

# AASP

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Presented Virtually

# CONFERENCE **ABSTRACTS**

ASSOCIATION for APPLIED  
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First Edition

For information, contact:

**Association for Applied Sport Psychology**

8365 Keystone Crossing, Suite 107

Indianapolis, IN 46240

Phone: (317) 205-9225

Fax: (317) 205-9481

Email: [info@appliedsportpsych.org](mailto:info@appliedsportpsych.org)

Website: [www.appliedsportpsych.org](http://www.appliedsportpsych.org)

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### LIVE SESSIONS

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#### LIVE-01

##### FROM THE BATTLEFIELD TO THE PLAYING FIELD: OPTIMIZING ATTENTION AND WELL-BEING WITH MINDFULNESS TRAINING

*Amishi Jha, Mindfulness, Attention, and Working Memory  
Researcher, University of Miami*

#### LIVE-02

##### THE MORE I LEARN THE LESS I KNOW: EXPERIENCED PRACTITIONERS DISCUSS THEIR JOURNEYS TOWARD WISDOM

*Mark Aoyagi, University of Denver;  
Alexander Cohen, United States Olympic & Paralympic  
Committee;  
Michael Gervais, Pinnacle Performance Center;  
Wendy Borlabi, Chicago Bulls;  
Anne Marte Pensgaard, Norwegian School of Sport Sciences  
& NOC;  
Richard Gordin, Utah State University*

With recent advances in the scientific understanding of wisdom (e.g., Jeste & LaFee, 2020), this panel is designed to explore sport & performance psychology (SPP) practitioners' pathways to wisdom. Several components of wisdom have been identified: social decision making and pragmatic knowledge of life, prosocial attitudes/behaviors, reflection and self-understanding, balancing decisiveness with acceptance of uncertainty, emotional stability and happiness, value relativism and tolerance, openness to new experience, spirituality, and sense of humor (Bangen, Meeks, and Jeste, 2013). Once thought to be a benefit of successful aging, empirical evidence now suggests that wisdom is not reserved for the twilight of one's career. Using evidence-based practices that accelerate and enhance the acquisition of wisdom as a framework (e.g., self-reflection, empathy/compassion, mindfulness, emotional regulation/resilience, gratitude, curiosity, solitude, spiritual practices), the panel members will discuss their personal journeys toward wisdom. Given that wisdom is particularly useful in the most challenging of circumstances, the panel will emphasize their experiences utilizing SPP as a vehicle for social justice and their perspectives on advocacy and cultural competence. Some questions the panelists will be asked to reflect on and respond to include: What do you understand better now? What do you understand less now? What lesson or understanding is continually reinforced? What keeps you curious? What most intrigues you now? What are your wisdom practices? Where are you going? Where is the field going?

The panel will be comprised of experienced and successful mid-career practitioners with a collective 97 years in practice including 50 years in professional/international sports and 53 Olympic Games/World Championships. The panelists were selected based on their diverse gender, cultural, (inter)national backgrounds, and wisdom journeys/practices. The panel will be moderated by a wise elder who has 43 years of practice including 31 years in professional/international sports and 11 Olympic Games/World Championships.

#### LIVE-03

##### ATHLETES' MENTAL HEALTH: FROM PREVALENCE TO BARRIERS TO PERFORMANCE

*Trent Petrie, University of North Texas;  
Randi Jackson, University of North Texas;  
Heather Keifer, University of North Texas;  
Kelzie Beebe, University of North Texas;  
Lindsey Slavin, University of North Texas;  
Macey Arnold, University of North Texas;  
Justin Harker, University of North Texas;  
Julian Yoon, University of North Texas;  
Megan Drew, University of North Texas;  
Carmyn Hayes, University of North Texas;  
James Houle, The Ohio State University;  
Josie Nicholson, University of Mississippi*

Athletes experience different mental health (MH) concerns, ranging from alcohol misuse (19%) to anxiety/depression (34%; Goutteborge et al., 2019), yet many do not seek treatment due to myriad internal and environmental barriers (Moreland et al., 2018). In this symposium, we explore these issues as well as consider the extent to which athletes believe that MH is related to their sport performances. In the first paper, the authors will provide a contextual/theoretical perspective regarding athletes' risk for MH concerns, and then present prevalence data from a sample of collegiate athletes (N = 264); they will consider athletes' levels of depression and anxiety in relation to their reported gender and race. In the second paper, the authors will review the research on barriers to athletes seeking MH treatment to provide a context for why they may underutilize available care. Drawing from the same collegiate athlete sample, they will present data regarding the extent to which athletes' self-beliefs (e.g., lack of time, self-reliance) or the negative attitudes of others (e.g., head coach) would prevent them from seeking available MH services. The relationship of gender and race to these perceived barriers again will be considered. In the final paper, the authors will review extant conceptual models that link MH and sport performance and then present quantitative and qualitative data regarding collegiate athletes' perceptions of this relationship. Finally, two discussants, sport psychologists who currently work in NCAA DI athletic departments and who represent the Counseling/Clinical Sport Psychology Association (CCSPA) executive board, will comment on the presented papers as well as discuss the larger context of MH within collegiate sports. In particular, they will address how data such as presented in this symposium may be used to educate athletic department personnel and guide the development of policy at the NCAA level.

#### LIVE-03A

##### RACE AND GENDER DIFFERENCES IN MENTAL HEALTH PREVALENCE RATES OF COLLEGIATE STUDENT-ATHLETES

*Megan Drew, University of North Texas;  
Heather Keifer, University of North Texas;  
Macey Arnold, University of North Texas;  
Camryn Hays, University of North Texas;  
Trent Petrie, University of North Texas*

The prevalence of mental health (MH) concerns among athletes has ranged from 19% for alcohol misuse to 34% for anxiety/depression (Goutteborge et al., 2019). Like with nonathletes (Wang et al., 2020), athletes' MH concerns may

have been exacerbated during COVID-19. Thus, we explored the prevalence of college student-athletes' depression, anxiety, and body image during Fall 2020. Participants (N = 264) were Division I athletes who provided data during their annual MH screening. We compared prevalence based on gender (male, n = 123; female, n = 141) and race (White, n = 113; BIPOC, n = 151). Overall, prevalence of MH concerns ranged from 12.8% to 38.3% (depression -- subclinical [6.8%] and clinical [6.0%]; anxiety -- subclinical [17.3%] and clinical [21.1%]; body image -- subclinical [13.2%] and clinical [13.5%]); 2.3% indicated suicidal ideation. Female, compared to male, athletes had higher clinical/subclinical rates of anxiety (49.6% vs. 25.2%;  $X^2(1) = 16.62, p < .001$ ) and body image concerns (39.0% vs. 26.2%;  $X^2(1) = 24.24, p < .001$ ); they scored similarly on depression (14.2% vs. 10.6%). Female athletes also had higher rates of MH service utilization (11.5% vs. 26.2%;  $X^2(1) = 9.12, p = .003$ ). With race, White, compared to BIPOC, athletes, had more body image concerns (38.1% vs 18.5%;  $X^2(1) = 12.51, p < .001$ ), anxiety (45.1% vs 33.1%;  $X^2(1) = 3.95, p = .047$ ) and past MH service utilization (25.9% vs 17.1%;  $X^2(1) = 5.26, p = .022$ ). Our results suggest that student-athletes experience relatively high levels of subclinical/clinical MH concerns, and that prevalence of these concerns does differ across gender and race. Therefore, athletic departments must promote MH and well-being by ensuring access to robust, culturally-conscious MH services.

### LIVE-03B

#### PERCEIVED BARRIERS TO COLLEGIATE ATHLETES SEEKING MENTAL HEALTH SERVICES

*Julian Yoon, University of North Texas;  
Justin Harker, University of North Texas;  
Trent Petrie, University of North Texas*

Despite NCAA guidelines for mental health (MH) best practices and athletic departments' efforts to provide MH resources to student-athletes, such services often are underutilized (Moreland et al., 2018). So, what keeps student-athletes from accessing available MH resources? We examined whether negative attitudes and beliefs about MH, either internalized by student-athletes or expressed by athletic department personnel (e.g., coaches), are perceived as barriers to seeking MH care and if such perceptions varied by race and gender.

Participants were 265 student-athletes (women = 141, men = 123, nonbinary = 1) at an NCAA DI university. They identified as White (42.5%), Black (35.0%), Latinx (10.2%), Asian American (3.0%), Native Hawaiian (1.5%), and Native American (1.1%); 6.0% selected bi/multiracial. For subsequent analyses, we grouped athletes as White (n = 113) or BIPOC (n = 152). During annual MH screening, athletes responded (YES/NO) to questions regarding whether the negative attitudes of others (e.g., coach) or self-beliefs (e.g., lack of time) would prevent them from seeking MH services.

Compared to the negative attitudes held by others, student-athletes' self-beliefs were more frequently endorsed as barriers to MH services, including: belief in own self-reliance (51.4%), not enough time (51.0%), lack of knowledge about MH disorders (43.5%), lack of confidence in MH treatment (40.4%), and a negative attitude toward seeking help (39.2%). Among athletic department personnel, athletes

most frequently endorsed head coaches (32.7%) and assistant coaches (27.2%), and their negative attitudes toward MH, as barriers to seeking care. Gender, but no race, differences emerged (chi-square tests  $p < .005$ ). Excluding knowledge about MH disorders, more female, than male, athletes endorsed the above self-beliefs as barriers. That athletes perceived their personal beliefs to be the most salient barriers to MH care, increasing MH literacy and destigmatizing seeking MH care within college athletics is a needed next step.

### LIVE-03C

#### MENTAL HEALTH AND ATHLETIC PERFORMANCE: A QUALITATIVE ANALYSIS OF ATHLETES' PERCEPTIONS

*Kelzie Beebe, University of North Texas;  
Macey Arnold, University of North Texas;  
Lindsey Slavin, University of North Texas;  
Heather Keifer, University of North Texas;  
Trent Petrie, University of North Texas*

NCAA student-athletes seem to experience mental health (MH) concerns (e.g., depression) at similar, or greater, rates than non-athlete, age-matched peers (Golding et al, 2020; Gouttebauge et al., 2019). Although the impact MH has on athletic performance seems self-evident, research examining this connection is limited. Thus, we used thematic analysis (Braun et al., 2016) to examine college student-athletes' beliefs about MH's impact on athletic performance.

Participants were NCAA DI student-athletes (N=266; Female = 141; Athletes of color = 151) from 11 sports at one university. As part of their annual MH screener, athletes (a) indicated whether they believed MH affects student-athletes' performances (YES/NO), and (b) through open-ended responses, indicated why/how.

The athletes overwhelmingly believed that MH impacts sport performances (97.6%). For the thematic analysis, four researchers independently coded 196 open-ended responses, then met as dyads, a quartet, and finally with a "clinical friend" to ensure thematic sufficiency. Three themes (and relevant subthemes) emerged: (1) Stress of Being a Student-Athlete ("Life Comes Into Sport," "Sport Affects Mental Health," and "Team Atmosphere is Impacted"); (2) Cognitive Disruptions ("Concentration," "Confidence," "Motivation," "Decision Making," "Mindset," and "Self-talk"); and (3) Mind-Body Connection ("Mind Correlates with Body" and "Mental Health Symptoms Impact Performance").

Athletes clearly see the impact of MH, not just in their personal lives, but in their sport performances. They believe that MH, broadly and clinically defined (e.g., anxiety), affects their performances in myriad ways, such as their eating, focus, and confidence. But they also acknowledge the stress of being an athlete and how their lived experiences impact their MH. Fully understanding the impact of MH on performance and sport on MH may help destigmatize MH treatment in the eyes of both coaches and athletes, increasing the acceptance of athletes obtaining the help they need.

### LIVE-04

#### ADVOCATING FOR TRANS INCLUSION IN SPORT: THE ROLE OF SPORT PSYCHOLOGY PROFESSIONALS/ PRACTITIONERS

*Hannah Bennett, Augusta University;*  
*Aidan Kraus, Boston University;*  
*Brooke Rundle, Headstrong Mindset;*  
*Ryan Socolow, Springfield College;*  
*Meghan Halbrook, Randolph College;*  
*Robert Owens, University of Western States;*  
*Bernadette Compton, Bowling Green State University;*  
*Annie Bluher, University of Denver;*  
*Ellea Bachmeier, University of Wisconsin- Green Bay*

According to the Universal Declaration of Human Rights, sport participation is a valuable part of the human experience, and denying involvement in athletics based on an individual social identity is unjust (“Sport as a Human Right”, 2018). Banning individuals from participating in sport for being who they are contradicts the most important values that sport is supposed to uphold: striving for personal and team excellence, committing to fairness inside and outside of competition, and respect of self and others. As professionals within the field of sport psychology, we have a responsibility to defend these values and extend them to all in our community in order to advocate for the right that all people have access to athletic competition.

With these considerations in mind, this workshop aims to provide a space for students and early career professionals to engage in conversations and education surrounding how to create and promote a more welcoming and safer environment for trans athletes at all levels. The learning objectives and structure of the workshop include: 1) provide education surrounding how practitioners within the field of sport psychology can have conversations with coaches and athletes surrounding social justice issues by using a “brave space vs. safe space” model (Arao & Clemens, 2013), 2) deconstruct the misinformation targeted at trans athletes using peer-reviewed evidence to support the case for inclusion, 3) critically examine implicit bias using vignettes to highlight examples of approaches to these conversations, 4) educate practitioners on ways to demonstrate allyship within heteronormative and hegemonic athletic spaces with special consideration surrounding language and microaggressions, 5) debrief and reflect on how students and early professionals can take the resources from the workshop and implement them into applied practice.

### LIVE-05

#### THE CMPC MENTORED EXPERIENCE – EXPLAINED AND CLARIFIED

*Jack J. Lesyk, Ohio Center for Sport Psychology;*  
*Charlie Maher, Cleveland Indians;*  
*Leilani Madrigal, Long Beach State University*

The Mentored Experience is an essential “real world” experience for CMPC candidates in which their academic knowledge is translated into practical experience in consulting with athletes and other performers under the guidance of an approved mentor. The requirements are somewhat complex and sometimes misunderstood. The three members of the Mentoring Committee of the Certification Council will present

short summaries of the requirements and recent changes, followed by questions and answers. This program is focused on the informational needs of present and future mentees, mentors, and university mentoring coordinators.

It is recommended that attendees prepare for this session by reading the Mentored Experience Section of the Candidate Handbook (pages 9-14) as well as the CMPC Mentor Guidelines and Best Practice Recommendations (available on the AASP website).

### LIVE-06

#### MENTAL PERFORMANCE IN ESPORTS: CONSIDERATIONS FOR PRACTITIONERS

*Mia Stellberg, SK Gaming / Dota Team OG;*  
*Doug Gardner, ThinkSport Consulting Services;*  
*Dominic King, Cleveland Clinic ESports Medicine Program;*  
*Phil Birch, University of Chichester*

Esports is a sport that features organized, multiplayer video game competitions, often between professional players, individually or as teams. Esports has burst into the mainstream in recent years, transforming from a vibrant niche to a fast-growing international phenomenon. Previously viewed as a subset of sports culture, it has developed into a full industry in its own right, expected to surpass \$1.5 billion by 2023.

This session will delve into existing and future opportunities that mental performance professionals have working with esports athletes. The panel will discuss the growth of esports at the local club and collegiate levels - 170 colleges offering gamer scholarships just in the US - as well as feature examples of applied work/best practices with national and international elite teams including approaches, strategies, techniques, technologies for service provision and outcomes. Panel members will also highlight research conducted in the area of esports to date, new emerging data and provide recommendations for future research to best support esports athletes.

### LIVE-07

#### IMPOSTER SYNDROME: MAKING IT OR FAKING IT?

*Duncan Simpson, IMG Academy;*  
*Hillary Cauthen, Texas Optimal Performance &  
Psychological Services*

In recent years, AASP has made a significant effort to rebrand and objectively validate its Certified Mental Performance Consultant (CMPC) credential presently accredited by the National Commission for Certifying Agencies (NCCA) to enhance the field and the quality of applied practitioners. This step towards professionalizing the field of sport psychology will require mental performance consultants (MPC's) to be more accountable (Anderson et al., 2002) and undoubtedly justify and prove their effectiveness as job opportunities continue to grow. As the job market for MPC's diversifies and grows it is essential that mid-career and experienced practitioners change to meet the demands of the field. As such, growth and adaptability are essential in professional development in sport psychology (Hutter et al., 2017). Yet, much remains to be learned about how MPC's mature, such as the ways that practitioners change throughout their careers (Tod, 2007). One

tool to assist practitioners through this maturation process is reflective practice. For example, experienced practitioners have suggested that self-reflection contributes to professional development, and effective consultants learn from colleagues and clients (Partington & Orlick, 1991; Simons & Andersen, 1995; Straub & Hinman, 1992). While we often embrace this idea of reflective practice as a neophyte practitioner, it can be argued reflective practice is essential throughout all stages of a career, but especially important for mid-career and experienced professionals who may be facing personal identify challenges, career transitions, or leadership opportunities within the field. As such, we need to perhaps focus less on what a practitioner understands and does and more on why and how they do what they do (Martindale & Collins, 2010; Poczwardowski, 2017). Therefore, this workshop will present information and use experiential activities to allow mid-career and experienced MPC's to engage in reflective practice. Specific learning objectives include (1) enhance career identity (2) re-examine and develop career goals, and (3) identify leadership and mentoring opportunities. The workshop will include reflective questioning, guided discovery, and small group discussions. Attendees will also leave with handouts summarizing the core content and will have gained additional networking opportunities.

### LIVE-08

#### **CHANGE THE FRAME, CHANGE THE GAME: DOING ANTI-RACISM WORK IN APPLIED SPORT AND PERFORMANCE PSYCHOLOGY (SPP) TEACHING, RESEARCH, AND CONSULTING**

*Chelsea Wooding, North Park University;  
Robert Owens, University of Western States;  
Amanda Perkins-Ball, Rice University;  
Shameema Yousuf, Empower2Perform / Valor Performance*

The killing of George Floyd in 2020, along with the deaths of numerous other unarmed BIPOC, brought the conversation of systemic racism to the forefront in many international circles. White supremacy, racism, and colonialism are still alive today around the world, requiring that we take responsibility for dismantling these systems of oppression that manifest both within [us] and within [our] communities (Saad, 2018). We are called to be more than not racist, but to become anti-racist (Kendi, 2018). Racism and oppression impact those with whom we work, making it imperative that practitioners continue building knowledge of and action behind anti-racism work (Perkins-Ball, 2021).

Given that anti-racism requires action (Perkins-Ball, 2021), and that unasked questions tend to be the most dangerous questions (Acho, 2020), the purpose of this panel is for a group of practitioners to honestly and openly discuss and debate various anti-racist practices that can be used in teaching (Owens et al., 2016), research, and consulting within sport and performance psychology (SPP). After providing brief definitions of anti-racism, anti-racist praxis, and decolonialism, panelists will explain the importance of anti-racism work; discuss various anti-racism practices in teaching, research, and consulting; and consider how anti-racism work might be reimaged within international contexts. The power of an oppressive system is rooted in its ability to remain imperceptible (Anderson, 2016). We must change the frame in order to highlight the roots of oppression and privilege within sport and the broader culture. Therefore, the primary goal of this panel is to encourage "uncomfortable conversations" (Acho, 2020) about systemic

racism that will bring these problems to the surface and empower practitioners to take action. The four members of the panel have varied backgrounds in counseling, consulting, teaching, and research, and all have extensive experience with incorporating diversity, equity, and inclusion (DEI) within SPP.

### LIVE-09

#### **THE DEVELOPMENT AND IMPLEMENTATION OF MENTAL HEALTH PROGRAMMING IN THE USOPC AND THE TOKYO OLYMPIC AND PARALYMPIC GAMES**

*Cody Commander, University of Oklahoma Athletics Dept;  
Jessica Bartley, University of Denver;  
Todd Stull, Inside Performance;  
Emily Klueh, University of Michigan;  
Thomas Mick, Cleveland Clinic*

The awareness of mental health disruptions and stressors elite athletes experience has continued to grow (Reardon CL, Hainline B, Aron CM, et al., 2019), which resulted in the development and hiring of Mental Health Officers (MHO) to provide mental health services to support elite athletes at the 2020 Tokyo Olympic and Paralympic Games. However, with the postponement of the Games, the MHO's roles and responsibilities evolved to creating the development of a Mental Health Strategic Plan for the US Olympic and Paralympic Committee (USOPC). Part of this plan included hiring a Director of Mental Health and three Assistant Directors of Mental Health prior to the 2021 Tokyo Olympic and Paralympic Games to provide mental health support and services to Team USA athletes.

In this panel, three Mental Health Officers (including a panel moderator) and the Director of Mental Health for the USOPC will describe the process of developing the Mental Health Strategic Plan in the USOPC, the adjustments made with the postponement of the Games, and the roles and responsibilities of the MHO's at the 2021 Tokyo Olympic and Paralympic Games. Panelists will discuss how the roles and responsibilities have evolved from the conception of the MHO and Directors positions and share highlights of the Games experiences with mental health services. Panelists will also share recommendations for further mental health support for elite athletes.

