form showed ratings ranging from 5 to 6 for self-efficacy and intention to carry out the advised health behaviors; 3 to 6 for the importance of the advice; and 4 to 6 for relevance and understandability of the information (out of a maximum rating of 6).

In terms of TTM stages of behavior change, all but one of the participants (90.9%) reported a progression of stage from baseline for at least one of the health behaviors. The behavior that the most participants progressed on was "seek help or advice the moment the body or mind is not functioning as usual", and "do stretches to relieve muscle tension after practice" (three participants each). Conversely, regression of stage was also reported by three participants.

Analysis of the scores on the HPLPII and K-MPAI tools showed statistically significant (p < .05) improvements in the scores for overall HPLPII, "Health Responsibility" subscale, and "Stress Management" subscale on the HPLPII; and "Worry/dread focused on self/other scrutiny" subscale, and "Biological vulnerability" subscale on the K-MPAI.

Discussion

The results of this study revealed the potential of such a brief intervention to effect changes in the engagement of health behaviors and level of anxiety pertaining to music performance.

Progression of stage for at least one playing-related health behavior, on the TTM stages of change, occurred for most of the participants.

The scores for "Health Responsibility", which was related to the recommended health behavior of "Health literacy", and "Stress Management", which was related to the recommended health behavior of "Stress management", of the HPLPII tool also showed improvement after the intervention, supporting the effectiveness of the tailored health advices offered in the program.

Meanwhile, scores on the "Worry/dread" subscale reflecting negative cognitions, and "Biological vulnerability" subscale also improved significantly after intervention. This suggested an improvement in the participants' cognitive processes related to music performance.

Future studies might benefit from having a comparison group; and monitoring of outcomes over a longer duration to evaluate the long-term effectiveness of such a program.