



**AASP Northwest Regional Conference**  
**Northwest Student Sport and Exercise Psychology**  
**Symposium (NWSSEPS)**

April 12<sup>th</sup> and 13<sup>th</sup>, 2019



Sponsored in Part by the Association for Applied Sport Psychology

**THANK YOU** to all of our funding agencies:

Dean of the College of Humanities and Social Sciences at WWU  
WWU Department of Health and Human Development  
WWU Kinesiology and Physical Education Program  
Association for Applied Sport Psychology

## Symposium Itinerary

*Friday, April 12<sup>th</sup>*

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4:30 PM – 4:50 PM: Registration

4:50 – 5:00 PM: Welcome

5:00 PM – 5:30 PM: Invited Presentation - Dr. Kelsey Erickson

**The Psychology of Doping in Sport**

5:30 PM – 6:20 PM: Keynote Speaker – Dr. Keith Russell, Western Washington University

**Nature as a Restorative Facilitator of Mindfulness-based Experiences in Addictions Treatment**

6:20 PM – 7:00 PM: Dinner

7:10 PM – 7:55 PM: Invited Presentation – Derrek Falor, CMPC

**Using a Debriefing System to Drive Athlete Accountability**

7:55 PM: Closing

*Saturday, April 13<sup>th</sup>*

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8:50 AM – 9:15 AM: Check-In/Light Breakfast

9:15 AM – 9:35 AM: Ice Breaker

9:35 AM – 9:55 AM: Student Presentation – Nate Wolch, Western Washington University

**The Effect of a Brief Mindfulness Training on Free Throw Shooting Performance Under**

9:55 AM – 10:15 AM: Student Presentation – Ella Fisher & Monet Kumazawa, Seattle University

**The Relationship Between Physical Activity Knowledge, Barriers, and Exercise Behavior in First-Year Undergraduate College Students**

10:15 AM – 10:25 AM: Break

10:25 AM – 10:55 AM: Invited Presentation- Dr. Jessyca Arthur-Cameselle, Western Washington University

**Eating Disorders: A Comparison of Athletes' and Non-Athletes' Onset and Recovery Experiences**

10:55 AM – 11:15 AM: Invited Talk – Taylor Leenstra, M.S.

**Post-Graduation Lessons Learned**

11:15 AM – 11:25 AM: Group Activity: Brain Break

11:25 AM – 11:50 AM: Presentation – Dr. Conrad Woolsey & Dr. Wendell Otto, University of Western States

**An Analysis of How Elite Coaches Define Mental Toughness in Coaching**

11:50 AM – 12:30 PM: Lunch

12:30 PM – 1:00 PM: Campus Walk or Lab Tour with Dr. Arthur-Cameselle and Dr. Buddhadev

1:00 PM – 1:10 PM: Group Activity: Brain Wake-Up

1:10PM – 1:30PM: Student Presentation, Brittany Haong, Eastern Washington Univeristy  
**Predicting USMLE Step 1 Scores from Foundations Curriculum Grades by Sex: The Surprising Role of MCAT Scores**

1:30 PM – 2:30 PM: Keynote Speaker – Dr. Sharlene Hoar, Canadian Sport Institute  
**My Top 5 Lessons learned from 20+ years as a Mental Performance Consultant**

2:30 PM – 2:40 PM: Break

2:40 PM – 3:00 PM: Student Presentation –Sam MacDonald, Western Washington University  
**Experiences and Outcomes of Coordinating an Exercise Program for Depression: Western Wellcat**

