

An Analysis of Research Methods Employed in Epidemiological Studies to Create a Similar Study for the UNT Marching Band

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Purpose

Performing artists experience injuries that can cripple a career. Epidemiologic research studies have been conducted for some performing artists groups, such as dancers. Furthermore, the field of sports medicine is rich in research regarding both the types and prevalence of injuries in athletes. However, research efforts designed to characterize injuries among marching band musicians are underdeveloped. This preliminary goal will be accomplished by finding, analyzing and eventually selecting assessment materials and procedures from published research studies of injury rates of analogous occupation-specific groups, such as dancers or athletes.

Methods

The preliminary goal of locating analogous sources was accomplished by finding, analyzing and eventually selecting assessment materials and procedures from published research studies of injury rates of analogous occupation-specific groups, such as dancers or athletes.



Table 1. Analogous Sources Used In This Study

Bowling, Ann. "Injuries To Dancers: Prevalence, Treatment, And Perceptions Of Causes." *BMJ: British Medical Journal* 298.6675 (1989): 731-734. *JSTOR*. Web. 5 Apr. 2011. <<http://www.jstor.org/stable/29702626>>

Hammett, C. E. "The Health of College Athletes." *The Scientific Monthly* 6.4 (1918): 350 to 354. *JSTOR*. Web. 5 April 2011. <<http://www.jstor.org/stable/22487>>

Knapik, Joseph, et al. "Physical Fitness, Age, and Injury Incidence in Infantry Soldiers." *The American College of Occupational and Environmental Medicine* 35.6 (1993): 598-603. *Journal of Occupational and Environmental Medicine*. Web. 5 Apr. 2011. <http://journals.lww.com/joem/Abstract/1993/06000/Physical_Fitness,_Age,_and_Injury_Incidence_in.17.aspx>

Valovich McLeod, Tamara C., et al. "National Athletic Trainers' Association Position Statement: Prevention of Pediatric Overuse Injuries." *Journal of Athletic Training* 46.2 (2011): 206-220. *Journal of Athletic Training*. Web. 5 Apr. 2011. <<http://www.journalofathletictraining.org/doi/pdf/10.4085/1062-6050-46.2.206>>

Wyshak, Grace. "Health Ratings in Relation to Illnesses, Physical Functioning, and General Mental Health and Well-Being: Self-Reports of College Alumnae, Ages <40-80 and Older." *Quality of Life Research* 12.6 (2003): 667-674. *JSTOR*. Web. 5 Apr. 2011. <<http://www.jstor.org/stable/4038171>>

Results

Examination of this literature shows a variety of research models, assessment strategies, and procedures. It also suggests that selection should be based on the ecological context, age specific strategies, and convenience and timing of related activities. Most studies used a survey or questionnaire format to gather data. Another method was through a series of physical tests over time. For a complete list of sources, see Table 1.

Conclusion

An interdisciplinary research study will be developed prior to the start of the Fall 2011 semester to examine the incidence of music related injuries amongst the students participating in marching band. This study will include a measure of musculoskeletal injuries in the upper and lower extremities, audiological issues such as hearing loss, dermatological issues as a result of long rehearsals in sun exposed environments and mental health effects. The reliability and validity of assessment procedures will be inferred from previous studies of analogous populations.



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