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### LIVE-10

#### **THE NEW “NORMAL” OF SPORT, EXERCISE, AND PERFORMANCE PSYCHOLOGY: PROFESSIONAL AND ETHICAL ISSUES FOR PRACTICE IN A PANDEMIC**

*Brandonn Harris, Georgia Southern University;  
Megan Byrd, Georgia Southern University;  
Sarah Castillo, University of Western States;  
Jonathan Metzler, Magellan Federal*

Fundamental changes to the provision of sport, exercise, and performance psychology (SEPP) services have taken place across the world as a product of the COVID-19 pandemic. Many of these changes represent temporary adaptations from institutional, state, and federal laws or practice guidelines designed to protect the safety and well-being of clients, students/trainees, and SEPP professionals alike. Furthermore, it is plausible that some of these adaptations will remain and become a standard part of SEPP service delivery post-pandemic given the novel manner in which professionals are now able to conduct their work with an increased convenience to clients, students/mentees, and practitioners. Yet, a number of professional, ethical, and legal issues related to distance consulting, distance mentorship, and the teaching and training of graduate students within SEPP have surfaced concomitant with the sudden shift to virtual, hybrid, or in-person professional work. Thus, this symposium will identify and address the novel professional and ethical issues in sport and performance (military) psychology settings stemming from COVID-19. In particular, (a) distance consulting, (b) graduate training within the context of mentorship and teaching, and (c) SEPP program administration will be discussed within sport and military contexts. Presenters include leadership from AASP who work extensively within sport and military/performance settings with vast experiences in consulting, mentorship, graduate training, and institutional or SEPP program administration overseeing these challenges among consultants and graduate students/programs. Presenters working within these professional capacities will provide an evaluation of these adaptations and their associated professional and ethical issues which are likely to transform the training and provision of SEPP services for the foreseeable future. Finally, a discussant will provide summary commentary on these challenges and the future of professional and ethical SEPP work, and offer recommendations and practical solutions regarding the evaluation, management, and decision-making processes when navigating these varied issues.

### LIVE-10A

#### **SEPP TRAINING DURING A GLOBAL PANDEMIC: PROFESSIONAL AND ETHICAL IMPLICATIONS**

*Brandonn Harris, Georgia Southern University*

Among the varied challenges to the field of sport, exercise, and performance psychology (SEPP) resulting from COVID-19 included abrupt modifications to the graduate training process. In particular, adaptations in context of mentorship and education of future SEPP and mental health professionals alike were seen immediately following the emergence of the pandemic (Goghari et al., 2020). Prior to the lockdown of most communities worldwide, post-graduate training in SEPP included both online and in-person education and mentorship; yet the pandemic-induced changes to program delivery and training left many graduate programs

and professionals scurrying to shift in-person courses and mentorship to various virtual platforms with little training nor time in some cases. Training integrity and practices, adhering to local, state, and federal safety requirements, continuity of training and mentorship, and competency-issues pertaining to the delivery of virtual training and students' own virtual work with clients have all been impacted by this pandemic (Bell, 2020). Further, the response to COVID-19 has not only impacted the manner in which SEPP graduate training has been developed and delivered; it has also been found to influence the physical and psychological safety and well-being of both students and faculty/mentors alike. Indeed, recent research has indicated that graduate students within the helping professions have evidenced increased mood-related disturbances in mentorship and supervision settings (Nash, 2021) and among the mental healthcare providers themselves (Gautam et al., 2020). Thus, this presentation addresses the professional and ethical issues stemming from COVID-19 as they have impacted graduate training in SEPP. In addition to specific logistical complications associated with these issues, the professional and ethical implications pertaining to the mental and physical health and well-being of graduate student/trainees, as well as faculty and mentors, will also be discussed within the context of SEPP education and mentorship.

### LIVE-10B

#### **SPORT, EXERCISE, AND PERFORMANCE PSYCHOLOGY PRACTICE: PROFESSIONAL AND ETHICAL CONSIDERATIONS FOR SERVICE PROVISION IN A PANDEMIC**

*Megan Byrd, Georgia Southern University*

Since 2020 when the havoc caused by the COVID-19 pandemic infiltrated all aspects of the global community's daily personal and professional lives, athletes and sport stakeholders across the world were faced with a series of difficult decisions as it pertained to the future of their athletic involvement. Indeed, significant and abrupt restrictions related to social distancing, personal protective equipment, and travel were implemented impacting athletes, coaches, staff, and consultants alike. Schinke and colleagues (2020) proposed that this abrupt stop could leave athletes and coaches with psychological and emotional challenges related to athletic identity, and mental health concerns. Further, as athletes, teams, and performers have been forced to adjust to a novel way of training, many were found being asked to prepare each day or week for competitions and/or competitive seasons that were not guaranteed to take place. With these significant changes, sport, exercise, and performance psychology (SEPP) practitioners concomitantly had to adjust their method of clinical and non-clinical service provision. Further, with this adjustment of service delivery to meet the changing needs, and locations, of teams also gave rise to unique professional and ethical issues for SEPP professionals. Thus, this presentation will focus on the unique professional and ethical considerations associated with COVID as it influences distance consulting. A Certified Mental Performance Consultant (CMPC) working with collegiate and professional teams will provide an overview of these relevant professional and ethical issues, as well as discussing the potential lasting implications for service provision. Finally, best practice recommendations to safely and ethically navigate these unique challenges associated with service provision in the pandemic will be offered with trainees, novice, and experienced consultants in mind.



### LIVE-10C

#### MANAGING GRADUATE PROGRAMS THROUGH COVID-19: PROFESSIONAL AND ETHICAL PERSPECTIVES

*Sarah Castillo, University of Western States*

Without question, COVID-19 caught the majority of SEPP graduate training programs around the globe off-guard. Prior to 2020, students deliberately chose between traditional in-person or online graduate SEPP programs. Often, this choice was based upon factors including work schedule, financial constraints, and/or level of comfort in an online environment. Faculty also made these decisions, deliberately choosing to teach either onsite or online. The pandemic's onset presented graduate programs with circumstances forcing them to contend with legal, ethical, and moral issues in a number of ways, including faculty training efforts, appropriate course design to maximize the student experience, and the protection of athlete/clients. Perhaps the largest issue requiring attention has been sustaining students' academic progress. Rather than simply continuing to offer required courses in an online or hybrid format, however, programs must address the training of faculty for a new learning modality, the incorporation of legal requirements for the delivery of online education, the comfort level (or lack thereof) of students now forced to learn in a more challenging environment, and the potential personal and economic impact the of pandemic on each and every stakeholder. Further, program directors must account for updated requirements and allowances of certifying agencies and licensing bodies to ensure that fieldwork, mentorship, and/or practicum experiences are conducted appropriately. While pre-existing online academic programs held an advantage in these efforts, the pandemic has spared no one from the need to adjust to what may represent a permanent departure from previous norms. Thus, this presentation explores the administrative impact that the COVID-19 pandemic has had on graduate programs in SEPP. Particular attention will be given to the professional and ethical implications program directors contend with to create and maintain a safe and effective environment to support the delivery of quality graduate training in SEPP.

### LIVE-10D

#### STAYING THE COURSE: MILITARY PERFORMANCE AND RESILIENCE TRAINING DURING A GLOBAL PANDEMIC

*Jonathan Metzler, Magellan Federal*

Among the confusion and chaos introduced by COVID-19 in the early months of 2020, was the disruption of wide scale application of applied performance psychology throughout the United States Army. Under normal circumstances, 238 Master Resilience Trainer-Performance Experts (PEs) deliver face-to-face training, coaching, and mentoring experiences daily to Soldiers at 32 US Army installations around the world. It is not unusual for these PEs, all with specialized graduate training in sport/performance psychology, to have direct contact with 750 Leaders and 60,000 Soldiers every month. Although the military adjusted in concert with mainstream society, no option exists to suspend military operations. Thus, unlike many companies in corporate America which may have had some autonomy to make decisions which prioritized individual employee health and well-being, companies with federal contracts were obligated to follow the lead of their government

partners. Magellan Federal continued to deliver performance psychology services as well as the 10-day Master Resilience Trainer Certification course either face-to-face or by making significant digital adaptations. With this in mind, a Senior Human Performance Expert for Magellan Federal will provide an overview of the solutions that were developed to maintain quality service provision across the enterprise and detail the implications for graduate programs or professionals looking to support the mission of applying performance psychology within the US military.

### LIVE-11

#### INTERVIEW WITH TAMIKA CATCHINGS & PERFORMANCE EXCELLENCE AWARD PRESENTATION

AASP President Kensa Gunter interviews Basketball Hall of Fame Inductee Tamika Catchings.

### LIVE-12

#### ETHICS LECTURE - BE WATER: THE RIPPLE EFFECTS OF UNETHICAL PRACTICES

*Angel Brutus, USOPC*

This lecture will explore the nuances associated with the practice of ethics in action beyond theory and principle. Attendees will increase understanding of the importance of putting ethical behaviors to practice, acknowledge challenges that threaten ethical fidelity, and commit to prioritizing the needs of identified clients in meaningful ways that ultimately impacts direct service provision, influences the field's contributions to policies and procedures within organizations and institutions, and ultimately facilitates or hinders the professional growth of SEP practitioners and researchers.

### LIVE-13

#### DUAL DIAGNOSIS: MANAGING THE IMPACT OF COVID-19 AND SOCIAL UNREST ON PROFESSIONAL SPORT TEAMS

*Nohelani Lawrence, New York Football Giants;  
Wendy Borlabi, Chicago Bulls;  
Kensa Gunter, Gunter Psychological Services, LLC;  
Nicole Linen, Denver Broncos Football Club;  
Nyaka NiiLampti, National Football League*

In recent years, there has been a growing demand for clinically trained sport psychologists within professional sports (Reardon et. al, 2019) with athletes and coaches leading the charge by publicly sharing their stories related to mental health. New regulations from the National Basketball Association (NBA) and National Football League (NFL) have mandated that each club designate a team clinician, with a growing number of positions being listed as full-time (NFL Players Health & Safety, 2019; Reynolds, 2021). As more leagues and teams were adopting a total wellness perspective aimed to provide more support for their players, 2020 delivered two unprecedented events that directly impacted our health & wellness. The COVID-19 pandemic changed our way of life and for athletes, it created unique situations that threatened their physical & mental health (e.g., temporary loss of sport, isolation & playing in "bubbles," competing in crowdless venues, managing intensive safety protocols, etc.), (Gregory, 2020). The other pandemic, racial injustice, resulted in the heightened awareness of racialized

violence & police brutality following the murder of George Floyd and led to increased advocacy and activism within the sport community which also carried an emotional toll and impacted mental health (Hu, 2018; O'Reilly, 2020). Sport psychologists are in a unique position to guide professional sport clubs and leagues in addressing mental health, equity, inclusion, and diversity efforts (O'Hara, 2020).

### LIVE-14

#### **COLEMAN GRIFFITH AS INSPIRATION: TAKING THE CARING CLIMATE ON THE ROAD**

*Mary Fry, University of Kansas*

Coleman Griffith is remembered for his ability to bridge the gap between research and practice in sport psychology. Mary has shared that same appreciation for how research informs our applied efforts. Across her career Mary has conducted research on the benefits of creating a caring and task-involving climate and has worked with diverse groups to help coaches implement these climate features in their unique settings. She will share some of these adventures and emphasize how AASP members, regardless of the roles they play, are allies in our quest to help individuals (through sport and physical activity) experience a sense of community, high self-worth, and feel empowered to make the world better.

### LIVE-15

#### **PRESIDENTIAL ADDRESS - WHAT IS YOUR STORY? PERSISTENCE, PROXIMITY, AND POSITIVITY**

*Lindsey Blom, Ball State University*

### LIVE-16

#### **MENTAL PERFORMANCE CONSULTING DURING THE PANDEMIC: PEARLS OF WISDOM FOR THE FUTURE**

*Nicole Linen, Denver Broncos;  
Alex Auerbach, Toronto Raptors;  
Jamie Shapiro, University of Denver; Adam Naylor, Telos SPC*

This session will highlight how CMPCs helped to prepare individuals and teams for major games, championships or performances during the pandemic. Panelists will share unique and innovative ways that they were able to provide services and meet the needs of athletes given the challenges presented by COVID-19. Learn what worked - and what didn't - as speakers offer their insights and valuable practitioner "pearls" that will inform their future work.

### LIVE-17

#### **EXPLORING ENTREPRENEURSHIP IN MENTAL PERFORMANCE: IS PRIVATE PRACTICE FOR YOU?**

*Abby Keenan, Intrepid Performance Consulting;  
Lauren Tashman, Align Performance LLC*

There are many sport psychology graduate students who desire to be a consultant in private practice or go this route in order to work in the field post-graduation; most who have attempted have failed while a few have succeeded (Taylor, 2008). A review of job opportunities and compensation from

2014 to 2019 indicated only 13% of professionals surveyed in sport psychology work in private practice, with an average of 48% of their income coming from mental performance work (Vosloo et al., 2020). With a desire to see students and young professionals thoughtfully consider private practice and succeed long-term, the presenters aim to share their experience as non-clinical Certified Mental Performance Consultants with over 18 combined years as business owners. In this workshop, participants will: (1) gain new perspectives about what it really means to be a non-clinical, mental performance entrepreneur; (2) consider what success means to them in their career; and (3) explore whether launching and running a private practice is right for them. The presenters will highlight different types of entrepreneurship; share a breakdown of how they spend their time in private practice; and engage participants in guided reflection and activities related to their motivation (Taylor, 2008), individual characteristics, and unique value-add (Cohen, 2018). Participants will leave with a copy of the slides and a handout with additional reflective questions to help set them up for success as they consider and/or prepare for mental performance entrepreneurship.

### LIVE-18

#### **"I'M SORRY YOU FEEL THAT WAY BUT THAT WASN'T MY INTENTION:" HOW TO APOLOGIZE WITH CULTURAL HUMILITY**

*Sae-Mi Lee, California State University, Los Angeles;  
Matthew Bejar, Mount Mercy University;  
Aaron Goodson, Mississippi State University*

When having conversations related to social justice issues such as racism and sexism, it is not a matter of "if" you make a mistake but "when." We will all take missteps because not only have we all been socialized to adopt mainstream discourses and practices that can result in oppressive consequences but also because social justice conversations continue to evolve to shed light on, and bring justice to, those at society's margins. Given that missteps are inevitable, it is important to engage in behaviors that support genuine efforts for continued reflection, learning, and reconciliation. Although adoption of defensive tendencies and reliance on sentiments of intentionality is common practice, this often exacerbates the presenting problem and leads to a devaluing of others' experiences (Schumann, 2018). Therefore, the purpose of this workshop is to demonstrate how sport and exercise psychology (SEP) professionals can reflect on the resulting impact of their words and actions and to learn how to apologize with cultural humility for inevitable missteps (Lewicki et al., 2016). Through case studies, video demonstrations, and group discussions, attendees will (a) analyze the impacts of various apology methods, (b) learn strategies to reflect on the intent vs impact of their actions, and (c) identify and rehearse proactive strategies for genuine reconciliation that can not only reduce harm but also promote continued trust and action towards social justice. Furthermore, attendees will receive resources to help them devise a long-term plan for continued practice of cultural humility and social justice advocacy. As adoption of a defensive posture hinders self-awareness, a key component of cultural competence (Sue, 2006), and increases the likelihood of perpetuating effects of chronic missteps and delayed progress, it is imperative that SEP professionals learn how to critically reflect on and apologize for their inevitable missteps and collaboratively work towards continued social progress.

### LIVE-19

#### THREE PERSPECTIVES ON ENHANCING CULTURALLY AND TECHNICALLY COMPETENT PERFORMANCE PSYCHOLOGY PRACTICE IN THE MILITARY

*Gloria Park, Consortium for Health and Military Performance; Susannah Knust, Walter Reed Army Institute of Research; Sam Whalen, KBR*

Applied sport and performance psychology professionals continue to be hired and employed by all branches of the military to enable service members to understand and integrate mental skills necessary for optimal performance, improve acquisition and maintenance of skills required for core task execution, and endure performance environments featuring high volatility and levels of stress.

In this panel, three sport and performance psychology professionals working in various settings across the military will share best practices and lessons learned from efforts from policy, research, and practice standpoints, respectively. The first session begins with an overview of DoD policy on Human Performance Optimization and Total Force Fitness (HPO/TFF), which highlights the importance of multidisciplinary approaches to performance. Enabling competent deployment of performance psychology assets requires cultivation of cultural and contextual knowledge, as well as development of team-based competencies to support Human Performance Team (HPT) efficacy. The second session reports on a research study designed to understand the qualities of performance psychology consultants embedded into the U.S. Army. Soldiers' perspectives on the capabilities that characterize effective performance psychology consultants will be defined. The final session of this panel will discuss the use of technology in performance psychology practice and explore the complex practical and ethical issues associated with the introduction and integration of these tools into the military context.

### LIVE-19A

#### ENABLING PERFORMANCE PSYCHOLOGY INTEGRATION WITHIN MULTIDISCIPLINARY HUMAN PERFORMANCE TEAMS

*Gloria Park, University of Denver*

The military continues to increase policy focus on Human Performance Optimization and Total Force Fitness (HPO/TFF), and consequently, on constructing multidisciplinary Human Performance Teams (HPTs). HPTs work to preserve health and readiness, and enhance performance of service members. Performance psychology professionals are central to HPTs, and work alongside medical assets, strength and conditioning coaches, nutritionists, injury prevention specialists, to name a few. As multi-disciplinary teams become the modality of performance enhancement service delivery for the military, more emphasis needs to be placed on optimizing efficacy of HPTs through individual and team-based competencies (Park, Lunasco, Chamberlin, & Deuster, 2020).

Competency begins with understanding the unique culture of the uniformed community and the distinctive contextual factors that influence performance psychology service delivery in the military. Competent performance psychology practitioners must be provided with structured opportunities to develop two sets of capabilities beyond basic sport psychology knowledge: 1) Tier 2, or knowledge, skills, and

abilities (KSAs) specific to the population and; 2) Tier 3, the contextual intelligence to navigate a complex micro-system (Hays & Brown, 2019). The first section of this session introduces several strategies to help accelerate learning for mental performance consultants entering or transitioning to working in a military context.

As part of an HPT, performance psychology practitioners need to work collaboratively with many other HPT assets to effectively serve the warfighter community. The second part of this session highlights team-based competencies that can serve to bolster multidisciplinary collaborations by: 1) Clarifying the complex roots of performance issues; 2) Aiding in targeting applications of performance efforts; 3) Shaping measurement strategies to demonstrate return on investment of the services provided; 4) Enabling practitioners to work more seamlessly with professionals from other disciplines and alongside existing medical professionals; 5) Reducing redundancies, silos, and/or duplication of efforts; and 6) Facilitating ethical practice.

### LIVE-19B

#### RAPPORT AND RELATIONSHIPS: SOLDIERS' PERCEPTIONS OF THE EFFECTIVENESS OF EMBEDDED PERFORMANCE EXPERTS

*Susannah Knust, Walter Reed Army Institute of Research; Kelly Toner, TechWerks; Coleen Crouch, Walter Reed Army Institute of Research; Amanda Adrian, TechWerks*

Performance Experts (PEs) are performance psychology practitioners who work with the U.S. Army at 33 Ready and Resilient Performance Centers around the world. Their purpose is to deliver psychological skills training to soldiers, their families, and Department of the Army civilians. Recently, the Army Resilience Directorate (Headquarters Department of the Army) started a pilot program at four installations where three to five PEs are embedded with specific battalions or at brigade headquarters. PEs provided guidance to their embedded units in a variety of ways which includes assisting soldiers toward the successful completion of a culminating event (e.g., Army Combat Physical Fitness Test, Expert Infantryman/Soldier Badge).

An Army research institute conducted a large mixed methods exploratory evaluation to better understand the embedment process as a whole. A subset of this evaluation is a consultant effectiveness evaluation that consists of surveys from PEs and soldiers in the context of preparing for the culminating event. After the researchers received IRB approval, PEs detailed their efforts to prepare soldiers for the culminating activity to include their methods (i.e. teach, coach, mentor) and the number of interactions they had with soldiers. Upon completion of the culminating activity, soldiers completed a survey that included the Consultant Evaluation Form (Partington & Orlick, 1987), the Military Coaching Behavior Scale (Wagstaff, Arthur, & Hardy, 2017), and measures that target cultural competence to determine the effectiveness of PEs. Three hundred forty-one soldiers were surveyed at three installations upon completion of their culminating event.

This presentation will connect the PEs' preparation of soldiers for the culminating activity and the soldiers' perceptions of the embedded PEs' overall effectiveness, ability to tailor training content and methods to the unit, and value to the embedded unit.

### **LIVE-19C**

#### **TECH TOY OR TOOL? TECHNOLOGY INTEGRATION STRATEGIES IN MILITARY CONTEXTS**

*Sam Whalen, KBR*

The purpose of this presentation is to contrast technology-based interventions between tactical and athletic populations, and recommend best practices for use within the military. As technology advances rapidly, sport psychology practitioners have an increasing number of tools, wearables, dashboards, databases, and platforms that provide human performance data geared toward performance optimization. Recently, Watson and Coker-Cranney (2018) outlined how sports performance practitioners leverage various technologies in service delivery packages. Effectively integrating a technology-based capability within a sport organization is not as simple as buying the latest gadget because a practitioner may experience resistance from athletes, coaches, and/or agents based on who can or cannot access the data. A clearly defined data management plan with clearly assigned roles for all stakeholders is key to a successful program. Similarly, a culturally competent military sport psychology practitioner should carefully consider how technology-based capabilities fit within the existing informal and formal organizational structures. Often military organizations have specific limitations regarding type of devices, as well as where and how those devices are used. Additionally, commanders may require service member participation in certain programs which introduces informed consent challenges. Prioritizing the end user as the client and setting specific goals before data collection may alleviate perceptions of the overall program and intent for data use. For example, many wearable devices can measure sleep patterns and heart rate variability (HRV) recovery metrics. Emerging research has started to show reliable evidence of relationships between HRV measurement and occupational performance outcomes in tactical populations (Tomes, Schram, & Orr, 2020). However, sharing precise sleep patterns and recovery metrics with command teams may lead to punitive actions that are counter to promoting healthy sleep and recovery.