3:00 PM – 3:45 PM: Q&A with Professionals

3:45 PM – 4:00 PM: Closing

## Presentations and Abstracts

### **Keynote Presentations**

#### **Nature as a Restorative Facilitator of Mindfulness-based Experiences in Addictions Treatment**

Dr. Keith Russell, Western Washington University

Keith C. Russell, Ph.D., is a Professor and Chair of the Department of Health and Human Development and faculty member in the nationally accredited Recreation Management and Leadership Program at Western Washington University. His research emphasis includes the study of human-nature relationships, the therapeutic value of natural environments, progress monitoring in mental health and international protected area management. His peers consider him a leader in his field. His scholarship publication record is prolific and his recent research has been published in *Psychotherapy*, *Mindfulness*, *Journal of Adventure Education and Outdoor Learning*, and *Child and Youth Care Forum*. He teaches courses in statistics, research methods, adventure education and therapy, and human relations. He is the author of several book chapters and is a co-author of the text titled *Adventure Therapy: Theory, Research and Practice* (Routledge Mental Health) with Michael Gass and Lee Gillis. Dr. Russell holds a M.S. in Parks, Recreation and Tourism Management and a PhD in Natural Resources Management and Policy from University of Idaho.



#### **My Top 5 Lessons learned from 20+ years as a Mental Performance Consultant**

Dr. Sharleen Hoar, Canadian Sport Institute



Sharleen Hoar, Ph.D. has been supporting elite and aspiring performers of all ages to achieve personal and performance excellence since 1996. She is a professional member of the Canadian Sport Psychology Association (CSPA-ACPS). She currently holds the position of Lead, Mental Performance with the Canadian Sport Institute – Pacific working with Olympic and National team athletes, coaches, and sport science and medical professionals. Sharleen attended the 2014 Commonwealth Games and the 2015 Pan American Games, and supported clients through three Olympic games including the 2010 and 2014 Winter Olympic Games in Vancouver (Canada) and Sochi (Russia), respectively, and 2016 Summer Olympic Games in Rio de Janeiro (Brazil).

Dr. Hoar received a Ph.D. in Sport & Exercise Psychology from the University of British Columbia, a M.Sc. in Applied Sport Psychology from University of Idaho, and is currently an Adjunct Professor with the University of Lethbridge (Lethbridge, AB). She actively publishes her research on self-regulation and emotion management as well as sport talent development. Dr. Hoar's commitment to practical and scientific understanding of the psychological foundations of performance excellence affords a cutting edge approach towards training athletes, coaches, and business professionals to achieve personal and performance excellence.

## ***Student/Faculty Presentations***

### **The Effect of a Brief Mindfulness Training on Free-Throw Performance Under Pressure**

Nate Wolch, Western Washington University

Pressure situations in sport can be a source of stress and anxiety for athletes (Craft, Magyar, Becker, & Feltz, 2003). The perceived pressure of the moment can lead to performance decrements for some athletes, as their attention is misdirected from the task at hand (Beilock & Carr, 2001). Several sessions of mindfulness sessions have been found to increase concentration, regulate arousal, and increase sport performance (Sappington & Longshore, 2015). Research on academic tasks indicates that a brief mindfulness training can improve math performance under stress (Brunye et al., 2013; Weger, Hooper, Meyer, & Hopthrow, 2012); however, no studies have examined the effects of brief mindfulness training on an athletic skill under pressure. Therefore, this experiment was designed to investigate the effects of a single, 15-minute mindfulness training on basketball free-throw shooting performance under pressure. Participants were college-aged (mean age = 21.29), male competitive basketball players with at least three years of competitive basketball experience. During the low-pressure phase, participants shot 20 free-throws in a low-pressure environment. They were then pair-matched by free-throw shooting percentage and randomly assigned into either the mindfulness ( $n = 16$ ) or control ( $n = 16$ ) conditions. When participants returned for the high-pressure phase, they listened to a 15-minute mindfulness or history of basketball recording. Anxiety was manipulated by offering performance-contingent incentives and pretending to videotape their performance on 20 free-throws. Two mixed ANOVAs were used to analyze the effects of mindfulness and pressure on free-throw percentage and shot accuracy. During the high-pressure phase, the experimental groups' free throw shooting average was higher ( $M = 70.6\%$ ) than the control groups' ( $M = 61.6\%$ ), although there were no significant differences found. Results of an ANCOVA on free-throw shot accuracy between groups during the pressure phase approached significance when controlling for trait mindfulness ( $F = 2.33, p = .051$ ). Notably, during the high-pressure phase, the experimental group also reported significantly lower levels of cognitive anxiety ( $t = 2.06, p = .048$ ) and somatic anxiety ( $t = 2.67, p = .014$ ) than the control group, as measured by the CSAI-2R (Cox, Martens, & Russell, 2003). While the brief mindfulness intervention did not have a significant effect on free-throw shooting percentage under pressure, the findings are discussed in terms of their practical significance.

