Introduction

Epidemiological research in performing arts continues to expand by exploring novel survey techniques that reflect the unique occupational challenges associated with various musical instruments and genres. While guitar represents an instrument used in virtually all musical genres, classical guitarists are an understudied group with unique challenges due to expected mastery of dedicated repertoire, specialized performance techniques, and the use of solo recitals as an obligatory performance context.  

The purpose of this study was to:

1. develop and deploy a novel epidemiologic survey tool specifically for classical guitarists,
2. report musculoskeletal and non-musculoskeletal occupational health problems of classical guitarists, and
3. explore the influence of intensity and frequency of site-specific musculoskeletal pain on musical performance.

Method

An on-line epidemiologic survey called the UNT Classical Guitarists Survey (UNG-S) was designed using Qualtrics to assess demographic (occupational health problems associated with playing the Classical Guitar. The findings from this study includes the strong levels of interest among subjects to learn more about occupational health. Before Practicing

- Subjects report an average of 1.91 playing sessions per day, 10.58 sessions per week, and an average 63 minutes of time per session. They also report taking 3.73 breaks per session and 8.27 minutes for average length of breaks. Subjects also report higher levels of practice during the week than on the weekend.

- The UNG-S was pilot tested and IRB approved. Recruitment sites of classical guitarists ordered by prevalence, linear regression analyses were performed on the data. The most common health problems reported were neck pain (35.3%), back pain (32.1%), upper arm pain (20.3%), and shoulder pain (16.8%).

- The analysis showed that intensity (B = .77, p < .01) and frequency (B = .35, p < .05) of pain were significant predictors of the influence of pain on performance for this site. However, the regression analysis for all pain sites did not achieve significance in predicting the influence of pain on performance. This supports the idea that intensity and frequency are more important factors in predicting the influence of pain on performance than the site.

- The results of the UNG-S study suggest that classical guitarists experience pain mostly during practice (28%), after practice (26.9%), and less during and after practice (14.6%).

- The mean intensity of pain reported was 38.61 (SD = 26.93) and the average influence of pain on performance was -14.13 on a scale from 0 to +5.0. Some subjects reported that performance anxiety had a positive influence on playing.

- When asked how often they experienced performance anxiety in the past year on a 10 point scale from never to always, the mean response score was 44 (SD = 34.15) with some reporting 100 (always). The mean intensity of performance anxiety over the past year was 38.61 (SD = 26.93) and the average influence of performance anxiety on performance was -14.13 on a scale from 0 to +5.0. The most encouraging findings from this study includes the strong levels of interest among subjects to learn more about occupational health.

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- This study represents the first epidemiologic study exclusively for Classical Guitarists. This study also included new survey protocols that allowed for detailed assessment of site-specific and diffuse pain specifically in the hands. Results are consistent with the finding from previous research on guitarists. However, results also provide a more granular understanding of musculoskeletal pain and non-musculoskeletal health problems associated with playing the Classical Guitar. The findings from this study will help inform both health care providers seeking to work with this population and to classical guitarists who perform and teach. The results of this project will provide insights that will support further research. The most encouraging findings from this study includes the strong levels of interest among subjects to learn more about occupational health.

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