### CE WORKSHOPS

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#### CE-01

##### **IT'S NOT ABOUT NOT BEING A RACIST: GOING BEYOND MULTICULTURAL COMPETENCE INTO ANTI-RACISM PRAXIS IN SPORT PSYCHOLOGY**

*Rob Owens, University of Western States;  
Tanya Prewitt-White, University of Illinois-Chicago;  
Dolores Christensen, University of Oklahoma;  
Cherokee Washington, McGill University;  
Lindsey Miossi, University of Tennessee Knoxville*

Historically, the field of sport psychology has devoted limited consideration to race and the ethical responsibility of professionals (especially White-identifying) to deepen their racial awareness, sensitivity, and anti-racism skills.

It is paramount to acknowledge the influences one's racial identity has on effective service delivery. If individual practitioners and the field do not consider the historical, social, systemic and personal relevance of race in sport and broader societal contexts, unjust racial realities are perpetuated (Lott, 2002; Butryn, 2002). Furthermore, to engage in anti-racism praxis, White-identifying members must continually do the challenging internal work.

This session will explore the role White-identifying individuals must play in addressing racism as sport psychology professionals. Participants will be encouraged to interrogate their internalized thoughts and emotions related to race. The implications of this self-reflective process for sport psychology service delivery will be discussed to promote steps towards active anti-racism. Through pre-session readings, brave dialogue in small and large groups, and experiential activities, attendees will focus on the internal work necessary to deepen their anti-racism praxis. Please note that while all individuals are welcomed to attend, the target audience includes those who identify as White and are interested in becoming better potential allies to communities of color.

#### **Learning Objectives**

- Reflect on privilege, power, prejudice and racism and recognize the importance of unlearning their socialization in both sport and general contexts
- Examine Whiteness as a power structure, and its impact on their personal lives and professional work
- Explore how they have been unaware of, benefitted from, and contributed to racism in sport and the field of sport psychology as a whole
- Consider tools and strategies to disrupt oppression in personal and professional spaces
- Discern what it means to be an "ally" versus anti-racist, and why these differences are critical
- Develop a racial education and anti-racist action plan for their future work in the field of sport and performance psychology

#### CE-02

##### **A RELIABLE AND VALID METHOD OF ASSESSING ETHNIC CULTURE OF ATHLETES FOR PSYCHOLOGISTS, CMPCs, TRAINERS AND OTHER PROFESSIONALS WORKING WITH ATHLETES**

*Brad Donohue, University of Nevada, Las Vegas*

Although there is a growing interest among professionals in applied sport psychology to better address culture, extant validated tools are available to assist this process. The proposed workshop is highly relevant to psychologists, CMPCs, counselors, social workers, athletic trainers and coaches working with athletes. In this workshop attendees will learn to administer the Semi-Structured Interview for Consideration of Ethnic Culture in Therapy Scale (SSICECTS); which includes a reliable and valid 7-item questionnaire measuring the extent to which individuals believe their ethnic culture is important and the extent to which negative experiences have occurred due to ethnic culture. The interview component is used to reliably review questionnaire responses, and in a controlled trial interviewees of diverse ethnicities/races perceived persons who administered this scale were more knowledgeable and respectful of their ethnic culture as compared to participants who were randomly assigned to a control group. The SSICECTS format can be adjusted to facilitate assessment of other cultures (e.g., sexual orientation, religion, gender), and when adjusted to assess sport culture its implementation was shown to predict engagement of athletes into goal-oriented counseling.

#### **Learning Objectives**

- Identify cultural domains that are reported by an athlete to be important (e.g., ethnicity/race, sport, gender, sexual orientation, religion, and/or academia/work) using a standardized assessment measure (i.e., Cultural Domains Menu).
- Administer, score, and interpret the questionnaire component of the Semi-Structured Interview for Ethnic Consideration in Therapy Scale (SSICECTS).
- Reliably implement the semi-structured interview component of the SSICECTS using prompting checklists (>70% protocol adherence).
- Adjust the SSICECTS format to permit identification of important cultures other than ethnicity based on the athlete's responses to the Cultural Domains Menu.

### CE-02

#### **MENTORSHIP CIRCUIT TRAINING: MULTICULTURAL CONSIDERATIONS, NAVIGATING MENTORSHIP CHALLENGES, AND FACILITATING GROUP MENTORSHIP THROUGH A PROFESSIONAL PEER CONSULTATION LENS**

*Vicki Tomlinson, National University;*  
*Julie Hayden-Blackburn, JFK School of Psychology at National University;*  
*Abby Keenan, Intrepid Performance Consulting;*  
*Michael Gerson, JFK School of Psychology at National University;*  
*Lauren Tashman, Align Performance LLC;*  
*Lauren Nutkevitch, JFK School of Psychology at National University*

Designed for current or aspiring mentors in sport psychology (i.e., Certified Mental Performance Consultants and AASP Approved Mentors), this workshop will include best practices, hands-on exercises, and interactive discussions, all revolving around mentorship. Participants will engage in three rotating circuits: (a) Multiculturalism in mentorship, (b) navigating mentorship challenges, and (c) facilitating group mentorship. Each circuit will include a short didactic portion, topical exercises, and/or small group discussion. In the first circuit, we will focus on socio-cultural issues and how mentors and mentees can embrace cultural humility (Krane & Waldron, 2020), emphasizing the vital importance of continued diversity, equity, and inclusion education. In the second circuit, we will discuss navigating mentorship challenges, such as gatekeeping (Watson et al., 2004; Statler et al., 2020), upholding high standards for mentees, and integrating ethical practices for mentoring (Andersen, 1994; Andersen et al., 2000). In the third circuit, we will highlight and curate components of high-quality, competency-building group mentorship experiences (Borders, 1991). Participants will have an opportunity to reflect (Schoel et al., 1988; Kolb & Kolb, 2009), discuss action-oriented next steps, and network with other mentors. Handouts, resource guides, and a contact list will be provided.

#### **Learning Objectives**

- Experience professional peer consultation as a mentor
- Learn about cultural humility as opposed to cultural competency, how to build it as a mentor, and subsequently how to infuse it into mentorship relationships to honor the unique lived experiences of mentors, mentees, and mentees' clients
- Gain practical strategies to overcome common mentorship challenges and feel empowered as ethical, standard-upholding gatekeepers
- Build knowledge and skills around facilitating group mentorship
- Enhance their support system of other mentors through networking

### FEATURED SESSIONS

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#### FEA-01

##### **CMPC CERTIFICATION: ELIGIBILITY REQUIREMENTS FOR NEW CANDIDATES AND RECERTIFICATION PROCEDURES FOR CURRENT CMPCs**

*Brandonn Harris, Georgia Southern University;  
Vicki Tomlinson, National University*

The eligibility requirements for new candidates (including students) and the recertification procedures for current Certified Mental Performance Consultants® will be discussed. The standard application for CMPC certification requires a graduate degree clearly related to sport science or psychology, and coursework or educational experiences to fulfill eight knowledge area requirements (Professional Ethics and Standards, Sport Psychology, Sport Science, Psychopathology, Helping Relationships, Research Methods and Statistics, Psychological Foundations of Behavior, and Diversity and Culture). A 400-hour mentored experience includes a minimum of 200 hours of direct client contact and a minimum of 50 hours of mentorship, including 10 hours of direct knowledge of services and up to 10 hours of group mentorship. All mentors must be current CMPCs or on the Registry of Approved Mentors. Experienced candidates may seek CMPC certification through the Experienced Practitioner Pathway, which requires an appropriate graduate degree, professional experience in applied sport psychology, knowledge of and contributions to the field, and evidence of having received mentorship or peer consultation while delivering sport psychology services. Once candidates have received approval from the Certification Council that they have fulfilled all requirements, they can sit for the CMPC certification exam. Successful completion of the exam results in candidates receiving certification as a Certified Mental Performance Consultant® or CMPC. Recertification is required every five years to maintain certification as a CMPC, including required continuing education activities. Seventy-five continuing education hours are required over each 5-year recertification period, including 6 CEUs in Professional Ethics, 6 CEUs in Diversity, and 6 CEUs in Mentorship/Supervision (required for mentors only). Examples of acceptable CE activities are provided, and the prorated system of CE requirements for CMPCs recertifying in 2021 will be explained.

#### FEA-02

##### **SO LONG AND THANKS FOR ALL THE FISH! AN OUTGOING EDITOR'S REFLECTIONS ON THE CURRENT AND FUTURE STATUS OF APPLIED SPORT PSYCHOLOGY RESEARCH**

*Stephen Mellalieu, Cardiff Metropolitan University, UK*

In this presentation as the outgoing Editor in Chief of the Journal of Applied Sport Psychology (JASP) Dr. Mellalieu reflect upon his 6 years in post, and decade on the Editorial board, by commenting on the current and future status of the field of applied sport psychology research. First, he will provide a context for the discussion by highlighting my reflections on the current landscape within which applied sport psychology (ASP) research exists. This includes the number of academic

outlets for the publication of sport psychology based work, the prominence of ASP research and teaching across North America, and the role of training and accreditation bodies and professional associations in fostering the growth of ASP research. A number of challenges for ASP research will then be highlighted. These include the greater adoption of a science to practice focus; the need for research to better reflect current trends in ASP practice, such as working beyond mere psychological skills training with athletes towards supporting systems and organisations around the performer; ensuring a suitable research focus is provided on understanding how to practice ASP more effectively; the growth in research into the mental health of athletes; the decline in emphasis on performance enhancement; and matters of methodological choice and quality. In highlighting the challenges for ASP research the presentation will conclude by offering some suggestions of areas for future research to address some of the challenges raised. These include greater alignment between theory and practice; engaging ASP consultants in practiced-based research; and sampling more diverse populations that better reflect 21st century ASP practice.

#### FEA-03

##### **STUDENT WORKSHOP - NEWBIE WITH TECHNOLOGY: CONSIDERATIONS FOR IMPLEMENTING TECHNOLOGY IN CONSULTING WORK**

*Abby Keenan, Intrepid Performance Consulting;  
Tim Herzog, Reaching Ahead Counseling and Mental  
Performance;  
Inna Khanzan, Harvard Medical School/Boston Center for  
Health Psychology and Biofeedback;  
Lauren Tashman, Align Performance LLC;  
Brian Alexander, UC San Diego;  
Melissa Hunfalvay, RightEye, LLC*

Over the past few decades, advances in technology have provided sport psychology consultants (SPCs) ample opportunities to find innovative ways for increasing human performance. As such, there is a need for practitioners to be versed in different technological advances and software applications designed to record, analyze, and optimize performance (Schack et al., 2014). While many SPCs have already been implementing technology in their practices, others are still learning about its efficacy and practical and ethical considerations (Price et al., 2020). Given that a number of graduate programs do not have access to new technology, many students may feel unprepared to navigate these new technological advances. Therefore, the purpose of this panel is to enlighten students about different types of technology and considerations for use in mental performance settings. This panel calls for full-time practitioners with expertise in technology used in varied performance settings. The panelists will discuss the purpose and benefits of technology, considerations for students who want to gain experience, and resources for learning how to use technology. The goal is to provide students a breadth of information on different types of gadgets and their uses.

### FEA-04

#### STUDENT WORKSHOP - NO TWO JOBS ARE ALIKE: EXPERIENCES IN APPLYING FOR ACADEMIC AND APPLIED JOBS

*Duncan Simpson, IMG Academy;*  
*Greg Young, IMG Academy;*  
*Vanessa Shannon, University of Louisville/Norton Sport Health;*  
*Robert Hilliard, Shenandoah University;*  
*Julia Cawthra, USOPC;*  
*Dolores Christensen, University of Oklahoma Athletics*  
*Department*

Past AASP presentations have emphasized the application process for applied jobs. However, every year a number of students seek positions in academia or some sort of combination of applied and academic appointments. Over the past decade, the number of sport and performance psychology jobs has been exponential, and so has the competition to land a job (Martin, 2019). Given that the application process for academic and applied jobs is vastly different, students often do not receive guidance and resources to prepare them for applying for these positions. Both job markets require different skill set and strategies for successfully navigating and landing a job. Thus, the purpose of this panel is to provide students first-hand experiences from the professionals who recently landed applied and/or academic appointment(s). Specifically, students will learn about 1) experts' personal experiences and lessons learned, 2) two different job application processes, and 3) strategies to develop strong application materials.

This panel will highlight experiences from both applied and academic professionals including differences within and between application processes and materials. Panelists will emphasize strategies that worked well and strategies that did not.

### FEA-05

#### THE BURT GIGES WORKSHOP: WORKING WITH YOUTH ATHLETES & THEIR PARENTS

*Dolores Christensen, University of Oklahoma;*  
*Abby Keenan, Intrepid Performance Consulting;*  
*Craig Cypher, University of Rochester Medical Center;*  
*Lindsey Hamilton, IMG Academy;*  
*Kerry Guest, Indiana University*

Dr. Burt Giges, MD, has been a central figure in the field of clinical sport psychology for the better part of the past three decades. His notable contributions include articles on psychodynamic concepts in sport psychology, the sport psychologist-athlete relationship, and helping coaches meet their own needs. He has also written book chapters on topics such as becoming a sport psychology practitioner, mindfulness, and understanding athletes' psychological needs. Dr. Giges has consulted with athletes and performers at all levels and trained generations of sport psychology practitioners in the Athletic Counseling graduate program at Springfield College and graduate programs around the country via his lectures, his book, "My Work in Sport Psychology" (2nd ed), and his videos ("Three Approaches to Sport Psychology Consulting," "Brief Contact Interventions in Sport Psychology," "Self-Awareness in Sport Psychology Consulting"). In particular, Dr. Giges is known for his experiential workshops where he demonstrated a live role play with a chosen "client" and then offered the audience real-time insight and feedback into his process as it was happening in front of them. The third annual Burt Giges Workshop seeks to extend the Giges experiential legacy by focusing on role plays that demonstrate the unique process of working with youth athletes and their parents and/or guardians.

Two practitioners, one who is a licensed mental health clinician and the other who is a mental performance consultant, will meet with the same "youth client" and "parent." The practitioners will first illustrate how they approach sport psychology work with a teenage client of approximately 14 years of age. Then, each practitioner will further demonstrate their individualized approach to incorporating the parent/guardian of the youth client into the sport psychology work itself. Following this "one client, two approaches" role play session, there will be a pre-recorded reflection session with practitioners and "clients" to offer their shared reactions to the role plays, answer questions from the moderator, and detail how to work cohesively with youth clients and their trusted parent/guardians. In the true spirit of Dr. Giges, themes of provider self-awareness and diverse consulting approaches will be highlighted in this process-oriented and experientially-based workshop.



### LECTURES

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#### LEC-01: Coaching

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#### LEC-01A

##### AN EXPLORATION OF PERFECTIONISM AS AN ANTECEDENT OF NCAA DIVISION I COACHES' BASIC PSYCHOLOGICAL NEED SATISFACTION AND FRUSTRATION

*Erika Van Dyke, West Virginia University;*  
*Kim Tolentino, West Virginia University;*  
*Tucker Readdy, University of Wyoming;*  
*Johannes Raabe, West Virginia University*

Coaches have to routinely manage personal, social, and organizational demands (Norris et al., 2017). Their ability to think, feel, and act optimally as they cope with challenges is meaningfully influenced by their perceptions of the three basic psychological needs of autonomy, competence, and relatedness (Ntoumanis et al., 2009). Despite the importance of coaches' basic psychological needs in facilitating their psychological functioning, there is a lack of comprehensive understanding of the factors that satisfy or thwart them. Given the emphasis on winning in elite sport environments, such as National Collegiate Athletic Association (NCAA) Division I, coaches are inherently required to seek competitive excellence to meet the expectations of their profession (Olusoga et al., 2009). Such pursuits can either be focused on perfectionistic strivings (i.e., the desire for perfect performance) or concerns (i.e., worries about failing to reach those high standards; Stoeber, 2014). Previous researchers have found a significant relationship between individuals' level of perfectionism and perceptions of their basic psychological needs (e.g., Costa et al., 2016), but this link has yet to be explored among coaches. Accordingly, the purpose of this study was to investigate perfectionistic strivings and concerns as potential antecedents of NCAA Division I coaches' perceptions of autonomy, competence, and relatedness. A total of N=829 NCAA Division I coaches (59% male, 41% female) from various sports participated in the current research. A structural equation model (RMSEA=.05; CFI=.93; SRMR=.05) indicated that participants' perfectionistic strivings were only significantly associated with their satisfaction of autonomy and competence (positively;  $p < .05$ ) as well as their frustration of competence (negatively;  $p < .001$ ). Perfectionistic concerns were associated with participants' satisfaction (negatively) and frustration (positively) of all three basic psychological needs ( $p < .001$ ). These findings highlight the potential benefits of adaptive perfectionism (i.e., strivings) but also the importance for sport psychology practitioners to help coaches mitigate maladaptive perfectionistic concerns.

#### LEC-01B

##### EXAMINING THE USE OF PSYCHOLOGICAL SKILLS AND STRATEGIES IN DIVISION-I STRENGTH AND CONDITIONING

*Adam Feit, Springfield College;*  
*Elizabeth Mullin, Springfield College;*  
*Jasmin Hutchinson, Springfield College;*  
*Brian Thompson, Springfield College*

The general purpose of coaching is to improve the physical, mental, and emotional performances of athletes while optimizing preparation for competitions (Dorgo, 2009). A coach is an individual who supports and facilitates the learning of skills, tasks, or concepts through effective instruction (Gilbert & Baldis, 2014). Strength and conditioning coaches (SCCs) primarily educate and train athletes in proper fitness and weight training methods to enhance qualities such as strength, power, speed, agility, flexibility, and conditioning (Magnusen & Rhea, 2009; NSCA Professional Standards and Guidelines Task Force, 2017). SCCs are in a unique position to complement physical training methods with psychological skills and strategies (PSS) (Radcliffe et al., 2013, 2016; Whitney et al., 2019). The purpose of this study was to understand the implementation of PSS in collegiate strength and conditioning settings and evaluate the content knowledge base of sport psychology amongst college SCCs. In this study, Division-I college SCCs (N = 16) participated in semi-structured interviews to further understand the use of PSS in the collegiate strength and conditioning setting. Five themes emerged from the data: (a) Multifaceted role of an SCC, including improving athlete performance and coaching effectiveness; (b) Barriers and obstacles toward implementation of PSS such as lack of confidence, time, educational resources, and clarity in the scope of practice; (c) Rudimentary understanding and application of sport psychology concepts and applications; (d) Providing social support to athletes such as informational, esteem, and emotional support; and (e) Elements of conventional strength and conditioning coaching. SCCs reported limited knowledge, experience, and confidence in coaching PSS but still engaged in the active instruction of PSS to enhance performance. Future application of this research includes improving the sport psychology knowledge base of SCCs, clarifying the scope of practice around the use of PSS as SCCs, and enhancing the collaboration between sport psychology professionals and SCCs.

#### LEC-01C

##### HELPING COACHES PREVENT AND ADDRESS TEEN-DATING VIOLENCE

*Gretchen Kerr, University of Toronto;*  
*Ashley Stirling, University of Toronto;*  
*Anthony Battaglia, University of Toronto;*  
*Joseph Gurgis, University of Toronto;*  
*Alexia Tam, University of Toronto;*  
*Erin Willson, University of Toronto;*  
*Aalaya Milne, University of Toronto;*  
*Nicole Godman, University of Toronto*

The purpose of this project was to develop educational resources to assist sport coaches in recognizing and addressing teen-dating violence and promoting healthy relationships

in and through sport. Given the prevalence of teen-dating violence (Rubio-Garay et al., 2017; Wincentak et al., 2017) particularly for youth with intersectional identities (Olsen et al., 2017), it is likely that sport coaches will become aware of such experiences among their athletes and will need to know how to respond and assist. Further, as coaches can have significant influences on the development of young people, their roles in modeling and promoting healthy relationships is especially important for teen athletes as they embark on dating relationships. Phase 1 of this project involved a content analysis of 79 online resources and toolkits on teen-dating violence (TDV), which revealed that no resources specific to sport and coaching exist. In Phase 2, an online, anonymous survey was distributed to coaches and athletes regarding teen dating violence. 133 athletes responded with views that their coaches can play important listening, supporting and educational roles in helping them with TDV. The majority of the 182 responding coaches agreed that they could play important listening, supporting and educational roles in helping athletes with dating conflicts and in modeling healthy relationships, however, they cited a lack of access to helpful resources. Informed by these data, a foundational online educational module on TDV and three advanced modules on Gender-Based Violence, Bystander Empowerment, and Fostering Healthy Relationships were developed for coaches. An educational toolkit and advocacy resources were also developed to accompany the online educational modules. In addition to addressing the content of these resources, this presentation will also discuss the benefits and challenges researchers face in working with an advisory group comprised of various sport and health stakeholders to develop educational resources.