### **The Relationship between Physical Activity Knowledge, Barriers, and Exercise Behavior in First-Year Undergraduate College Students**

Ella Fisher, Monet Kumazawa, Erica Rauff, Ph.D., Seattle University

**Background** The USDHHS physical activity (PA) guidelines provide strong evidence for health benefits associated with engaging in moderate PA for 150 minutes/week. However, the relationship between PA guideline knowledge and translation of knowledge to exercise behavior within college students is not well-studied. **Purpose** This study aimed to examine the influence of PA guideline knowledge on students' exercise behavior and self-efficacy to overcome barriers to engage in PA despite having accurate PA guideline knowledge. **Methods** First-year college students ( $N = 180$ ; 16% male, 83% female) completed self-report questionnaires of PA knowledge, PA behavior, and self-efficacy to overcome PA barriers. Students were categorized as having accurate PA guideline knowledge or inaccurate PA guideline knowledge. Students were further dichotomized as meeting PA guidelines or not meeting PA guidelines. Chi-square analysis revealed significantly more students with knowledge of PA guidelines were meeting PA guidelines ( $n = 29$ ) as well as not meeting PA guidelines ( $n = 13$ ). Thus, study analyses were conducted across the following groups: knowledge/meeting PA guidelines and knowledge/not meeting PA guidelines. A MANCOVA with Bonferroni correction controlling for family income was conducted to assess group differences in self-efficacy to overcome PA barriers. **Results** No significant multivariate effects were observed; however, follow-up

univariate tests revealed that students with knowledge/meeting PA guidelines had significantly higher self-efficacy to overcome barriers of psychological health ( $M = 56\%$  vs.  $36\%$ ), social support ( $M = 57\%$  vs.  $39\%$ ), and appearance ( $M = 54\%$  vs.  $33\%$ ) when compared to students with knowledge/not meeting PA guidelines ( $p$ 's  $< 0.05$ ). **Conclusion** These findings provide initial evidence to understand salient barriers that may be preventing students with appropriate knowledge from engaging in PA behavior. These barriers should be targeted in future interventions to help students improve their self-efficacy to overcome barriers to be more physically active in their first year of college.

### **An Analysis of How Elite Coaches Define Mental Toughness in Coaching**

<sup>1</sup>William Steffen, <sup>2</sup>Conrad L. Woolsey, Wendell Otto, & <sup>3</sup>Ronald Quinn<sup>3</sup>

<sup>1</sup>Wingate University, <sup>2</sup>University of Western States, <sup>3</sup>Xavier University

The purpose of this study was to develop a working definition of mental toughness in coaching. Additionally, the study sought attributes of the ideal mentally tough coach. Researchers have explored mental toughness of elite athletes as a concept relating to specific activities and sports; however, there is limited research on mental toughness among elite coaches. This study expanded upon previous research by investigating elite coaches ( $n=22$ ) perspectives of what attributes were most important to define mental toughness in coaching. Results of coaching focus group interviews yielded the following definition: Mental toughness of a coach is a complex interaction of a determined mindset, resiliency, confidence and a strong belief in the coach's system, processes, and actions, which result in consistent behaviors and emotional responses. Coaches were asked to list attributes they felt were descriptive of the ideal mentally tough coach. Their list included confident, resilient, consistent, has a positive spirit, energetic, passionate, optimistic, adaptable, has inner strength, and patient. These attributes were discussed in consideration of coaches' rationale for these choices. Examining mental toughness can positively assist coaches seeking to become the best they can be. By studying mental toughness for coaching the hope is to increase the quality of coaches leading to improved performances and satisfaction for coaches and the athletes they serve. Through investigating the attributes of the ideal mentally tough coach further, coaches choosing to continually improve can look introspectively for characteristics within themselves to improve.

