

Faculty Fellowship Summary 2020-2021

Submitted to the Dean's Office – School of Education



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Summary

This has been an interesting year to have this fellowship especially give the travel and research restrictions. I have tried to strategically use these funds in order to maximize success in the following years. One of the main areas have improved is essential laboratory equipment. Our department just moved from the Natatorium to a new lab in the Medical Sciences Center. I used funds to purchase some needed supplies and equipment. I purchased a treadmill to help standardize warm-ups in our laboratory. We have not done this in the past, and it was an important issue to address. Additionally, I purchased a software package that will be used in a research study next year. This software allows for collection of biomechanical variables using only our force plates. This will allow for quicker data collection in the laboratory and will allow us to validate jumping measurements from GPS units. These GPS units are used by athletic teams to measure performance, but it is unclear how accurate these metrics are for jumping. I will also be able to use this software for jumping labs in courses that I teach. Finally, I used funds for summer salary support. Below, you will find a summary of upcoming research that is being developed this summer.

Future Research

The following research studies will take place over the next year and are being planned this summer:

The Impact of Patient Socioeconomic Status on Care Provided by Athletic Trainers

- Athletic trainers that work in the high school setting are often the first, and sometimes only, access to health care experienced by low socioeconomic status patients. We aim to identify barriers that exist in treating low SES patients and identify successful strategies in caring for these patients. We believe that this research will be critical to developing training tools and strategies for athletic trainers in this setting.

Does Sport Specialization Impact Physical Activity?

- One of our primary lines of research is focused on sport specialization. Sport specialization is focusing on a single sport year-round. This is a major problem in youth sports because it increases injury risk and dropout. One critique we often hear from adults is that highly specialized children are more active than low specialization children. However, this does not seem to line up with other anecdotal evidence (i.e. kids standing in hitting lines for an entire practice). This study aims to answer this question. We will use research grade accelerometers to measure the physical activity levels in children with different levels of sport specialization. We theorize that differences in physical activity level will not be different between these groups. If this is true, it would be important finding for sport specialization and require changes to this practice.

How do Athletic Trainers Care for Overuse Injuries?

- Injury rates in youth sports are increasing. This is especially true for overuse injuries that are a byproduct of sport specialization. Oftentimes, athletic trainers encounter barriers to successfully completing rehabilitation and prevention programs associated with overuse injuries. These include pressure from a coach, parent, or teammate, a player afraid of losing their position, etc. However, we don't know what athletic trainers perceive as the most important factor. This study will identify barriers to care of overuse injuries facilitated by the athletic trainer.