### LEC-01D

#### **“NO DAYS OFF”: USING SELF-DETERMINATION THEORY TO UNDERSTAND NCAA DIVISION I COACHES’ WORKAHOLISM**

*Kim Tolentino, West Virginia University;  
Tucker Readdy, University of Wyoming;  
Johannes Raabe, West Virginia University*

For National Collegiate Athletic Association (NCAA) Division I coaches, there is an immense pressure to win which is often directly associated with their job security (McLean et al., 2012). Those unable to effectively cope are more likely to compensate through workaholic tendencies (Hancock et al., 2009). Working excessively (beyond what is reasonably expected for one’s position or organization’s demands) and compulsively (preoccupation and need to work that cannot be resisted) are associated with negative psychological, physical, and social consequences (Clark et al., 2016). Previous researchers have found low satisfactions of the basic psychological needs of competence, autonomy, and relatedness to be antecedents of workaholism (Van Beek et al., 2012); however, these associations have not yet been investigated among coaches. Thus, the primary purpose of this study was to investigate the influence of NCAA Division I coaches’ basic psychological need satisfaction and frustration on their tendencies to work excessively and compulsively. Additionally, individuals who lack coping resources to meet professional demands are more susceptible to workaholism (Lumpkin & Anshel, 2012). Therefore, a secondary purpose was to examine coaches’ use of different coping functions (i.e., problem-, emotion-, avoidance-focused) as a potential mediator of this relationship. A total of N=820 NCAA Division

I coaches (58% male, 42% female) from various sports participated in this research. Structural equation modeling (RMSEA=.05; CFI=.93; SRMR=.05) revealed that coaches’ tendencies to work excessively were positively associated with their satisfaction of autonomy as well as their frustration of autonomy and competence ( $p<.05$ ). Participants’ reported levels of working compulsively were positively associated with the degree to which their competence was frustrated ( $p<.05$ ). The analysis also indicated that these relationships were partially mediated by coaches’ frequency of using problem- and avoidance-focused ( $p<.05$ ), but not emotion-focused coping. These findings can provide sport psychology practitioners with a potential mechanism to understand coaches’ workaholism.

### LEC-01E

#### **PERSON-CENTERED THEORY IN PRACTICE: IMPLEMENTATION AND EVALUATION OF A PILOT PROFESSIONAL DEVELOPMENT PROGRAM FOR NCAA DIVISION I COACHES**

*Lauren McHenry, University of Tennessee;  
Rebecca Zakrajsek, University of Tennessee;  
Megan Murray, Michigan State University*

A growing body of literature on the abuse of athletes by coaches has exposed a win-at-all-cost culture in sport. Unfortunately, in such a culture, winning too often comes at the expense of athletes’ and coaches’ well-being (Kerr & Stirling, 2008; Santos & Costa, 2018). Sport psychology scholars have suggested that athlete-centered coaching is an antidote to abusive coaching practices (Stirling & Kerr, 2008). Research evidence has supported Rogers’ (1959) person-centered theory (PCT) as a viable framework for athlete-centered coaching (McHenry et al., 2019, 2020). However, evaluation of coach education on PCT concepts—authenticity, empathy, and unconditional positive regard—as applied to professional coaching is lacking. The purpose of this study was twofold: (1) implement a pilot professional development program aimed to educate NCAA Division I coaches on PCT concepts and facilitate coaches’ application of PCT concepts to their professional practice, and (2) evaluate the program’s implementation processes and short-term outcomes. Participants included 23 coaches from eight sports within one midwestern university, seven of whom gave consent for their participation materials to be analyzed for the evaluation. The program included an in-person workshop followed by six modules delivered through a mobile App across 18 weeks. Each module included a podcast paired with reflection questions, application activities, and opportunity for virtual discussion. Results of the process evaluation revealed that (1) Active participation depended on the timing of coaches’ sport season and coaches’ initial perceptions of PCT being applicable to coaching or not, (2) Positive perceptions about PCT’s applicability to coaching increased as coaches completed each module, and (3) Coaches reported that program participation helped to improve their well-being, understanding of athletes’ needs, and response to athletes in stressful moments. With these findings, practical recommendations for the implementation of coach development programs and the application of PCT concepts to coaching will be discussed.

### LEC-01F

#### THE PSYCHOLOGICAL FUNCTIONING OF NCAA DIVISION I ASSISTANT COACHES: A SELF-DETERMINATION THEORY PERSPECTIVE

Johannes Raabe, West Virginia University; Kim Tolentino, West Virginia University; Tucker Readdy, University of Wyoming

Especially at elite levels of sport, such as National Collegiate Athletic Association (NCAA) Division I, coaches must navigate various personal, social, and organizational challenges (Norris et al., 2017). Thus, it is essential to cultivate optimal psychological functioning among coaches to allow them to cope with the demands of their profession. According to self-determination theory (Ryan & Deci, 2017), the quality of individuals' cognition, affect, and behavior is determined by their perceptions of the three basic psychological needs of autonomy, competence, and relatedness. To date, research on these needs in sport has almost exclusively been conducted to explore athletes' experiences. Therefore, there is a lack of knowledge regarding the perspective of coaches in general and assistant coaches in particular (Zakrajsek et al., 2020). The purpose of this study was to gain a better understanding of NCAA Division I assistant coaches' basic psychological need satisfaction and frustration. A total of N=509 NCAA Division I assistant coaches from multiple sports participated in the research. A structural equation model (RMSEA=.05; CFI=.90; SRMR=.07) indicated that participants' perceptions of all three basic psychological needs were significantly associated with the behavior of the head coaches for whom they worked. Especially need thwarting behaviors seemed to have a strong negative effect on assistant coaches' sense of autonomy, competence, and relatedness ( $p<.05$ ). Individuals who perceived their head coaches to be need-supportive felt more autonomous and related ( $p<.05$ ), but these positive head coach behaviors did not significantly enhance their sense of competence. In turn, participants' need fulfillment was positively associated with their frequency of using problem- and emotion-focused coping ( $p<.05$ ). Need thwarting was positively linked with avoidance-focused coping ( $p<.05$ ). These findings highlight the importance of head coaches in shaping assistant coaches' psychological functioning and provide an empirical foundation for practitioners trying to improve coaches' thoughts, feelings, and behavior.

### LEC-01G

#### WOMEN SUPPORTING WOMEN: A PROPOSED MODEL FOR THE FEMALE MENTAL PERFORMANCE CONSULTANT-COACH MENTOR RELATIONSHIP

Tammy Sheehy, Bridgewater College

Female sport coaches remain a largely underrepresented population. Numerous research studies cite barriers that females face in sport that include the culture of masculine hegemony, unequal assumption of competence, high stress of balancing work and life, and lack of female mentors or role models (Burton, 2015; Kilty, 2006). This last barrier is particularly troubling given the multitude of research emphasizing the importance of mentoring for female coaches (Banwell et al., 2019; Marshall, 2001) and the benefits that mentoring can provide (e.g., developing life skills, receiving psychosocial and career-related support; Banwell et al., 2019). The influence of a female professional who understands

many of the gender-specific stressors female coaches face and who represents a female role-model may be particularly meaningful (Dahlstrom, 2014). Despite the potential influence that female mentors could have, the primary barrier cited for this dearth of women mentors is a lack of human resources (i.e., female coaches who are willing to be mentors; Marshall, 2001).<br><br>Prior research has indicated that there is no 'one-size-fits-all' approach to mentoring female coaches (Banwell et al., 2019), however, previous mentorship models may provide a framework for how other female professionals in sport can provide mentor support to female coaches. Therefore, this lecture will propose a process-oriented model adapted from Eby et al. (2013) for a female MPC-coach mentor relationship and provide a case example based on a qualitative interview conducted with a high-performance female coach. The model will include identification of specific inputs (i.e., motivation, similarity, formality), processes (i.e., psychosocial support, instrumental support, relationship quality), and outcomes (i.e., performance, motivation, attitudinal outcomes, behavioral outcomes, health-related outcomes) associated with mentorship. Possible implications as well as ethical considerations, particularly around dual relationships, will also be addressed.

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### LEC-02: Collegiate Sport

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### LEC-02A

#### AN EXPLORATION OF CROSS-CONTEXTUAL MOTIVATION IN NCAA STUDENT-ATHLETES' EXPERIENCES

Daniel Leyhr, Institute of Sports Science,  
Department Sport Psychology and Research Methods,  
University of Tuebingen;

Lauren McHenry, University of Tennessee;  
Tucker Readdy, University of Wyoming;  
Johannes Raabe, West Virginia University

According to self-determination theory (Ryan & Deci, 2017), the quality of people's motivation has a meaningful impact on their ability to think, feel, and act optimally as they engage in a behavior. Their motivation, in turn, is determined by the degree to which the three basic psychological needs of autonomy, competence, and relatedness are satisfied. While the relationship between these psychological constructs has been explored extensively in singular settings (e.g., sport; De Francisco et al., 2020), researchers have previously suggested that individuals' motivation in one life domain may also affect their motivation in another (Vallerand, 2000). This potential cross-contextual influence appears particularly relevant for National Collegiate Athletic Association (NCAA) student-athletes who are tasked with simultaneously managing the challenges and expectations of two achievement domains: sport and academics. Therefore, the current study was designed to explore the potential cross-contextual influence in collegiate student-athletes' motivation. The data of N=238 NCAA Division I, II, and III student-athletes (93 male, 145 female;  $M=19.50\pm 1.25$  years old) from a variety of sports was analyzed to investigate whether their perceptions of autonomy, competence, and relatedness in sport influenced their motivation in academics and vice-versa. A path model

indicated significant effects of participants' basic psychological needs on their motivation (i.e., relative autonomy index [RAI]) within each respective context (academics:  $\beta=.58$ ,  $p<.001$ ; sport:  $\beta=.52$ ,  $p<.001$ ). The analysis revealed a significant cross-contextual influence of student-athletes' need fulfillment in sport on their RAI in academics ( $\beta=.22$ ,  $p<.001$ ). These findings highlight that while student-athletes may have two roles, they are still only one person as their participation—including the respective demands, challenges, and motivation—in one setting cannot be separated from their participation in another. Practical implications will be discussed for those tasked with the cultivation of positive sport and academic experiences in the NCAA (e.g., coaches, sport psychology consultants, academic counselors).

### LEC-02B

#### **EVALUATION OF THE LINK BETWEEN PSYCHOLOGICAL FLEXIBILITY AND ANXIETY AND DEPRESSIVE SYMPTOMS AMONG UNIVERSITY STUDENT-ATHLETES DURING COVID-19**

*Véronique Gauthier, UQTR;*  
*Sophie Labossière, Université de Sherbrooke;*  
*Veronique Boudreault, Université de Sherbrooke;*  
*Frédéric Dionne, Université du Québec à Trois-Rivières*

University student-athletes (U-SA) are a population at risk of developing mental health disorders despite the beneficial effects of sports, considering they face multiple stressors such as athletic and academic performance pressure, busy schedules, and interpersonal conflicts with coaches and teammates (Bissett, 2020; Gross, 2016). More recently, COVID-19 and its confinement repercussions have caused an increase in psychological symptoms. However, research has shown that psychological flexibility can be a protective factor, as it moderates the negative impact of stress on well-being and mental health (Gloster, 2017) and also during the pandemic (Kroska, 2020). Therefore, the aim of this study is to better understand the link between psychological flexibility and depressive and anxious symptoms experienced by U-SA. During the fall 2020 session,  $N = 484$  university student-athletes (163 men, 278 women) of a total of 12 universities in the province of Quebec (Canada) were invited to complete an online survey. Of these, 24.9% had moderate to severe anxiety (GAD-7) and 38.5% had moderate to severe depression (PHQ-9). Results from the binary logistic regression suggest that psychological flexibility explains respectively 22% and 27.8% of the variance ( $\text{sig} = 0.001$ ) of the presence of anxiety and depressive symptoms. Psychological flexibility scores statistically discriminate between athletes that will present an anxiety or depressive disorders, which means that psychological flexibility can be related to better coping strategies during the pandemic. These results provide information to enhance future interventions improving flexibility to better adapt to periods of uncertainty. Among those, Acceptance and Commitment Therapy's interventions can be used to improve psychological flexibility (Hayes, 2012). In addition, the results of this project will be communicated to the sports community (podcasts, posters, leaflets, etc.) to help reduce stigmas, tailor interventions such as psychological flexibility and promote clinical recommendations.

### LEC-02C

#### **FOLLOWING THE SAME PLAYBOOK: COMPARING COACHES' AND CAPTAIN'S PERCEPTIONS OF LEADERSHIP IN WOMEN'S COLLEGIATE SPORT**

*Kayla Sliz, Boston University;*  
*Karen Collins, University of New Hampshire*

Effective leadership is critical for the success of sport teams. Previous research has identified effective leadership qualities in youth or high school sport including good communication skills, positive relationships, the ability to make decisions and other characteristics such as strength, confidence, and passion (Gould, Volker, & Griffes, 2013; Volker, et al., 2019). Further, evidence points to men and women having different expectations of leadership based on gendered norms (Schull & Kihl, 2019) (Duguay, Loughhead & Munroe-Chandler, 2016). These findings highlight the assumption that females have certain leadership attributes based on their gender, emphasizing the need for continued investigation in this area. Recognizing the need for focus on leadership in collegiate sport, specifically on female leadership development in women's collegiate sport, the purpose of this investigation was to compare coaches' and female captains' perceptions of effective leadership skills, roadblocks to leadership, and the leader-performer relationship. Participants included captains ( $n=15$ ) and coaches ( $n=12$ ) of multiple Division I women's collegiate sport teams. Through focus group interviews, participants shared their perceptions and experiences of leadership in women's collegiate sport. Multiple levels of thematic data analysis indicated similarities between captains and coaches in the perception that leading by example and communicating effectively are important skills for leadership, while the leader-team dynamic and leader-coach dynamic can be a roadblock to leadership. Alternately, there were differences in perceptions on the importance of the relationship of high performance and leadership. Overall, results indicate the importance of captains and coaches communicating their expectations for the role of a leader on their team. Findings from this study will be used to continually inform the curriculum and direction of leadership development programs for leaders in women's collegiate sport.

### LEC-02D

#### **"I'M FEELING THE NEED TO MAKE COPIES OF MYSELF": A DESCRIPTIVE STUDY OF PRACTITIONER PERSPECTIVES IN COLLEGIATE MENTAL HEALTH AND SPORT PSYCHOLOGY**

*William Way, West Virginia University;*  
*Jack Watson II, West Virginia University;*  
*Sam Zizzi, West Virginia University*

Amid burgeoning literature on the mental health and performance needs of student-athletes, research on practitioner perspectives has been rare (cf. Schlimmer & Chin, 2018), and particularly so at institutions without sport psychology services (Rancourt et al., 2020). As such, a mixed-method survey was distributed to collegiate sport psychology practitioners (clinical and applied,  $n = 130$ , 25.1% response) and to counseling center staff from institutions without sport psychology services ( $n = 334$ , 15.8% response). When offered, 65.8% of practitioners from DI institutions and 53.5% of practitioners from DII/DIII institutions indicated that clinical sport psychology services were stretched or exceeded by demand.

Some advocated for clinical/applied sport psychology services when they were not available, but others expressed hesitancy to create these specialized services (citing scope of practice with limited resources, sequestering athletes from broader services, etc.). Overall, 64.1% of participants wanted more emotional support for stressors encountered as practitioners. Current events (“[we’re] dealing with the same issues as everyone else during COVID-19”) and the demand for services (“I have seen an overwhelming increase in the risk/acuity of student-athletes’ presenting issues”) may have contributed to this finding. Half the sample would have liked more peer consultation for their work with student-athletes, and in some instances, practitioners commented that better cross-campus communication could have helped. Practitioners reported a critical need for more staff, more diverse staff (“[Counseling services] at my university is short-staffed in general and short-staffed in having Black identified therapists available...”), and more multidisciplinary staff (“our psychiatry budget was eliminated”). Drawing upon these insights from practitioners, discussion will address various symbiotic relationships that could emerge as different groups (internal and external to an institution) work to better support practitioners in collegiate mental health/sport psychology.

### LEC-02E

#### **INAUGURAL SEASONS ARE NOT THAT SIMPLE: EXPLORING ONE TEAM’S JOURNEY, HIGHLIGHTS, AND BARRIERS TO SUCCESS AND TEAM SATISFACTION**

*Jamie Robbins, Methodist University;  
Leilani Madrigal, Long Beach State University*

Tuckman and Jensen’s (1977) model of team development introduced the stages of forming, storming, norming and performing. Recently, research and observation revealed complexities of team development making this model more ideal than real (Rickards & Moger, 2000). According to Eys et al. (2019), understanding of sport group dynamics is in its adolescence. They called for more research “to build a coherent body of knowledge for a very complex topic” (Eys et al., 2019, p.45). The current study focused on one Division III field hockey team’s inaugural season to identify variables that enhanced and/or detracted from the creation of a cohesive team, motivational climate, and satisfaction. Researchers used an ethnographic approach and mixed-method design, with the primary investigator serving as a participant-researcher. Survey data were collected from athletes pre- and post-season. Athletes also submitted personal journals and participated in interviews. Additional data were collected through coach interviews and observations. The researchers used a practical iterative framework (Srivastava & Hopwood, 2009) and descriptive statistics to identify trends. Results are categorized into the following major themes: (a) Setting the stage, (b) Structural issues, (c) Group processes, (d) Emergent states, and (e) Outcomes. The extensive findings revealed factors that influenced team identity, goals, leadership, cohesion, and team record, including but not limited to, norms, life issues, environment, ineffective goal setting, a bad apple and athlete outcome orientations. Although results demonstrate an imperfect formative year, the team did create a strong foundation. This presentation will elucidate factors that promoted and detracted from this team’s experience and make connections to existing theories related to team building, goal setting, leadership, motivation, and cohesion. Through

discussion of this team’s journey, the researchers will highlight barriers for practitioners, athletes, and coaches, and provide suggestions for encouraging task orientation, creating team rituals, supporting athlete openness, and instilling team pride.

### LEC-02F

#### **PAINTING A HOLISTIC PICTURE: THE RELATIONSHIP BETWEEN PERFECTIONISM, SELF-COMPASSION, ANXIETY, RUMINATION, WELL-BEING, SELF-ESTEEM, AND SPORT ENJOYMENT IN NCAA ATHLETES**

*Carly Block, Florida State University;  
Frances Cacho, Florida State University;  
Graig Chow, University of California, Berkeley;  
Jennifer Forse, Florida State University;  
Natasha Habert, FSU;  
Jacquelyn Gnassi, Florida State University*

Perfectionism is a personality trait composed of two dimensions, perfectionism strivings (i.e., set excessively high standards of performance) and perfectionistic concerns (i.e., experience concerns over mistakes; Stoeber, 2012). Perfectionism is prevalent in athletes and performers and has been found to significantly impact them in various positive and negative ways (see Hill et al., 2011; Gotwals et al., 2012; Stoeber, 2011 for reviews). With the increasing demand of excellence and the subsequent salience of perfectionism, there is a need to paint a more holistic picture that fully encapsulates perfectionism’s impact on athletes’ psychological well-being. Therefore, the purpose of this study was to investigate the relationships between dimensions of perfectionism and self-compassion, self-esteem, sport enjoyment, well-being, sport anxiety, and rumination. In a sample of 337 collegiate student-athletes and performers, multiple linear regression analyses indicated that athletes who demonstrated higher perfectionistic concerns showed lower levels of facilitative outcomes (e.g., sport enjoyment) and higher levels of debilitative outcomes (e.g., rumination). In addition, athletes who demonstrated higher perfectionistic strivings demonstrated higher levels of facilitative outcomes and lower levels of debilitative outcomes. Findings illustrate the importance for continuing the quest to understand perfectionistic athletes and how these tendencies impact their sport participation. Presenters will discuss specific perfectionism subscales that are most salient in predicting both facilitative and debilitative outcomes. Additionally, presenters will discuss how the results of this study will be utilized to guide the development and evaluation of interventions for perfectionistic athletes. This has implications for helping applied practitioners better understand sport perfectionism and how they can help performers manage strivings and concerns in a way that aids them in their pursuit toward excellence.

### LEC-02G

#### THE ABCS OF RATIONAL THINKING PATTERNS: NORMATIVE DATA ON THE CMBQ FOR NCAA DIVISION I STUDENT-ATHLETES

*Bianca Boling, Midwestern University;*  
*Angela Breitmeyer, Midwestern University;*  
*Thomas Virden, Midwestern University;*  
*Martin Turner, Manchester Metropolitan University;*  
*Breanna Naegeli, Grand Canyon University*

Although the use of Rational Emotive Behavior Therapy (REBT; Ellis, 1956, 1991) has been empirically supported in its traditional psychotherapeutic application, researchers have recently begun to examine its efficacy within sport (Turner, 2014; Turner & Barker, 2013; Wood et al., 2017). REBT purports that one's emotional and behavioral consequences (C) are not a direct result of adversity (A), but rather one's beliefs (B) about the adversity; such beliefs can either be rational or irrational (Ellis 1956, 1991). To assess an individual's propensity to think in an Adversity-Belief-Consequence (ABC) way, the Cognitive Mediation Beliefs Questionnaire (CMBQ; Turner et al., 2020) was developed. Consistent with REBT theory, those who endorse ABC thinking are more equipped to manage their emotions and behaviors, and subsequently, enhance performance. Although previously normed on other populations, the purpose of this study was to obtain normative data for the CMBQ utilizing a NCAA Division I student-athlete sample. Our survey was administered to over 400 student-athletes to explore the CMBQ's relationship to emotion regulation and psychological health. Using stepwise regression analyses, our results implied a relationship between those who attribute their consequences to adverse events with higher levels of emotional reactivity, e.g., increased temper, anger, and irritability ( $\beta = .475$ ,  $F(1, 83) = 24.159$ ,  $p < .001$ ). On the contrary, athletes who endorsed ABC thinking demonstrated greater reappraisal abilities related to emotion regulation ( $\beta = -.532$ ,  $P < .001$ ), and positive psychological well-being ( $F(2, 82) = 10.334$ ,  $p < .001$ ). These findings provide important implications for student-athletes. Namely, an athlete's thinking patterns can impact their psychological well-being, which reciprocally impacts their sport performance. Nevertheless, a noted limitation was the homogeneity of our sample, which compromises the generalizability of our findings, necessitates diversity-related considerations, and supports the need for multicultural inclusion within the research and applied practice of sport psychology.