### **Predicting USMLE Step 1 Scores from Foundations Curriculum Grades by Sex: The Surprising Role of MCAT Scores**

Brittney Haong, Eastern Washington University

Step 1 of the United States Medical Licensing Exam (USMLE) is the first of three required exams for the practice of medicine as a physician in the United States and is sponsored by the Federation of State Medical Boards (FSMB) and the National Board of Medical Examiners (NBME). Aside from being a necessary "step" in the licensing process, the Step 1 exam plays an important role in the placement of medical students into residency programs. A survey of program directors by the National Resident Matching Program in 2016 revealed that 93% of all US residency programs use Step 1 scores as influential factors for interview selection (Puscas, Chang, Lee, Diaz & Miller, 2017). Given its importance in licensing as well as the residency placement process, the identification of the best ways to prepare for this exam is of obvious importance to medical schools in the U.S. Thus, the purpose of this study was to identify the best predictors of Step 1 scores using the Medical College Admission Test (MCAT) percentiles and student performance scores during the Foundations phase (i.e., basic science) of a medical school curriculum. Participants were 60 students who

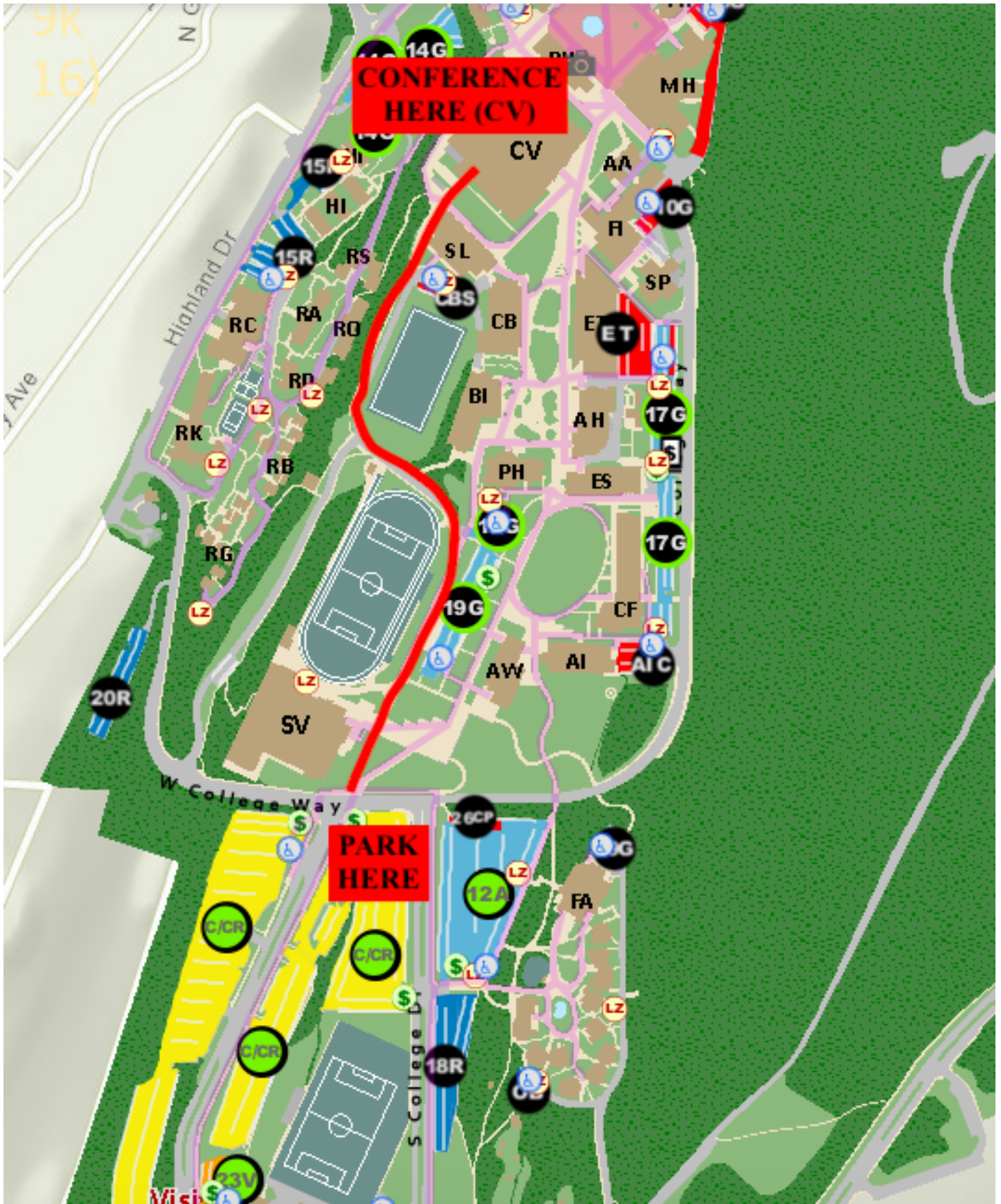
entered medical school in the year of 2016. The dependent variable in this study was Step 1 score and the independent variables were sex, MCAT score, and foundation grades for seven different basic science courses. The results of the study showed that males entered medical school with higher MCAT scores and also had higher Step 1 scores than females. Interestingly, MCAT did not significantly predict Step score for either sex. These results suggest that the foundations curriculum has a more robust effect on Step 1 score than MCAT does.