### LEC-02H

#### THE IMPACT OF SUDDEN SPORT RETIREMENT DUE TO COVID-19: AN INVESTIGATION OF COLLEGE ATHLETES

*Kelly Renner, Franklin University;*  
*Amber Shipherd, Texas A&M University - Kingsville /*  
*Next Level Mind Consulting;*  
*Itay Basevitch, College of Management;*  
*Edgar Pizarro, Texas A&M University - Kingsville*

In March 2020, colleges and universities across the United States moved the remainder of the Spring 2020 classes to an online format, closing their physical campuses to students, and abruptly ending all extracurricular activities, including the spring athletic season due to SARS-COV-2, more commonly

known as COVID-19. While there are studies that qualitatively examine athletes' retirement experiences post retirement (e.g., Lavallee & Robinson, 2007; Torregrosa et al., 2015; Tshube & Feltz, 2015; Warriner & Lavallee, 2008), a unique opportunity was presented to gather data from a group of college athletes who faced potential involuntary sport retirement at roughly the same time for the same reason, thus eliminating multiple variables that are common in athlete retirement research. Guided by interpretative phenomenological analysis, the experience of senior college athletes due to COVID-19 was examined. In-depth interviews were conducted with three NCAA Division II senior baseball players. Data analysis revealed that while the college athletes reported experiencing negative cognitive and emotional responses, they also identified positive aspects of this unexpected situation, thought of others during this unprecedented time, and remained future-oriented. The results of this study largely follow the literature on stress-related growth (Schaefer & Moos, 1992) and sport injury-related growth (Roy-Davis et al., 2017), given that there was reportedly a generally negative immediate emotional response, strengthening of their social networks, then the emotional responses shifted to become more positive, and their new free-time provided the opportunity to reflect on their goals, spend time with friends/family, and/or focus on academics. Although there is still much to learn about the impact of sudden sport retirement on athletes, this exploration offered optimism that some athletes can be surprisingly resilient when faced with unexpected adversity at the end of their athletic careers. Finally, applied implications for practitioners supporting athlete retirement will be discussed.

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### LEC-03: Consulting & Interventions

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### LEC-03A

#### ASSESSING THE IMPACT OF A COMMERCIALY AVAILABLE MINDFULNESS APP ON COLLEGE STUDENT ATHLETE WELL-BEING AND SPORT EXPERIENCE

*Benjamin Smith, Yale University;*  
*Kyle Stephenson, Willamette University*

Preliminary randomized control trials (RCTs) have suggested that smartphone-based mindfulness programs tend to be effective for improving a range of mental health and well-being outcomes in college students (Clarke & Draper, 2020), however, the effects of these interventions on college student athletes have yet to be examined. Because of their low cost and convenience, mindfulness apps may be more accessible for a student athlete population less likely to seek formal psychological services because of time scarcity (López & Levy, 2013). The present study extended the qualitative work by Shaffer & Shaffer (2019) and Costalupes et al. (2020) on smartphone-based MBIs with athletes by randomizing college varsity and club sport student athletes to use of a commercially available mindfulness app (Headspace) for 4-weeks ( $n = 58$ ), or to a waitlist control condition ( $n = 28$ ). Participants completed self-report measures of mindfulness, mental health, athletic coping skills, and flow state before and immediately after the intervention. Results indicated that participants in the immediate treatment group exhibited significant improvements in mindfulness ( $d = 0.39$ ), athletic coping skills ( $d = 0.41$ ), and flow state ( $d = 0.47$ ) but, surprisingly, not mental health. The control group did not

exhibit significant changes in these variables, however, group membership did not interact significantly with time. These findings indicate that a smartphone-based mindfulness training program may be an accessible tool to improve student athlete experience on and off the field. Although the highly accessible nature of smartphone MBIs may be one of their greatest strengths, qualitative feedback revealed that athletes may need guidance in linking concepts from the application directly to their sport. Potential future directions will be discussed, including athletic department-wide implementation of a mindfulness app program and additional individualized support which may be needed to encourage engagement with such self-guided treatments.

### LEC-03B

#### CONDUCTING AND PARTICIPATING IN PRESSURE TRAINING: PERSPECTIVES OF SPORT PSYCHOLOGISTS AND ATHLETES

*William Low, University of Essex;*  
*Joanne Butt, Liverpool John Moores University;*  
*Mike Stoker, English Institute of Sport;*  
*Paul Freeman, University of Essex;*  
*Ian Maynard, University of Essex*

To prepare athletes for psychological pressure of competition, pressure training (PT) systematically applies pressure on athletes while they practice sport-specific skills. This pressure can be created by adding consequences (e.g., rewards or punishments) and demands that increase the difficulty of performing (Stoker et al., 2016). Evidence suggests that PT can improve performance in various sports and domains, but little research has examined how to conduct PT effectively in applied settings. Exploring demands and consequences in more depth would guide practitioners in creating pressure. It is also important to understand the aspects of delivering PT that help athletes learn and develop from experiencing this pressure. Therefore, this study explored sport psychologists' approaches to conducting PT and athletes' experiences of participating in PT. Participants were eight sport psychologists with experience conducting PT at international levels and eight international-level athletes who had participated in PT. Each participant took part in an online semi-structured interview. Thematic analysis produced themes that related to creating pressure, increasing PT's effectiveness, and benefits of PT. To create pressure, psychologists often extended the reach of consequences or simulated psychological demands. These strategies created pressure without relying on only the degree of rewards or punishments. A key to increasing effectiveness was collaboration between psychologists, athletes, and coaches when designing and conducting the intervention. Collaboration underscored how the way PT is delivered can influence athletes and coaches' receptiveness to this training that may be new to them. Finally, PT benefited athletes by building confidence and providing opportunities to practice coping strategies for pressure. These findings provide guidance for introducing and integrating PT into athletes' existing training. They illustrated that creating pressure can in fact be practical in applied settings and that athletes can train mental skills during physical training.

### LEC-03C

#### ENHANCING CONCUSSION CARE STRATEGIES THROUGH COLLABORATIVE INQUIRY: A VALUE PERSPECTIVE

*Cassandra Seguin, University of Ottawa;*  
*Diane Culver, University of Ottawa*

The creation of effective interventions for injured athletes requires a thorough understanding of the injury, athlete, and sport, and the effective application of evidence-based strategies. Psychosocial interventions for athletes with concussions are sparse and largely absent within current care models. To address this gap, a group of eight mental performance consultants (MPCs) from elite sport contexts engaged in a community of practice (CoP). Within this CoP, MPCs discussed their experiences of working with concussed athletes, shared intervention strategies and resources, and enhanced learning by critically discussing current concussion research with the help of external experts. Collaborative inquiry was used to foster a process of reflection and action, and facilitate ongoing engagement. As formal CoPs and collaborative inquiries are rare in mental performance consulting, this project held a unique opportunity to not only advance the field of concussion support, but to understand the value that MPCs could gain from actively engaging in this type of intradisciplinary collaboration. The four-month long CoP was successful in achieving individual and collective objectives, as well as in producing a resource for MPCs who are navigating this injury context. To assess the value of this CoP for individual members and understand how this approach could be of importance to the broader profession, 34 single-spaced pages of reflections and collaboratively developed documents were thematically analyzed using the recently expanded value creation framework (E. Wenger-Trayner & Wenger-Trayner, 2021). This analysis identified positive value across all eight cycles of the framework (e.g., identification and clarification of our role in concussion support – transformative value; critical boundaries within the practical and theoretical concussion landscape – orienting value). These values will be discussed to highlight the potential significance of this strategy for ongoing learning and advancing professional practice, and to help elucidate benefits and tools for practitioners wishing to foster their own CoPs.

### LEC-03D

#### SPORT PSYCHOLOGY PRACTITIONERS' EXPERIENCES OF ENGAGING WITH PSYCHOLOGICAL SKILLS INTERVENTION LITERATURE: AN INTERPRETIVE PHENOMENOLOGICAL ANALYSIS

*Marie Winter, University of Essex;*  
*Ian Maynard, University of Essex;*  
*Paul Freeman, University of Essex;*  
*Murray Griffin, University of Essex*

The application of evidence-based knowledge is recognised as important for allowing sport psychology practitioners to make informed decisions regarding the most effective interventions (Gardner & Moore, 2007). There has been much progress regarding the identification of effective sport psychology consultation characteristics within the literature (Sharp & Hodge, 2011), and there is evidence to support the effectiveness of psychological skills interventions (e.g.

Greenspan & Feltz, 1989). However, there is much less focus within the literature on how practitioners can efficiently implement and extemporise evidence-based techniques for use in practice (Gould & Damarjian, 1998; Winter & Collins, 2014). The purpose of the study was to investigate experiences of engaging with the psychological skills intervention literature throughout the career of a sport psychology practitioner, with a specific focus on its influence on decision-making in intervention design. An interpretive phenomenological analysis (IPA; Smith, 1996; Smith & Osborn, 2008) was adopted as an in-depth qualitative approach to explore perceptions and experiences of four early career (no more than three years post-accreditation) and four experienced (at least ten years post-accreditation) sport psychology practitioners. Through the interpretive phenomenological analysis of semi-structured interviews with eight practitioners, three superordinate themes emerged: feeling overwhelmed by literature during masters training programmes, the importance of early practice experiences and the influence of supervisors and peers. The study provides valuable insight into the influences on sport psychology practitioner behaviour, derived from experiences of events and interaction with stakeholders during the earliest stages of a practitioner's career. The chance to present, and discuss, these findings in a lecture could help improve adherence to evidence-driven models for understanding, conceptualising, assessing and intervening with athletes. The practical implications of this research could strengthen the integration of evidence-based practice approaches in training curriculums and supervision guidelines to promote adherence to them throughout a practitioner's professional development.

### LEC-03E

#### **VIRTUAL REALITY AND APPLIED SPORT PSYCHOLOGY: A MODERN INTERVENTION FOR AMERICAN FOOTBALL**

*Kyle Kennedy, Indiana University;*  
*Jesse Steinfeldt, Indiana University;*  
*Scott Bellini, Indiana University;*  
*Ellen Vaughan, Indiana University;*  
*Gary Sailes, Indiana University*

Competitive athletics is undergoing a technological revolution. While technology becomes increasingly embedded within sport, sport and performance psychologists may seek clinical benefits from the application of innovative technology. Specifically, virtual reality (VR) serves as a modality for athletes to visualize and rehearse cognitive, sport-specific processes that are otherwise difficult to replicate outside of competition. Adaptations of VR technology have been applied across a diverse range of sports (Cannova, 2020; Bideau et al., 2009; Mcleod et al., 2008). However, the full potential of VR technology in sport remains unfulfilled (Cotterill, 2018). Sport and performance psychologists have a distinct advantage in development and application of VR technology through experienced use of existing imagery-based techniques. The purpose of this lecture is to demonstrate the application of a novel, VR intervention for cognitive, sport-specific processes based upon Holmes and Collins' (2001) PETTLEP model of imagery. Specifically, the lecture will review and demonstrate a VR intervention developed to improve both processing speed and defensive coverage identification for American football quarterbacks. The study employed a single-subject, multiple baseline ABA design. VR film modules were developed using a 360-degree camera filming quarterback-specific football drills. Visual analysis through tables and figures in addition to improvement rate difference (IRD), a

quantitative method of analysis, were used to analyze results. Results indicated the VR intervention showed significant improvements in reduction of processing time. Defensive coverage identification also demonstrated improvement but produced questionable IRD. While the lecture will cover both strengths and limitations in development and application of the intervention, it will also consider broader implications for VR technology in applied sport and performance psychology.

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### LEC-04: Diversity & Culture

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#### LEC-04A

#### **APPLYING CULTURAL SPORT PSYCHOLOGY: BAHALA NA COPING FROM RESEARCH TO PRACTICE**

*Sheryll Casuga, John F. Kennedy University*

The term "bahala na" translates literally as 'leave it up to God' and is a culturally-distinctive attitude commonly experienced by Filipinos when faced with challenging situations and is a core cultural value that can be traced back to pre-colonial times (Agoncillo & Guerero, 1984; De Guia, 2005). To date, there has been little sport psychology research investigating how cultural values and norms impact performance. This study used a qualitative method to explore elite Filipino athletes' subjective experience of the bahala na attitude. Specifically, the study examined ways in which athletes' use of the bahala na attitude was experienced as facilitative or debilitating to their performance. Eleven Filipino athletes who have participated in an international sporting competition participated in a semi-structured interview. Conventional qualitative content analysis was utilized to analyze the data. The common themes that emerged among the participants' description of their bahala na experience were: bahala na as adaptive attitudinal coping with anxiety and decision-making in performance situations, bahala na as an automatic response to routine stress, bahala na as problematic effort reduction, and performance pressure as prompting context for bahala na. The implications for bahala na attitude as a coping strategy for performance anxiety, managing expectations, and situational demands in sports and in similar contexts are discussed. A case study is presented highlighting the use of bahala na coping strategies by a Filipino elite athlete to meet the unique training and performance demands during the pandemic and in preparation for the Tokyo Olympics.

#### LEC-04B

#### **"IF I'VE GOT GOD ON MY SIDE, I CAN DO IT": A PHENOMENOLOGICAL INVESTIGATION OF THE LIVED EXPERIENCES OF SPIRITUALITY FOR LDS NCAA DI STUDENT-ATHLETES**

*Matthew Moore, Miami University;*  
*Leslee Fisher, University of Tennessee*

The relationship between athletes' diverse religious practices and their sport performance is an important but overlooked component of sport psychology research and practice, particularly with regard to increasing the cultural awareness of sport psychology practitioners. The aim of the current study, therefore, was to explore the lived experiences of a certain group of religious athletes—those who identified



as members of The Church of Jesus Christ of Latter-day Saints (LDS) while also participating in NCAA Division I (DI) athletics. Using an existential phenomenological approach (Thomas & Pollio, 2002), nine interviews were conducted with four self-identified female and five self-identified male NCAA DI LDS Church members (cross-country/track and field, football, soccer, and volleyball student-athletes attending five different DI institutions; mean age = 22 years). Thematic analysis constructed by an existential phenomenological research group (e.g., Sohn, Thomas, Greenberg, & Pollio, 2017) centered on four major themes related to participants' experiences of religion and spirituality as LDS NCAA DI student-athletes: (a) the use of LDS embodied spirituality when times get tough; (b) LDS embodied spirituality was greatly influenced by relationships; (c) LDS embodied spirituality was not always enough in terms of support throughout student-athletes' collegiate careers; and (d) a holistic care team could be very useful in terms of support for LDS student-athletes' mental health. For the purpose of this presentation, only the fourth theme is focused on. Findings are presented related to practical strategies that sport psychology consultants can implement to help NCAA DI religious student-athletes perform better throughout their collegiate careers.

### LEC-04C

#### TRANSGENDER COLLEGE STUDENT PHYSICAL ACTIVITY AND MENTAL HEALTH: INCREASING AWARENESS FOR INTERVENTIONS

*Danielle Wong, University of Northern Colorado;*  
*Megan Babkes Stellino, University of Northern Colorado;*  
*David Hydock, University of Northern Colorado*

There is a need to increase efforts to better understand transgender students' physical activity (PA) levels and associated mental health as part of endeavors to promote equity and inclusion across college campuses (ACHA, 2020). Little empirical evidence on the connections between, and predictors and levels of, transgender college students' PA exist. As a result, universities cannot adequately assess how to best support and promote the health of all members of their student population (Legg et al., 2020). The purposes of this study were to examine differences in PA between cisgender and transgender students, between transmen and transwomen students, and relationships among transgender students' aspects of mental health and PA levels. Data from the American College Health Association (ACHA) National College Health Assessment gathered from students ( $n=385,693$ , Mage = 21.89, SD = 2.82) at various institutions in US from 2015 to 2019 were acquired. Students who identified as transgender were represented by 1.9% ( $n=975$ , Mage = 20.94, SD = 2.931) of the larger sample. Participants reported specific mental health aspects (loneliness, hopelessness, anxiety, sadness, overwhelmed, exhausted, anger) and types of PA engagement (i.e., weight training, moderate-intensity, vigorous-intensity). Chi-square analyses revealed transgender students had significantly lower PA levels  $X^2(1, n = 385,693) = 117.71, p < .05$  and poorer mental health  $X^2(1, n = 385,693) = 1135.15, p < .05$  compared to cisgender students. Logistical regression revealed increased feelings of hopelessness significantly and negatively predicted the probability for engagement in moderate-intensity PA for transgender students ( $F(1, 8) = 5.18, p < .05, R^2 = .008$ ). Interventions for transgender college student health should be proactive and include dedicated attention to improve PA and mental health as part of inclusive and relevant health promotion. Consideration of the present findings provide

professionals and practitioners with a foundation to advocate for nondiscriminatory and improved resources and expand services to include transgender college student wellness.

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### LEC-05: Elite/Pro Sport

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### LEC-05A

#### CAREER SUPPORT AND SPORT TRANSITION: ARE RESOURCES IN PLACE REALLY ACCESSIBLE TO YOUR ATHLETES? HOW AN ECONOMIC THEORY OF SOCIAL JUSTICE CAN HELP YOU UNDERSTAND THE HELP-SEEKING BEHAVIOR OF ATHLETES

*Sophie Brassard, Game Plan/Faeq;*  
*Sylvain Bourdon, Professor Sherbrooke University;*  
*Patricia Dionne, Professor, Sherbrooke University*

In an effort to help individuals, it is not enough to simply make resources available. Despite the results showing that planning the transition out of sport is associated with more positive emotional responses, fewer emotional difficulties in retirement, a shorter post-retirement transition period and greater life satisfaction (Alfermann, Stambulova, & Zemaityte, 2004), career support services available through Game Plan Canada are used by only 10% of high level athletes. The purpose of this research was to explore the perceived barriers and factors influencing the use of career support resources based on the Capability approach developed by the economist Amartya Sen (1985). The Capability approach enables providers to understand what is accessible in principle and what is really accessible to athletes according to the context in which they live. According to Sen (1985), the resources available to individuals are not good indicators of what people are actually capable of doing or being since they differ in what they can do with the same resource. The results of a survey amongst high level athletes in Canada shows that the main perceived barriers to help-seeking are: a lack of time or access to the services (52%), a lack of knowledge of the services offered (35%) and the fear of stigma related to the use of the services (13%). Factors such as age, sport season and the level of engagement in a career outside of sport are linked to an increase in the use of services. A better understanding of what influences the help-seeking behaviors, both in terms of the athlete's characteristics and those of his or her environment, could service providers better support athletes who aren't actually seeking help and thus facilitate their transition out of sport.

### LEC-05B

#### COOL THEORY, BUT WHAT NOW? PARTICIPATORY ACTION RESEARCH EXPLORING THE PROMOTION OF THRIVING WITHIN AN OLYMPIC SPORT ORGANIZATION

*Michael Passaportis, University of Portsmouth;*  
*Daniel Brown, University of Portsmouth;*  
*Chris Wagstaff, University of Portsmouth;*  
*Rachel Arnold, University of Bath;*  
*Kate Hays, English Institute of Sport*

With calls to safeguard athlete well-being in the pursuit of sporting success (Arnold & Fletcher, 2021; Giles et al., 2020), research may offer practitioners insight into potential mechanisms that promote both outcomes simultaneously

(i.e., thriving; Brown et al, 2017). Nevertheless, given elite sport environments are increasingly complex and volatile (Fletcher & Wagstaff, 2009; Wagstaff, 2016), translating this knowledge to create real-world impact requires careful consideration (Holt et al, 2018). In this study we aimed to bridge the gap between theory and practice by exploring a sport psychologist's attempts to promote thriving within an Olympic sport organization. Participatory action research enables scholars to address the specific needs of practitioners through establishing collaborative working relationships (Cargo & Mercer, 2008; Wallerstein & Duran, 2006). In the present study, the first author acted as a critical friend to a sport psychologist working with a remit to influence the socio-psychological system within the sport organization, whereby they provided theoretical insights and enabled reflection on key factors regarding the implementation of theoretical knowledge. Over a 10-month period, several key implementations were made that facilitated the promotion of thriving systems. Initially, the cultural and technical language of the sport was integrated into established theoretical terms so athletes and coaches could better relate to the concept of thriving. The new terms were then used, with athlete input, to subjectively assess athletes' current levels of thriving and key influencing variables. This allowed for contextualized individual athlete thriving and needs profiles to be generated. Further, the temporal nature of thriving was identified, highlighting fluctuations in athletes' experiences through different competition and training periods. The practical implications of these novel findings will be discussed, to better support sport psychologists in their attempts to adapt and integrate theoretical knowledge to enhance athlete well-being and performance within elite sport organizations.

### LEC-05C

#### **GATHERING NARRATIVES OF ATHLETES' EXPERIENCES PREPARING FOR THE TOKYO 2020 OLYMPIC GAMES DURING COVID-19**

*Morgan Rogers, University of Calgary;  
Penny Werthner, University of Calgary*

The COVID-19 pandemic has created extraordinary challenges for Olympic athletes, including preparing for the now-postponed Tokyo 2020 summer Olympic Games amidst a global health crisis. Athletes have been confronted with numerous stressors including social isolation, uncertainty regarding Olympic qualification, and limited access to training facilities and partners (Schinke et al., 2020). Given the profound disruption athletes have faced since the onset of the pandemic in March of 2020, the construct of psychological resilience is a useful framework for understanding athlete experiences during this pandemic. Fletcher and Sarkar (2012) conceptualize resilience as one's ability to positively adapt to stressors, influenced by mental processes and behaviours. The purpose of this study was to explore the experiences and strategies of Canadian athletes preparing for the Tokyo Olympic Games during the COVID-19 pandemic. The research was informed by Fletcher and Sarkar's (2012) resilience model, and centered within a narrative framework. Narrative interviews were conducted with 20 Canadian athletes across a number of summer sports. All participants spoke of developing resilience throughout the pandemic and highlighted diverse approaches to managing and adapting to this unprecedented adversity. The narratives of five athletes are presented to illustrate a range of difficulties faced and how they were managed. Athletes struggled with the initial shock

of the postponement, the dilemma of how and where to train, and the difficulty of maintaining motivation. The narratives also highlight the critical importance of social support and thoughtful reflection with coaches, mental performance consultants, teammates, and family. As Ungar & Theron (2020) note, resilience is not an end in itself but rather a "means to achieve functional outcomes such as mental health," (p. 444) and in the context of elite sport, achievement of athletic goals. Implications for the practice of sport psychology and future research directions are also discussed.

### LEC-05D

#### **"SOMETHING THAT JUST RELAXES MY MIND AND GETS ME AWAY FROM BALL" A STUDY OF MENTAL REST IN PROFESSIONAL ATHLETES AND IMPLICATIONS FOR BEST PRACTICE**

*David Eccles, Florida State University;  
Thomas Gretton, Florida State University;  
Nate Harris, Florida State University;  
Gabriela Caviedes,*

The purpose of this study was to understand the psychology of rest in professional athletes. While rest is central to athlete recovery, avoiding burnout, and ultimately athlete performance and wellbeing, there remains little research on this topic. A qualitative design was employed: 20 current professional athletes from the NFL, NBA, and MLB were interviewed about their meanings and experiences of rest. A thematic analysis of interview data was undertaken. Data were interpreted deductively using a model of the psychology of rest in college athletes (Eccles & Kazmier, 2019) and, given that this population comprised professional athletes, an inductive approach was also employed to identify rest-related concepts unique to professionals. Results indicated that professionals obtain rest by engaging in sleeping and wakeful resting. Wakeful resting involves multiple psychological experiences that include obtaining a break from sustained effortful thinking. Specifically, on a training day involving multiple training sessions, professional athletes typically allocate time (e.g., 1-2 hours) between sessions to spend experiencing reduced cognitive demands or "relaxing the mind". Relaxing the mind is aided by engaging in activities and physical and social environments imposing low cognitive demands. Common activities include listening to music, walking the dog, and cooking. The most common social environment involves being alone to avoid the cognitive effort associated with responding to the needs, desires, and impositions of others. The most common physical environment involves being at home, in part because the environment is typically tranquil and the athlete can avoid being approached by the public. This study provides a foundation for "best practice" strategies: For example, athletes should create and spend daily time in a "quiet zone" to help them obtain the wakeful rest they need and avoid burnout. Consultants should consider integrating strategies into their athlete education programs that help athletes obtain mental rest.

### LEC-05E

#### SUPPORTING PSYCHOLOGICAL PREPARATION IN ELITE OFFICIALS

*Thomas Gretton, Florida State University;*  
*David Eccles, Florida State University;*  
*Gabriela Caviedes,*

To advance psychological support of underrepresented, performance populations, we explored psychological preparation in fifteen (8 male, 7 female) elite level officials in the buildup to a fixture. While attention has been paid to psychological preparation for athletes and coaches, there is little research on this topic with officials. We studied how officials psychologically prepare, over time, to officiate; that is, in the days, hours, and minutes before competition. This reflexive thematic analysis study adopted a constructivist paradigm, emphasizing the co-construction of knowledge between researcher and participant and acknowledging potential multiple realities of official preparation (Ponterotto, 2005). A creative analytical practice method was used to examine official preparation; instruments included individual interviews, researcher reflexive journaling, and a focus group interview. The focus group aided member reflections via the construction of a creative non-fiction story which was informed by the collected interview data (Smith et al., 2016). Results indicated cognitive (e.g., rehearsing law implementation) and socio-emotional (e.g., enhancing authenticity) forms of preparation as well as tapered engagement in psychological preparation, from high to low volume, in the week's buildup to competition. For example, officials reported attempts to psychologically detach (i.e., switch off from thinking about officiating) the day before a game to obtain the mental rest needed to be able to focus during their fixture the following day. Moreover, as competition neared, officials increased their engagement in emotional regulation strategies (e.g., kinesthetic rehearsal) to attempt to obtain a psychological state (e.g., calm, focused) they perceived as conducive to effective officiating. Implications for attempts to enhance officials preparation for performance include: (a) encouraging officials' use of rest days during preparation, (b) education and application of tailored interventions for officials (e.g., visual searching, quiet eye training, & pre-performance routines), and (c) helping officials engage in reflection that promotes systematic competition preparation.

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#### LEC-06: Exercise/Health/Fitness

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### LEC-06A

#### FOR THE LOVE OF THE GAME: HOW A NON-PERFORMANCE NARRATIVE IN HIGH SCHOOL SPORTS PROMOTES EXERCISE ADHERENCE IN ADULTS

*Rebecca Busanich, St. Catherine University*

The purpose of this longitudinal narrative inquiry study design was to explore the ways in which high school sport/exercise narratives, and the meanings constructed within them, impact lifelong exercise adherence. Exercise adherence rates remain low in the United States, with only 1 in 5 adults meeting the minimum physical activity guidelines (Center for Disease Control and Prevention, 2018). This public health crisis is in part linked to a dominant performance narrative that confines

the ways in which athletes experience sport, and constructs exercise through narrowed outcome-focused means. Research also shows exercise narratives may be further constrained by constricted gendered meanings that can negatively impact the sport and exercise experience in exclusive and unjust ways (Busanich, McGannon, Schinke, 2012; 2014).  
Using a social constructionist theoretical framework, this study extended previous narrative research by first seeking out and analyzing over 1,500 entries in team running journals collected by a high school cross-country coach from 1992-1999. Results showed a dominant non-performance narrative shaped the ways in which the athletes on this team framed their cross-country experience, leading to greater performance and higher associated well-being. To explore how this impacted these athletes' exercising experience post-high school into middle adulthood, all athletes were contacted in present day (current age = 34-43); resulting in 25 online surveys and 6 individual narrative interviews. Our findings confirmed that long-term exposure to a non-performance narrative in high school led to more positive, meaningful relationships with exercise, while also leading to greater exercise adherence over time. Furthermore, the meanings constructed through this narrative provided the individuals with tools to resist dominant gendered meanings and overcome barriers associated with parenting, aging, and gender roles. Practitioners and scholars alike will find ways to apply and extend the research to promote adherence, inclusivity, and overall well-being.

### LEC-06B

#### PRESERVING PERFECTIONISM: THE RELATIONSHIP BETWEEN PERFECTIONISM AND SELF-HANDICAPPING IN ENDURANCE RUNNERS

*Diana Curtis, Springfield College;*  
*Jasmin Hutchinson, Springfield College*

Perfectionism is a complex multidimensional concept that has been categorized and measured in a number of ways. Hewitt and Flett (1990) divided perfectionism into three dimensions including self-oriented, other-oriented, and socially prescribed perfectionism. To date, there has been little to no research describing endurance athletes based on this categorization. A relationship between perfectionism and self-handicapping has been demonstrated in a number of studies outside the sports domain (e.g., Stewart & De George-Walker, 2014) with the relationship being dependent on the type of perfectionism measured. However, this relationship has yet to be explored in a sports setting. Thus, the purpose of this study was i) to measure the three dimensions of perfectionism in endurance runners, and ii) to determine whether there is a relationship between the type of perfectionism reported by endurance runners and their level of trait self-handicapping. Participants (N = 158) provided demographic and running history information and completed the 15-item Multidimensional Perfectionism Scale (Hewitt et al., 2008) and the 15-item Self-Handicapping Scale (Rhodewalt, 1990). Self-oriented, other-oriented, and socially prescribed perfectionism scores (20.1 + 7.5, 18.2 + 6.0, and 17.5 + 7.1, respectively) were all relatively high compared to previous studies (Enns et al., 2001). Results showed that females are more likely to self-handicap than males ( $p < .05$ ). Additionally, there was a significant negative correlation ( $r = -.337$ ) between age and self-handicapping, and significant positive correlations between other-oriented ( $r = .183$ ) and socially prescribed perfectionism ( $r = .345$ ) and self-handicapping. These results can be explained through the self-esteem protection provided by self-handicapping.

High perceived expectations from others can result in excuse-making in order to justify potential failures. Reducing levels of perceived pressure through the use of sport psychology skills can reduce endurance runners' tendency to self-handicap.

### LEC-06C

#### UNIVERSITY STUDENTS' PERCEPTIONS OF EXERCISE COUNSELLING: A QUALITATIVE EXAMINATION OF THE UWORKITOUT UWIN EXERCISE PROGRAM

*Melissa Pare, University of Windsor;  
Irene Muir, University of Windsor;  
Krista Chandler, University of Windsor;  
Todd Loughhead, University of Windsor;  
Chad Sutherland, University of Windsor*

University students are among the population of Canadians experiencing the highest prevalence of mental health issues (ACHA, 2016). There is empirical evidence that exercise-based interventions are effective in reducing anxiety and depression in university students (e.g., Huang et al., 2018; Muir et al., 2020). Additionally, exercise counselling has been used in a variety of health areas to achieve favorable outcomes in the physical, behavioral, and cognitive domains (Breckon et al., 2008). The UWorkItOut UWin program is a six-week supervised exercise training and counselling intervention, which has shown to decrease psychological distress in university students (Muir et al., 2020). The purpose of the current study was to qualitatively assess participant perceptions of the UWorkItOut UWin program to gain a deeper understanding of its impact. Participants included 58 university students considered low risk for mental health issues (39 females, 18 males, 1 gender variant) who had successfully completed the UWorkItOut UWin program between 2017 and 2019. Responses from their exit interviews were thematically analyzed (Braun & Clark, 2019) and organized into the Center for Disease Control recommended basic logic model (e.g., inputs, activity, outputs, and influential factors; US Department of Human Services, 2002). For the purpose of this presentation, we will focus on the exercise counselling component of the basic logic model, specifically, an overview of the exercise counselling sessions and the perceived associated outcomes. The results demonstrated program outcomes in three domains: mental health (e.g., reduced anxiety), cognitive changes (e.g., increased self-efficacy), and coping (e.g., enlisting social support). The results of this study will help to bridge the research to practice gap by providing practitioners and researchers with actionable information to apply to their own practice and interventions (Ely et al., 2020).

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### LEC-07: Injury/Rehabilitation

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### LEC-07A

#### ASSESSMENTS OF PSYCHOLOGICAL SEQUELAE FOLLOWING SPORT INJURY

*Bridget Sturch, University of Minnesota - Twin Cities;  
Diane Wiese-Bjornstal, University of Minnesota*

Effectively assessing psychological sequelae following sport injury is important for researchers documenting psychological responses and to professionals assisting athletes during their

recoveries. The purpose of this paper is to review assessment tools that measure or evaluate varied cognitions, affects, and behaviors associated with psychological responses to sport injury and rehabilitation processes in a way that informs the work of sport injury psychology researchers and applied practitioners. Ethical best practices in assessment and the training of specific sports-related professionals would determine which of these are appropriate within diverse contexts. For example, some assessments are designed as structured clinical intake interviews for sport psychologists (e.g., the Emotional Responses of Athletes to Injury Questionnaire, Smith et al., 1990). Others are self-report surveys concerning areas such as confidence and rehabilitation anxiety that could be useful to orthopedic surgeons (e.g., ACL Return to Sport Inventory, Webster et al., 2008). Athletic trainers may find provider assessments of rehabilitation adherence (e.g., Rehabilitation Adherence Measure for Athletic Training, Granquist et al., 2010) or athlete self-reports of perceived disablement (e.g., Disablement in the Physically Active Scale, Vela & Denegar, 2010) relevant to their work. Sport coaches could monitor athletes for fatigue or other biopsychomarkers during return to play via the Recovery-Stress Questionnaire for Athletes (Kellmann & Kallus, 2001). Understanding not only the appropriate applications but also the strengths and weaknesses of these assessments is foundational to their interpretations. For example, many assessments rely on athlete self-reports, the strengths of which include simplicity of administration, cost-effectiveness, and reliability, but having limitations such as validity, measurement error, and social desirability (Saw et al., 2015; 2017). Used appropriately, sport injury psychology assessments can guide applied practitioners in the creation and planning of interventions that target the assessed psychological needs of athletes during rehabilitation (Wiese-Bjornstal et al., 2020).

### LEC-07B

#### DISPROPORTIONALITY & CONCUSSION MANAGEMENT POLICY: AN EVALUATION OF IMPLEMENTATION PRACTICES

*Courtney Hess, University of Massachusetts - Boston;  
Jonathan Howland, Boston Medical Center Injury Prevention Center & Boston University School of Medicine;  
Julia Campbell, Boston Medical Center Injury Prevention Center;  
Holly Hackman, Boston Medical Center Injury Prevention Center & Boston University School of Medicine;  
Steven D Vannoy, University of Massachusetts Boston;  
Laura Hayden, University of Massachusetts Boston*

**Introduction:** Establishing best practices for sport-related concussion management in schools has garnered clinical and research attention (Gioia, 2016), and some practices have been codified into legislation. Policy implementation, however, remains understudied and thus the impact on day-to-day practices remains unclear (Simon & Mitchell, 2016). Existing school-based research has highlighted how policy can lead to disparities between students due to differential implementation (Sullivan et al., 2013). This study examined implementation of concussion management practices in Massachusetts public high schools and assessed whether implementation was systematically different according to schools' sociodemographic profiles. Method: A cross-sectional survey was designed to assess which concussion policies and best practices were being implemented at least 90% of the time in Massachusetts high schools. A school nurse in every public high school (N= 305) was sent the survey, and 51.1% (n= 156) responded and included their

school name. Responses were tallied such that higher scores indicated more practices being consistently implemented. School demographic data were collected using the Massachusetts Department of Elementary and Secondary Education website and linked to survey responses. Schools were clustered using a k-means clustering algorithm based on their total implementation score. Differences in sociodemographic variables across clusters were assessed. Results: K-mean cluster analysis revealed two unique clusters with mean implementation scores of  $39.37 \pm 3.96$  ( $n_{\text{high}}=73$ ), and  $19.48 \pm 5.47$  ( $n_{\text{low}}=83$ ). Independent t-tests revealed significant differences between the two clusters such that schools in the low implementation group had significantly higher student-to-teacher ratios ( $p=0.046$ ), nurses with less experience ( $p=0.024$ ), and significantly higher percentages of students identifying as economically disadvantaged ( $p=0.003$ ), racially marginalized ( $p=0.004$ ), and English language learners ( $p=0.043$ ). Discussion: Results suggest concussion policy implementation in Massachusetts high schools mirrors existing disproportionality trends in that disparities appear to be systematic whereby schools with more marginalized students and less resources are less able to consistently implement concussion management policies.

### LEC-07C

#### NO SEX DIFFERENCES IN KNEE SELF-EFFICACY IN PATIENTS AFTER ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION

*Francesca Genoese, Michigan State University;*  
*J.D. DeFreese, University of North Carolina;*  
*Matt Hoch, University of Kentucky;*  
*Johanna Hoch, University of Kentucky;*  
*Shelby Baez, Michigan State University*

Females after anterior cruciate ligament reconstruction (ACLR) are at increased risk of reinjuring their ACL when compared to males (Paterno et al., 2012). Psychological factors such as injury-related fear are also associated with ACL reinjury, (Paterno et al., 2018) yet no sex differences in injury-related fear have been observed (Kuenze et al., 2020). Another psychological variable shown to affect outcomes post-ACLR is knee self-efficacy, or an individual's belief in their ability to perform knee-related tasks (Thomeé et al., 2008; Thomeé et al., 2006). Yet, sex differences in knee self-efficacy have not been explored in ACL-injured populations. Therefore, the purpose of this study was to examine sex differences in knee self-efficacy in ACL-injured populations. We hypothesized that females post-ACLR would exhibit decreased knee self-efficacy when compared to males. Forty participants ( $n=29$  females) with previous unilateral ACLR ( $\geq 1$ -year post-operative) enrolled and completed the Knee Self-Efficacy Scale (K-SES). The K-SES is a 22-item questionnaire that measures perceived self-efficacy after ACL injury (Thomeé et al., 2006). The questionnaire contains 4 subscales: Daily Activities, Sports/Leisure Activities, Physical Activities, and Future Function. Items are scored on a Likert scale from 0-10. The subscales are scored separately with higher scores indicating greater knee self-efficacy. Mann-Whitney U Tests were used to examine sex differences in K-SES scores. There were no statistical differences between sexes for the Future Function ( $p=.39$ ), Daily Activities ( $p=.19$ ), Sports/Leisure Activities ( $p=.28$ ), or Physical Activities ( $p=.19$ ) subscales. Both sexes exhibited low knee self-efficacy on the Future Function subscale (males=  $6.75(9)$ ), females=

$6.25(5.75)$ ) which examines confidence about future knee performance. These results suggest no sex differences in knee self-efficacy in patients post-ACLR. However, both sexes had decreased confidence in the future performance of their knee. Future research should explore psychologically informed clinical practice strategies, such as goal-setting, to enhance future knee self-efficacy.

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### LEC-08: Mental Health

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#### LEC-08A

##### A PHENOMENOLOGICAL PHOTOVOICE EXPLORATION OF WOMEN'S EXPERIENCES OF THEIR BODY WHILE EXERCISING IN FITNESS CENTER ENVIRONMENTS

*Katherine Fairhurst, Cloud Break Therapy LLC;*  
*Dana Voelker, West Virginia University;*  
*Karly Casanave, West Virginia University;*  
*Sam Zizzi, West Virginia University;*  
*Christy Greenleaf, University of Wisconsin - Milwaukee;*  
*Monica Leppma, West Virginia University*

Fitness centers have a formative impact on young adult women's exercise and body experiences, particularly during early adulthood when self-consciousness is heightened and fitness center participation is high (e.g., Prichard & Tiggemann, 2012). Yet, the specific structural, social, and cultural features of fitness environments that inform young adult women's relationship with their bodies are relatively unknown. From a social constructivist lens and sociocultural framework, this study used an Interpretative Phenomenological Analysis approach with Photovoice methodology to explore young adult women's lived experiences of their body while exercising in fitness centers. A purposive sample of 11 women (Mage = 21.9 years; SD = 2.25) completed (1) a two-week period photographing elements of their fitness center that they believed encouraged, and discouraged, a healthy relationship with their body while exercising and (2) a 60-90-minute, photo-elicited interview exploring their experiences. Participants described their fitness center as a gendered sociocultural environment in which women must 'find their place,' highlighting the underrepresentation of women and the perpetuation of narrow body ideals in structural features throughout the gym (e.g., men-only illustrations for equipment usage, thin and fit exemplars of women on cardio machines). Participants explained their negative experiences were buffered through negotiating strategies (e.g., seeking private sub-spaces in which to exercise) and self-compassion-based messaging (e.g., body acceptance quotations on mirrors and walls). Our results support further use of sociocultural approaches for understanding body experiences in frequented exercise settings. Fitness industry professionals are encouraged to consider how the structural features of fitness centers have the potential to perpetuate, or disrupt, dominant gender narratives related to exercise that affect women's healthy connection to their bodies.

### LEC-08B

#### A SYSTEMATIC REVIEW OF THE PERCEPTION OF MENTAL HEALTH IN YOUTH SPORT AND THE ROLE THERAPY PLAYS WITHIN THIS

*Oliver Twizell, University of Manchester*

Mental health within children and young people is of growing concern, with a number of strategies explored to improve their wellbeing. Despite growing media interest into the effects of organized sport on children and young people's mental health, there remains a dearth of research (Doherty, Hannigan, & Campbell, 2016). A systematic review was conducted into the qualitative research studies related to mental health and the role of therapy within youth sport development. Searches were conducted within five electronic databases: PsychINFO; CINAHL Plus; Physical Education Index; Scopus; and SportDiscus. Additional reference searches and network contacts were employed to locate further relevant papers. Ten studies were included in the final synthesis. Thematic synthesis of qualitative research was utilized to analyze the papers (Thomas & Harden, 2008). The results of the thematic analysis revealed three main themes and seven subordinate themes. The three main themes that indicated support for mental health within youth sport were: collaborative multi-disciplinary support; developing knowledge and education of mental health; and determining the psychological skills required and the approach to support youth athletes. This review highlights a collective agreement amongst the four key domains of: youth-athletes, coaches, family, and sport organizations, that mental health is an important issue within youth sport. However, there was also recognition of the limited knowledge and understanding provided within the industry. An overriding principle connecting the themes highlights communication in imparting knowledge, providing transparency, and ensuring the delivery of psychological skills. Implications for therapy and directions for future research are discussed. These include the provision of flexible holistic support, tailored athlete-centered therapeutic practice, and therapy acting as a platform to connect the four domains.