### **Experiences and Outcomes of Coordinating an Exercise Program for Depression: Western Wellcat**

Sam MacDonald, Western Washington University

In the past 12 months, 18% of undergraduate students were diagnosed with clinical depression (American College Health Association, 2018). Exercise has proven to be a treatment as effective as medication, personal therapy, and group therapy for depression; specifically, exercise has a small to moderate effect for sub-clinical depression and a moderate to large effect for clinical depression (Babyak et al., 2000; Dunn et al., 2005; Taliaferro, 2009). Western Wellcat is an exercise program based on Ryan and Deci's (2000) self-determination theory that pairs undergraduate students with active kinesiology student interns to exercise together twice a week. Participants are evaluated using the Godin Leisure Time Physical Activity Scale (Godin & Shephard, 1985), the Psychological Need Satisfaction in Physical Activity Scale (PNSE-PA; Gunnell et al., 2012), the Zung Depression Inventory (1965), and the Depression, Anxiety, and Stress Scale (DASS; Lovibond & Lovibond, 1995); qualitative follow-up questions are also incorporated into the questionnaire given to participants. The 2018 participants included 8 females ages 18 to 22 years old. Participants completed the surveys before beginning the program and then again after participating for 8 weeks. Results indicate a decrease in the Zung Depression Inventory ( $t = 2.85, p = .025$ ), and an increase in basic psychological need satisfaction, measured by the PNSE-PA, ( $t = -3.97, p = .005$ ), including an increase in autonomy ( $t = -3.87, p = .006$ ) and relatedness ( $t = -5.32, p = .001$ ) after 8 weeks of program participation. The coordinator of the program contributes by completing the intake with participants, training and hiring interns, and maintaining supervision with interns throughout the duration of the program. This presentation will include details of the program's background and methods, as well as the experience of coordinating the program and lessons learned from involvement in the program.





The symposium is located in the Carver Academic Building, room 264 (CV on the map above). Guest parking is available in the C/CR lots (yellow on the map above) and is free after 4:30pm on Friday and all day on Saturday. Visit lot pay station (card only) for permit for all other hours.