### LEC-08C

#### ATHLETIC IDENTITY, SOCIAL PERCEPTIONS, AND PSYCHOLOGICAL OUTCOMES OF FORMER ELITE AMERICAN FOOTBALL ATHLETES

*J.D. DeFreese, University of North Carolina;  
Nikki E. Barczak-Scarboro, University of North Carolina at Chapel Hill;  
Avinash Chandran, Datalys Center for Sports Injury Research and Prevention, Inc., UNC-Chapel Hill;  
Kevin Carneiro, University of North Carolina at Chapel Hill;  
Zachary Y. Kerr, University of North Carolina at Chapel Hill;  
Kevin Guskiewicz, University of North Carolina at Chapel Hill*

Athletic identity, or the degree to which an individual identifies with the athlete role (Brewer et al., 1993), is an important consideration for the lifespan health and well-being of former athletes, with particular relevance to the transition from sport. The current study aimed to examine associations among current and retrospective athlete identity perceptions, social perceptions, and key markers of psychological health (e.g., anxiety, depression, life satisfaction) in former elite American football athletes (FEAFAs). We hypothesized that, when considering social perceptions, athletic identity

(both past and current) would be positively associated with adaptive and negatively associated with maladaptive psychological outcomes of interest. Participants (N=200; M=53.8±15.9 years) were former American collegiate (n=114) and professional (n=86) football athletes who completed a paper or internet-based questionnaire. Measures of interest, assessed via previously validated measures, included current and retrospective athletic identity (i.e., Athletic Identity Measurement Scale) as well as current anxiety (General Anxiety Disorder-7), depression (i.e., Patient Health Questionnaire-9), and life satisfaction (i.e., Satisfaction With Life Scale). Separate multivariable, linear regression models identified determinants of each study outcome. For FEAFAs, higher past athletic identity was associated with current anxiety ( $\beta = 0.24$ ,  $p < .001$ , model  $R^2 = 0.31$ ), depression ( $\beta = 0.20$ ,  $p = .002$ , model  $R^2 = 0.30$ ), and life satisfaction ( $\beta = -0.18$ ,  $p = .009$ , model  $R^2 = 0.26$ ) in hypothesized directions, when social perceptions were considered. Current athletic identity was not a significant contributor to any study outcome. In partial support of study hypotheses, results suggest peak athletic identity prior to the athlete transition may be a key contributor to the psychological outcomes of FEAFAs later in life. Though preliminary, results support future prospective research efforts which examine athletic identity development across the elite athlete transition window. Sport psychology practitioners may also benefit from training on strategies designed to support adaptive identity changes in elite athletes during their transition from sport.

### LEC-08D

#### COLLEGE STUDENT ATHLETES' STRESS AND PREFERENCES FOR SPECIALLY TRAINED PROFESSIONAL SUPPORT

*Shaine Henert, Northern Illinois University;  
Brianna Goodrich, Northern Illinois University*

The mission of AASP's Mental Health SIG is to provide education on mental health symptoms, prevention, and treatment within the athletic and performing arts population. To support this mission, the current study assessed the unique stress that college student athletes experience and identified resources athletes prefer to help them to manage their stress. College student athletes manage a multitude of stressors that make them vulnerable to a wide range of mental health issues – e.g., depression, anxiety, substance abuse, and eating disorders (Hwang & Choi, 2016; Poucher et al., 2019; Ryan et al., 2018). Therefore, it is essential to understand their unique stressors and identify resources to assist them in maintaining positive mental health and wellbeing. A mixed method design was used to examine college student athletes' ratings of stress (i.e., academic, athletic, personal/social) and their perception of resources needed to help them manage their stress. 188 college-age student athletes (82 males, 106 females), representing a variety of sports and competitive seasons, completed the College Student-Athletes' Life Stress Scale, where they report the frequency with which they encounter several stressful situations in their daily life, and 2 open-ended questions regarding their perception of available resources and preference for additional resources to help them manage stress. The college student-athletes reported medium levels of stress overall. Consistent with previous research (Lu et al., 2012), sport injury, performance demands, and academic requirements were specifically rated as the highest sources of stress. Although the college student athletes in this study most frequently reported preferring to have a professional trained in sport psychology and mental health (e.g., CMPC) to help

them manage their stress, very few reported having access to such a professional resource. Consistent with AASP's position statement, providing college student athletes with properly trained staff would help support their positive mental health and wellbeing.

### LEC-08E

#### EXAMINING THE IMPACT OF THE COVID-19 PANDEMIC ON CANADIAN NATIONAL TEAM ATHLETES' MENTAL PERFORMANCE AND MENTAL HEALTH: THE PERSPECTIVES OF MENTAL PERFORMANCE CONSULTANTS AND MENTAL HEALTH PRACTITIONERS

*Lori Dithurbide, Dalhousie University;*  
*Natalie Durand-Bush, University of Ottawa;*  
*Veronique Boudreault, Université de Sherbrooke;*  
*Lucy MacLeod, Dalhousie University;*  
*Véronique Gauthier, UQTR;*  
*Andy Van Neutegem, Own The Podium*

Following the postponement of the 2020 Tokyo Olympic Games due to COVID-19, athletes ceased all types of physical group training and interactions, and experienced significant disruptions in their daily life. As a result, the potential for athletes to experience mental health challenges was increased. In Canada, mental performance consultants (MPCs) and mental health practitioners have been diligently working to provide psychological support to national team athletes and promote the self-isolation period as an opportunity to strengthen mental performance competencies. However, the perceived value and impact of this support and athletes' collective experiences of the pandemic are unknown. The purpose of this study was to gather empirical evidence to inform future psychological support for Canada's national athletes by examining the impact of the COVID-19 pandemic on athletes' mental performance and mental health, and the role and outcomes of practitioners' work. Three online focus group interviews and two individual interviews were conducted with a total of 12 practitioners (i.e., 7 MPCs, 1 mental health practitioner, 4 with dual MPC and mental health credentials; 9 women and 3 men). Data were transcribed and thematically analyzed using NVivo software. Participants described that many athletes first appreciated time away from training and focused on recovery. But as the isolation period continued, athletes seemed to experience negative changes in mood, anxiety and motivation, and mental health symptoms present before the pandemic were exacerbated. This resulted in an increase in demand and workload for MPCs and mental health practitioners. Athletes with prior mental performance training or those strengthening their mental performance competencies during the pandemic were perceived to more effectively cope when struggling. Specifically, emotional regulation, adaptability, and mindfulness competencies were the most beneficial. Findings support recommendations to allocate resources for psychological support to Canadian national team athletes in response to significant disruptions caused by major disruptions.

### LEC-08F

#### LOOKING AT THE BRIGHT SIDE: PROMOTING POSITIVE MENTAL HEALTH ACROSS STUDENT ATHLETES' CAREERS

*David Schary, Winthrop University;*  
*Carolina Lundqvist, Linköping University & The Swedish Olympic Committee*

Efforts to maintain or improve mental health among athletes are a priority across all sports and levels of competition. Collegiate student-athletes state that mental health is a primary health concern (Brown, 2014). The World Health Organization (WHO; 2004, p. 12) defines mental health as "a state of well-being in which the individual realizes his or her abilities, can cope with normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community." Despite WHO's emphasis on well-being and functionality over disorder and dysfunction, a majority of studies on athlete mental health assess self-reported, negative mental health symptoms at one point in time (e.g., Lundqvist, 2021). Consequently, little is known about positive mental health and how mental health changes across student-athletes' careers. The present study examined indicators of positive and negative mental health among NCAA Division I student-athletes assessed at different stages of the collegiate career (i.e., freshman, sophomore, junior, senior). Participants (males: n = 65, females: n = 34) with a mean age of 19.7 (SD = 1.5) completed assessments on positive (i.e., psychological, social, and subjective well-being, quality of life) and negative (i.e., anxiety, depression) mental health dimensions. Controlling for demographics (i.e., gender, race, social support) and sport-specific variables (i.e., sport, scholarship status, years), regression analysis revealed that the reported social well-being and quality of life significantly decreased as student-athletes approached graduation, independent of anxiety and depression scores. To maximize positive mental health, student-athletes at later stages of their collegiate career may need a gradual increase of assistance in reimagining and redefining their social world to prepare for life after college without competitive sports. Practical strategies and readily available interventions to achieve proper support should be made available to coaches and support staff and included in career transition programs.

### LEC-08G

#### MENTAL HEALTH AND ELITE FEMALE ATHLETES: A SCOPING REVIEW

*Carly Perry, University of Central Lancashire;*  
*Francesca Champ, Liverpool John Moores University;*  
*Jessica Macbeth, University of Central Lancashire*

Since the turn of the decade, research into mental health and mental illness has received increased attention in elite sport (see Rice et al., 2016 & Kuettel & Larsen, 2019; Poucher et al., 2021). In the elite athlete population, the prevalence of mental illness ranges from 5-35% annually, which is comparable to that of the general adult population (Gorczyński, Coyle, & Gibson, 2017; Castaldelli-Maia et al., 2019). Rates of mental illness amongst elite female athletes are, however, higher than their male counterparts and the general population (Kuettel & Larsen, 2019). Concerningly, this population is vastly underrepresented across the sport literature. The purpose

of this scoping review was to explore and synthesise current literature concerning mental health and mental illness that has been studied specifically and/or exclusively with elite female athletes. Moreover, this review focuses on (1) identifying the methods used in research concerning mental health or mental illness and elite female athletes, (2) exploring how theory has informed the design and undertaking of these studies, and (3) providing an overview of the research purposes with the aim of identifying gaps in the literature and providing recommendations for future research. The included studies were identified and selected using broad search criteria and four separate databases. Following study identification, specific exclusion criteria were applied. Twenty-four studies met the review criteria, of which twenty studies (83.3%) used quantitative methods and a cross-sectional research design. Findings reveal that the vast majority of studies (95%) focused on eating disorders and/or disordered eating in elite female athletes who compete in 'lean-physique' or endurance sports (e.g. gymnastics, long-distance, running). Findings highlight the need for researchers to explore mental illness beyond eating disorders and broaden the scope of assessment and sport-type in order to adequately explore elite female athletes' lived experiences of poor mental health and mental illness.

### LEC-08H

#### NCAA ATHLETIC DEPARTMENTS' MENTAL HEALTH SCREENING PRACTICES: WHO, WHAT, WHEN AND HOW

*Megan Drew, University of North Texas;*  
*Trent Petrie, University of North Texas;*  
*Tess Palmateer, University of North Texas*

College student-athletes face unique, sport-related stressors and challenges that may lead to, or exacerbate, mental health (MH) concerns. In recognition of these stressors and the impact of the sport culture, which often encourages athletes to be "tough" and push through pain, the NCAA has identified MH screening as a best practice. However, there are minimal data about contemporary practices within collegiate athletic departments. Thus, we explored NCAA athletic departments' MH screening practices, including the psychological concerns covered during screenings, personnel who administer and review screeners, and resources available for "at-risk" athletes. Participants (N = 264) were personnel across DI, DII, and DIII athletic departments. Compared to DII/III (52.9%), DI (89.0%) institutions were significantly more likely to have a formal MH screening program,  $X^2(1) = 32.23, p < .001$ . The five most frequently assessed MH topics were: depression (98.9%), anxiety (95.2%), suicidal ideation/self-harm (85.6%), sleep concerns (76.5%), and disordered eating (73.3%). Athletic trainers at DII/DIII institutions, compared to DI, were significantly more likely to both administer (45.7% vs. 80.6%,  $X^2(1) = 19.70, p < .001$ ) and review (27.3% vs. 65.2%,  $X^2(1) = 20.79, p < .001$ ) screeners. At DI institutions, 74.1% of screener reviews were done by other personnel, such as sport psychologists (23.4%) and other mental health professionals (22.1%). Compared to DII/DIII, DI institutions were significantly more likely to have had a student-athlete attempt suicide (62.2% vs. 40.4%,  $X^2(1) = 10.28, p = .001$ ) and participate in inpatient treatment (68.9% vs. 43.4%,  $X^2(1) = 14.17, p < .001$ ); overall, 6.1% of institutions had a student die by suicide. The NCAA, along with its member institutions, need to continue to develop policies that promote and support MH screening within all athletic departments and ensure institutions have the resources to do so.

### LEC-08I

#### TRANSITION FROM COLLEGIATE TRACK AND FIELD: AN EXAMINATION OF VALUES AND COMMITMENT

*Mike Clark, University of Oklahoma, Clark Performance Consulting*

The purpose of this study was to investigate how personal values were associated with a healthy transition from collegiate track and field in order to shed light on ways in which universities can prepare their student-athletes for transition away from competitive sport prior to graduation. Over 500,000 student athletes are participating in NCAA and NAIA athletics at any given time and more than 100,000 leave collegiate sport each year (NCAA, 2018a), yet limited research explores ways in which student-athletes could be prepared prior to their departure from college athletics. Drawing from the theories of Acceptance and Commitment Therapy and The Minnesota Theory of Work Adjustment, the study utilized a population of former NCAA Division 1, 2, 3 and NAIA student-athletes to offer an in-depth look at the transition away from collegiate track and field. Mediation analysis was utilized to explore the interplay between commitment to values driven behavior, psychological wellbeing and the vocational psychology construct Correspondence. Findings indicated that consistent with ACT theory, the relationship between Committed Action and Psychological Flexibility was found to be significant and positive ( $\beta = .439, p < .000$ ). Results also indicated that when controlling for Committed Action, the relationship between Correspondence and Psychological Flexibility was significant and negative ( $\beta = -.016, p < .000$ ). Given the duality of improving sport and academic performance during college, this study suggests that supporting an individual's personal growth in commitment to values prior to graduation may in turn have a positive influence on their wellbeing in the workplace. Discussion will center on various considerations for applied sport psychology practitioners in clinical and non-clinical roles who come into contact with student-athletes prior to their transition from collegiate track and field.

### LEC-08J

#### WE ARE NOT OK: THE IMPACT OF COVID-19 ON THE MENTAL HEALTH OF COLLEGIATE ATHLETES

*Virginia Iannone, Stevenson University;*  
*David R. McDuff, Clinical Professor, Department of Psychiatry, University of Maryland School of Medicine;*  
*Emily Bishoff, Stevenson University;*  
*Garston Banks, Stevenson University*

This study was designed to assess the impact of the COVID-19 pandemic on the mental health and wellness of collegiate athletes, both in terms of their distress and how they are faring compared to their non-athlete peers. Participants were 245 college students aged 18-25 ( $M=19.95, SD=1.46$ ). The sample included 145 athletes and 100 non-athletes from colleges and universities in 17 different states. The athletes were primarily from NCAA Division III schools and represented 20 different sports. The sample was somewhat diverse in terms of gender (30% male) and race (75% White). *This study included the use of 5 validated measures to assess mental health and wellness. Four of the measures are part of the IOC Sport Mental Health Assessment Tool1, and a fifth measure was added to assess overall well-being.* Results indicate moderate to high levels of distress on measures of



depression (PHQ-9) and anxiety (GAD-7) with athletes scoring significantly lower than non-athletes on both measures ( $p < .001$  for both). Sleep disturbances were reported by 72% of athletes and 84% of non-athletes with no significant differences in the severity of disturbance as measured by the ASSQ ( $p > .05$ ). Concerns about disordered eating and body image were reported by 54% of athletes and 78% of non-athletes with non-athletes reporting more problematic concerns as measured by the BEDA-Q ( $p < .05$ ). In terms of mental well-being, athletes scored significantly higher on the SWEMWS, placing their score in the average range, while their non-athlete counterparts were below average ( $p < .01$ ). These results are consistent with prior research citing athletic participation as a protective factor against emotional distress. Implications of these findings will be discussed along with an overview of how the results are informing the development of support services for collegiate athletes at a Division-III university. Understanding these data are useful for any practitioner working with collegiate athletes.

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### LEC-09: Non-Sport Performance Applications

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#### LEC-09A

##### HARMONY BETWEEN THE MUSIC AND THE MIND: A PSYCHOLOGICAL SKILLS PROGRAM FOR MUSICIANS

*Anna Bomber, University of Wisconsin Green Bay;  
Tsz Lun (Alan) Chu, University of Wisconsin-Green Bay;  
Courtney Sherman, University of Wisconsin Green Bay*

Psychological skills training is becoming relatively common in high-performance sports environments, yet it is not a common practice in most non-sport performing domains such as music and performing arts (Ford et al., 2020). In addition, the literature on psychological skills training in non-sport performance contexts is scarce. Therefore, we adopted a scientist-practitioner model to develop a training program—applying evidenced-based psychological skills and methods from sport psychology and to a music setting with our contextual knowledge. <br><br>To set up the consulting relationship, a CMPC proposed this collaboration idea to a music faculty member to allow a sport and performance psychology graduate assistant to work with the music department on their students' psychological skills development. After discussing the consulting roles in an initial meeting, we implemented psychological skills training based on Weinberg and Williams' (2010) seven-phase training program in sport psychology. At the beginning of the Fall 2020 semester, we administered a needs assessment on all music students, using the Self-regulated Learning in Music Questionnaire (Hatfield, 2017), to analyze which skills to target and how and the COVID-19 pandemic impacted certain skills. The key areas of improvement (i.e., lowest scores) included time management, arousal regulation, and self-control; the area most negatively impacted by COVID-19 was goal setting. Under the CMPC's guidance, the graduate assistant determined relevant psychological skills and methods (e.g., breathing techniques) to teach to the music students via several different learning methods, including a Facebook group and in-person workshops. Within the group, we provided information via infographics and videos and facilitated discussions about how the students could apply and practice psychological skills regularly. <br><br>We will further discuss the program effectiveness, our reflections, and each of the seven phases in detail that could help consultants

interested in working with non-sport performers to create and implement their psychological skills training programs.

#### LEC-09B

##### MENTAL WELLNESS AND APPLIED MENTAL SKILLS WITH ESPORTS ATHLETES

*Jon Fledzinskas, Commander Counseling and Wellness*

Esports players engage in rigorous and demanding training after years of honing their crafts often with the hope of entering into the foray of profitable competitive gaming. Similarly to traditional athletes, healthy psychosocial functioning is a key ingredient in the effective performance of eSports players as well (Himmelstein, Liu, & Shapiro, 2021). This is not surprising, as eSports teams can face challenges to their success such as poor inter-team communication, lack of confidence, poor life balance, and improper preparation and practice (Smith, Burch, & Bright, 2019). Certain emotional states have been linked with increased efforts and successful performances in eSports (Behnke, Gross, & Kaczmarek, 2020). High degrees of emotional control and mental toughness observed that have benefitted traditional athletes are cited to be similarly useful for eSports athletes (Poulus, Coulter, Trotter, & Polman, 2020). Research seeking to understand how sport and performance psychology can be properly tailored to fit unique challenges faced in eSports is continuing to grow. This lecture will examine how the use of sport and performance psychology principles and interventions can facilitate performance in eSports athletes.

#### LEC-09C

##### ORCHESTRAL CONDUCTING: MENTAL SKILLS AS KEYS TO PERFORMANCE

*John Hazelwood, University of North Carolina at Greensboro;  
Jennifer Farrell, University of North Carolina at Greensboro*

Musical skills are only one part of what makes a musical performance successful. Previous research demonstrates that musicians can enhance performance and enjoyment through the cultivation of mental skills as (Allan, 2016; Hawkes, 2018). Orchestra conductors face unique challenges in that they are often the focal point of attention during a performance and also are responsible for directing and leading others. Not only do they need to master musical performance skills, but also a range of technical and conducting skills. While they might not feel the pressure of standing at the free-throw line, they feel similar pressure when standing in front of a symphony to conduct a performance in front of a live crowd. If the movement of a conductor's hand is even slightly off-tune, the entire orchestra may falter which leaves little room for error. If conductors make mistakes, they might overanalyze and catastrophize, which leads them down a path of destructive self-talk. Music performance anxiety, lack of confidence and unrealistic expectations of perfection are common mental challenges that conductors face. Even though conductors often focus more on the development of technical skills, it is imperative to support these technical skills with mental skills as well, just as athletes and other performers do. <br><br>Therefore, the purpose of this presentation is to describe the development and implementation of a mental skills training program for graduate students studying to be conductors within a university's School of Music. The authors will share how they adapted mental skills such as stress management, relaxation,

attentional control, imagery and self-talk to this specific population. Additionally, challenges when working with this population and considerations for future mental skills training programs will be discussed.

### LEC-09D

#### SPORT-RELATED ANXIETY AND SELF-TALK BETWEEN TRADITIONAL SPORTS AND ESPORTS

*Eric LeNorgant, California State University Fresno;  
Dawn Lewis, California State University, Fresno;  
David Kinnunen Ph.D, California State University Fresno;  
Brett Shelton Ph.D, Boise State University*

The purposes of this study were to examine trait anxiety and self-talk patterns (i.e., intensity and frequency) of eSport competitors and compare to those of traditional sports athletes. eSports has grown into a multimillion dollar industry. Competition prize pools, college scholarships, and corporate sponsorships suggest eSports are becoming a viable college and career opportunity that in turn places high psycho-emotional demands on competitors during training and competition. Sport psychology research shows competition elicits high stress and anxiety in traditional sports competitors (Ford, Ildefonso, Jones, & Arvinen-Barrow, 2017; Hanton, Mellalieu, & Williams, 2015). Also, anxiety has been found to have a significant adverse relationship to competitive sport performance (Woodman & Hardy, 2003). However, no research exploring the effects of competition and the psycho-emotional demands on eSports competitors currently exists in the literature. Therefore, it was hypothesized that there would be no significant difference between eSports and traditional sports competitors' sport-related anxiety scores. Furthermore, self-talk intensity and frequency was expected to be similar between the groups. Thirty-three eSports and 56 traditional sports competitors who compete for a NCAA Division I, II, or NAIA institution participated in this study. Participants completed demographics survey and the SAS-2, S-TQ and TOPS questionnaires. As expected, ANOVA analyses showed trait anxiety scores were not different between the two types of competitors. However, patterns of self-talk intensity and frequency differed significantly between the groups. Discussion includes a profile of the eSport competitor and recommendations for applied practice and future study in the realm of eSports.

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#### LEC-10: Professional Development, Supervision, and Mentoring

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### LEC-10A

#### GUIDELINES FOR THE DEVELOPMENT, IMPLEMENTATION, AND EVALUATION OF MENTORING PROGRAMS IN SPORT

*Jordan Lefebvre, McGill University;  
Matt Hoffmann, California State University, Fullerton;  
Alex Cai, McGill University;  
Gordon Bloom, McGill University*

There is an increasing number of sport organizations and athletic departments that are utilizing mentoring programs as a developmental tool for coaches and athletes. Despite

this, there has been a limited amount of empirical research that has examined the effectiveness of these sport mentoring programs (Bloom, 2013; Lefebvre et al., 2020). This lack of research has hampered the provision of best practices to inform practitioners and stakeholders during the development of sport mentoring programs. Therefore, this presentation will draw from best mentoring practices in the domains of management, medicine, and education to propose a set of guidelines for the (1) development, (2) implementation, and (3) evaluation of mentoring programs in sport. First, the presentation will discuss guidelines for developing a mentoring program, including the importance of establishing a planning committee, implementing a needs assessment, deciding on a mentoring structure (e.g., dyadic, triadic, or group structures), recruiting mentors and mentees, and providing compensation to mentors (Kashiwagi et al., 2013; Merrick, 2017). Second, the presentation will discuss guidelines for the successful implementation of a mentoring program, including the importance of educating mentors and mentees, careful consideration during the matching process, and implementing strategies to foster commitment and accountability, such as written contracts and program curriculum (Kashiwagi et al., 2013; Merrick, 2017). Lastly, the presentation will propose and discuss various evaluation models that can be used to guide the evaluation of the effectiveness of a mentoring program, such as the Logic Model and the Kirkpatrick Evaluation Model (Murphy & Lewes, 2017). The proposed guidelines will offer practitioners and stakeholders with practical suggestions that aim to foster high-quality formalized mentoring relationships, which can serve to promote and expedite the development of coaches and athletes, at all levels of sport.

### LEC-10B

#### THE INFLUENCE OF A DUAL-MENTORSHIP APPROACH ON A CMPC CANDIDATE'S EXPERIENCE: A SELF-STUDY

*Kevin Barton, Alpha Sport Performance;  
Jenn Jacobs, Northern Illinois University;  
Shaine Henert, Northern Illinois University*

There is limited research on the Certified Mental Performance Consultant (CMPC) mentoring experience from the mentee's perspective, despite recent calls for more research in this area (Fitzpatrick et al., 2016). The purpose of this study was to examine the influence of a dual-mentorship approach on a CMPC candidate's mentorship experience. The dual-mentorship approach involved using both a formal CMPC Approved Mentor and an informal professional mentor (i.e., graduate faculty member in Sport & Exercise Psychology). The study focused on identifying the advantages and challenges of this approach as well as recommendations for CMPC candidates embarking on the mentorship experience. Utilizing a self-study framework (Bullough Jr. & Pinnegar, 2001), data was collected from one male graduate student undergoing his CMPC mentorship hours. Data collected included journal reflections and bimonthly interviews spanning 10 weeks, focusing on his experiences with the mentorship experience (i.e., advantages, challenges, recommendations), as well as the dynamics of the dual-mentor approach. Qualitative analysis revealed that advantages of a dual-mentor approach include the provision of complementary support for the mentee. Specifically, each mentor provided unique support (i.e., progress toward CMPC requirements, consulting competency, personal development, social media skills, business insight) and common support (i.e., psychosocial support, networking connections, accountability, professional development).

This fluid dynamic enabled the CMPC candidate to develop valuable professional and life skills like navigating professional relationships and seeking proper support resources. Noted challenges for the mentee included maintaining multiple roles (e.g., graduate student, research partner, mentee, intern, and graduate assistant) and understanding how this influenced the interactions and power dynamics in each mentor relationship. Altogether, this self-study provides initial support for a dual-mentorship approach to facilitating a CMPC candidate's mentoring experience. More research is needed to understand the candidate experience during the CMPC process with respect to how mentors can best facilitate personal and professional growth.

### LEC-10C

#### WHO ARE THE CMPCS AND WHAT DO THEY DO?

*Tsz Lun (Alan) Chu, University of Wisconsin-Green Bay;*  
*Taylor Mair, University of Wisconsin-Green Bay;*  
*Ellea Bachmeier, University of Wisconsin-Green Bay*

The CMPC® certification was developed to align with the job task analysis and knowledge areas in applied sport psychology (Vealey et al., 2019). Since this modified certification was implemented, however, little systematic evidence has been available regarding the job prospects of CMPCs. The purpose of this project was to examine CMPCs' current employment types, credentials, and specializations, as well as the comparisons between CMPCs certified before and after 2018. We—three authors including a CMPC—first extracted data from the AASP's Certified Consultant Profile webpage (<https://appliedsportpsych.org/certification/cmhc-directory/>) between December 2020 and February 2021. Then, we conducted qualitative coding for all available CMPC data (N = 576; 52.3% female). Frequency analyses (non-exclusive) indicated the most common (a) employment types as private practice (45.0%), university faculty (26.9%), and applied positions within non-sport performance settings (10.1%, including 8.0% in the military); (b) credentials (beyond CMPC) as Licensed Psychologist (20.3%), Licensed Professional Counselor (4.2%), and National Certified Counselor (4.2%); and (c) specializations as elite performance (56.4%), stress management (48.8%), and psychological skills training in sport (47.0%). In contrast, the rarest specializations were transnational practice (0.7%), religion/spirituality (1.6%), and advocacy and social justice (1.7%). Comparing CMPCs certified before (n = 397) and after (n = 178) 2018, chi-square tests showed significantly (p < .05) larger proportions of professional baseball consulting (2.8% vs. 6.7%), Licensed Mental Health Counselors (1.3% vs. 4.3%), and specializations in diversity and inclusion (3.7% vs. 13.3%), psychological skills training in sport (56.6% vs. 82.9%), and team culture (33.7% vs. 60.0%) after 2018. Chi-square tests further demonstrated significantly smaller proportions of female CMPCs (56.9% vs. 41.9%), university faculty (29.7% vs. 20.8%), and Licensed Psychologists (25.5% vs. 14.4%) after 2018. This presentation will elaborate on these findings that might be attributed to the changes in the certification requirements from CC-AASP to CMPC.

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### LEC-11: Professional Issues & Ethics

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#### LEC-11A

#### RECONCEPTUALIZING SAFE SPORT: FROM PREVENTION OF HARM TO PROMOTION OF ATHLETE RIGHTS

*Joseph Gurgis, University of Toronto;*  
*Gretchen Kerr, University of Toronto*

The construct "Safe Sport" has permeated the North American sport world and is commonly understood to describe sport that is free of abuse, bullying, harassment, and sometimes, injuries, concussions, and discrimination (Kerr et al., 2020; Mountjoy et al., 2020). In response to numerous high-profile cases of harm experienced by athletes, sport organizations have endeavored to develop safe sport policies, educational programmes, and complaint processes. However, despite the proliferation of this term, confusion exists about what it does and does not encompass and without a consistent conceptual framework, the effectiveness of interventions to prevent and address harms in sport will be hindered (Kerr et al., 2020). In this study, we sought to develop a conceptual framework of safe sport informed by the perspectives of various stakeholders in sport. Using a constructivist grounded theory method (Charmaz, 2006), semi-structured interviews were conducted with 44 participants, including researchers, athletes, coaches, and sport administrators, with the purpose of eliciting views of the meaning of the term safe sport and the foundational characteristics that define this term. The findings indicated that commonalities existed across all participants, specifically regarding the prevention of and intervention in incidences of maltreatment and the prevention of physical harm caused by the hazardous sport environments. Additionally, some participants extended their interpretation of safe sport to include the optimization of the sport experience, characterized by the actualization of human rights in sport. Stemming from the findings, a conceptual framework for safeguarding is proposed, that includes the prevention of harms but also encompasses the prioritization of inclusive, accessible, and rights-based sport for all. Implications for sport psychology researchers and practitioners will be addressed.

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### LEC-12: Social Justice, Equity, and Inclusion

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#### LEC-12A

#### LET'S PLAY! EXPLORING THE IMPACT OF A SPORT- AND PHYSICAL ACTIVITY-BASED SUMMER CAMP ON THE PHYSICAL AND PSYCHOSOCIAL EXPERIENCES OF DIVERSE URBAN YOUTH

*Shaine Henert, Northern Illinois University;*  
*Jenn Jacobs, Northern Illinois University;*  
*Zachary Wahl-Alexander, Northern Illinois University*

AASP's Race & Ethnicity in Sport SIG addresses racial and ethnic disparities in the way sport psychology is accessed, promoted, and practiced in professional settings. To support this mission, a repeated measures design was used to examine the positive youth development (PYD) effects on racially- and economically-diverse urban youth participating in a sport- and physical activity-based summer camp. Specifically, we

assessed their daily physical activity (PA) levels (step counts), self-perceptions of competence in their social life, physical appearance, and global self-worth (Self-Perception Profile for Children; Harter, 2012), and personal and interpersonal developmental skills (Short Form Youth Experience Survey for Sport; Sullivan et al., 2015). The camp systematically incorporates life skills promoted in the Teaching Personal & Social Responsibility (TPSR; Hellison, 2011) and Sport-Based Youth Development (SBYD; Holt et al., 2017) models. Critics of PYD programs argue that adequate daily physical activity levels are oftentimes sacrificed for psychosocial development. Overall, campers reported that the summer camp program benefited self-perceptions of their social lives, physical appearance, and global self-worth as well as their development of personal/social, goal setting, and initiative skills. Campers of color reported benefitting the most in a number of these psychosocial domains. Results also showed that campers achieved these psychosocial benefits without sacrificing adequate daily physical activity levels. Summer camp programs with a holistic developmental approach may help diverse populations of urban youth maintain adequate daily physical activity levels while simultaneously promoting their broader psychosocial welfare. Access to affordable programs is critical in supporting racially- and economically-diverse urban youth during the summer months when they are not participating in school physical education programs. This is especially important for urban youth of color, who may experience more significant losses in PA and fitness during the summer months and reported benefitting the most from this summer camp program.

### LEC-12B

#### MAKING ROOM FOR BLACK FEMINISM AND WOMANISM IN APPLIED SPORT PSYCHOLOGY

*Sharon Couch, University of Tennessee Knoxville TN;  
Diandra Walker, University of Tennessee, Knoxville;  
Leslee Fisher, University of Tennessee*

Historically, Black women in US sport have been oppressed, dehumanized, controlled, sexualized, and marginalized as well as undeniably absent in sport psychology research and practice (Carter & Davilla, 2017; Hall, 2001). Recently, this exclusion has been somewhat addressed in books like Carter's (2019) *Feminist Applied Sport Psychology* and in the Association for Applied Sport Psychology (AASP) which now features Black women in leadership positions. Despite this positioning, the ways of understanding their experience and contributions to sport psychology have been virtually non-existent. Therefore, the purpose of this presentation is to explore how Black feminism and womanism (i.e., Collins, 1990) grounded in an endarkened feminist epistemology (Dillard, 2000) could be used as both a research and practical strategy to understand BIPOC women's applied sport psychology experiences. Highlighted are the ways that: (a) "traditional" (white) feminist applied sport psychology scholars have been preoccupied with gender and ignored race and class in feminist theorizing (Hall, 2001; Prewitt-White & Fisher, 2020); (b) moving forward, we could use Black feminism and Womanism (Collins, 1986; 1990) to theorize the ways that race, gender, and class oppression operate in sport psychology spaces; (c) the lack of intersectional analysis (Crenshaw, 1989) results in the absence of Black women's voices in sport psychology research; (d) endarkened feminist epistemology (Dillard, 2000) can help us view Black women's everyday experiences as legitimate scholarship (Collins, 1990); and (e) a social justice

road map for pushing the field forward by firmly placing Black women at the center of the discourse (Carter et al., 2020) could work. Ultimately, we aim to raise feminist consciousness - while engaging, equipping, and empowering Black women practitioners and their allies - so that an alternative theory focused in Black feminist sport psychology can emerge.

### LEC-12C

#### MALTREATMENT IN SPORT: ATHLETE IDENTITY MATTERS

*Erin Willson, University of Toronto;  
Gretchen Kerr, University of Toronto;  
Stephanie Buono, University of Toronto;  
Ashley Stirling, University of Toronto*

The current study explored the maltreatment experiences of athletes with diverse, intersectional identities. Outside of sport, substantial evidence indicates that those with socially marginalized identities experience more child maltreatment, domestic, and dating violence, but data on experiences of maltreatment amongst athletes with under-represented identities are absent. The participants in the current study included elite athletes from 64 sports, including 995 current (n=758, 76%) and retired (n=237, 24%) athletes (Mage = 27.72, SD = 9.09). The sample comprised 583 females (62%) and 362 males (38%) (50 participants did not disclose gender), those with a disability (n=110, 12%), racialized or of a racial minority (n=92, 10%), LGBTQ2SI+ (n=69, 7.5%), and Indigenous (n=15, 1.6%). Participants submitted an online, anonymous survey of maltreatment experiences in sport. A correlation analysis demonstrated that being female was related to experiencing all forms of maltreatment; identifying as racialized was related to physical harm, and identifying as LGBTQ2SI+ was related to sexual harm. To determine the individual effects of identity characteristics, a path analysis was conducted with forms of harm as dependent variables, and identity characteristics as independent variables. Being female was predictive of experiencing more harm of all forms. Identifying as racialized predicted physical harm and being an LGBTQ2SI athlete predicted sexual harm. Identifying as Indigenous or as an athlete with a disability did not predict experiences of harm. The findings pertaining to gender are congruent with previous evidence within and outside of sport; those pertaining to race and sexuality partially support previous research while findings reported by Indigenous athletes and athletes with a disability contrast existing literature in non-sport settings. Future research will benefit from replication of this study with larger samples and an exploration of the ways in which structures of oppression operate in sport.

### LEC-12D

#### SENSORY IMPAIRMENTS IN SPORT: ENHANCING UNDERSTANDING AND PROMOTING INCLUSION

*Christopher Stanley, Florida State University*

There are a variety of hidden disabilities and sensory impairments which athletes may need to negotiate with their respective sport participation and performance. Many cases are 'hidden' in nature or at lower levels of symptomatology and do not appear to impact sport involvement or require adaptation. In other cases, disabilities or impairments may more evidently impact sport participation and performance.

For instance, children with visual impairments tend to experience less physical activity than their peers (Gür et al, 2020; Wrzesińska et al, 2018). Many athletes may benefit from taking steps to ensure better access and accommodations. Sport psychology professionals may be in a unique position to assist these athletes and their coaches to recognize specific needs, understand links with sport performance, recognize and address barriers to participation, and otherwise advocate for basic modification(s) and inclusion (Lieberman & Childs, 2020). In this lecture, a few common sensory impairments will be covered, including sensory processing disorder, visual impairments, and auditory impairments. For each, definitions, forms, and prevalence will be covered, along with how they are recognized in developmental contexts. Then, attention will be given to implications for sport participation and performance, along with strategies and considerations that can help support the athletes and their coaches in developing a more inclusive environment and fostering a beneficial sport experience. The speaker will incorporate practical, evidence-based suggestions as well as share additional resources for professionals, coaches, and athletes.

### LEC-12E

#### **SOCIAL JUSTICE ACTIVISM: EXPERIENCES OF SPORT PSYCHOLOGY PROFESSIONALS DOING SOCIAL JUSTICE ACTIVISM**

*Bernadette Compton, Bowling Green State University;  
Hannah Bennett, Augusta University*

The attention to diversity, inclusion, and social justice are among the stated values within the Association of Applied Sport Psychology's ethical code. As sport psychology professionals continue working with people from different cultural and socioeconomic backgrounds, it is critical to integrate social justice and cultural sport psychology into our work (Hacker & Mann, 2017). As a theoretical framework, cultural sport psychology focuses on understanding marginalized identities within sport psychology (Schinke et al., 2012). Social justice activism, for this study, refers to professionals who work to eliminate unjust conditions such as racism, sexism, ableism, and homophobia (Gorski, 2015). Utilizing cultural sport psychology and social justice framework, one moves from merely learning about diversity and inclusion to working effectively as an advocate for social change. *We argue that as sport psychology professionals understand who they represent and how they interact within their space, their experiences within this environment can have a life-altering impact. The purpose of this exploratory qualitative study was to understand the experiences of fifteen sport psychology professionals engaged with social justice activism from across the United States. By exploring these participants' experience, this study extends previous calls to action by Schinke and Moore (2011), Schinke and colleagues (2012), and Krane and Waldron (2020), who argue for attention towards social justice and cultural competence within the field.* A thematic analysis revealed four central themes that parallel previous research within the activism literature (Gorski, 2015). These experiences, while unique to each individual, highlight the complex relationship between activism and practitioner work. The application of self-care to discuss the study's central themes will foster the reader's contextual understanding of the participant's experiences. We discuss the importance of implementing activist self-care and more extensive attention to social justice conversations within the organization and training.

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### LEC-13: Tactical Populations

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#### **LEC-13A**

##### **CHOKING ON THE BATTLEFIELD: A QUALITATIVE STUDY OF ACUTE STRESS REACTIONS IN SOLDIERS DURING COMBAT**

*Peter Jensen, New Mexico State University*

Choking during sport competition is well-researched, to include evidence-based intervention strategies (e.g., Vealey, Low, Pierce, and Quinones-Paredes, 2014), yet similar literature remains mostly absent for tactical populations facing life-threatening settings. Individuals that "choke" during a tactical crisis situation can experience performance degradations similar to athletes, as well as severe cognitive, emotional, and behavioral impacts (Maercker et al., 2013). Termed an Acute Stress Reaction (ASR), symptoms can include severe disorientation, attentional detachment, overwhelming emotions, erratic actions, and an inability to effectively respond to situational demands. Failure to manage the stress leading to an ASR can have catastrophic results for an individual and their team members (Hammeister, Pickering, and Lennox, 2011). ASRs during military combat settings appear common, with a recent study of United States Army soldiers (n = 176) finding 51.7% reported observing at least one ASR symptom in a team member during a combat assignment (Adler, Svetlitzky, and Gutierrez, 2020). Following recommendations from sport scientists (Fiore, Hoffman, and Salas, 2008) to apply sport psychology research approaches to examine military populations, document analysis (Merriam and Tisdell, 2015) was conducted with eight autobiographies from military individuals to shed light on ASRs during combat. Findings suggest soldiers observed the full range of ASR symptoms in their team members during a wide variety of combat situations. Expanding current literature, rich descriptions from the autobiography authors suggest they personally experienced several ASR symptoms, as well as performance degradations that put them in danger. Practical implications for mental performance consultants are discussed within military mental skills training approaches adapted from sport psychology (e.g., DeWiggins, Hite, and Alston, 2010). Additionally, a peer-to-peer intervention protocol (Adler et al., 2020) designed to immediately return team members to functioning during a life-threatening setting is discussed within the context of the study findings.

#### **LEC-13B**

##### **DEVELOPING TAILORED PHYSICAL ACTIVITY SUPPORT FOR STUDENT-VETERANS: AN ASSET-BASED APPROACH**

*Erin Reifsteck, University of North Carolina at Greensboro;  
Michael Hemphill, UNC Greensboro;  
DeAnne Davis Brooks, UNC Greensboro;  
Gregory Daniels, UNC Greensboro;  
Shelby Anderson, UNC Greensboro;  
Bradley Wrenn, UNC Greensboro*

Physical training and fitness values are embedded in military culture and identity (Goodrich & Hall, 2017). The transition from military service to civilian life likely presents identity and motivational challenges with sustaining a physically

active lifestyle after separation from the military. Mandatory, structured physical activity (e.g., regular physical training, periodic fitness testing) is an integral part of military service. However, limited autonomy while in the military combined with no longer having access to resources and facilities that were available during service may create barriers to regular physical activity participation for veterans (Littman et al., 2015). As many US veterans pursue education benefits through the post-9/11 GI Bill following their separation from the military, identifying community-based physical activity opportunities within the university setting can enhance the transition to a healthy civilian lifestyle. In this presentation we describe the community engagement methods we used to identify relevant issues, leverage assets, and implement solutions in a culturally appropriate, relational, and sustainable way to support student veterans' physical activity on our university campus (Kretzman & McKnight, 1993). Following the concept of reciprocity (Cooper & Orrell, 2016), we surveyed student veterans to characterize their current physical activity and related factors and conducted individual and focus group interviews with members of key groups (e.g., student veterans and faculty/staff who have a stake in student veteran physical activity) to inform our efforts to tailor a physical activity promotion framework for this population. This reciprocal process aims to center the needs and interests of student veterans. In this presentation, we describe our overall process, discuss lessons learned, and provide recommendations for other sport psychology scholar-practitioners interested in adopting a similar approach to develop tailored programming.

### LEC-13C

#### **MAXIMIZING EMBEDDED PERFORMANCE EXPERTS' EFFECTIVENESS: LESSONS LEARNED FROM THE FIELD**

*Susannah Knust, Walter Reed Army Institute of Research; Kelly Toner, TechWerks; Amanda Adrian, TechWerks; Coleen Crouch, TechWerks*

The U.S. Army has more than 200 performance psychology practitioners (Performance Experts [PEs]) at 33 Ready and Resilient Performance Centers around the world to deliver training related to performance psychology, positive psychology, and social psychology to soldiers, their families, and civilians employed by the Army. While PEs are resources for the entire Army installation where they are located, the Army Resilience Directorate (Headquarters Department of the Army) is piloting a program at four installations where three to five PEs are embedded within specific battalions or at the brigade headquarters. An Army research institute is conducting a mixed methods evaluation to better understand the embedment process and to understand leaders' perceptions of PEs' effectiveness to better set expectations for the Army and PEs as the Army continues to expand this embedment program. <br>With IRB approval, this mixed method approach includes interviews with PEs and active duty unit leaders, as well as surveys from the soldiers the PE supports. Between May 2020 and February 2021, PE and active duty leaders were interviewed at four U.S. Army installations. Nineteen PEs were interviewed at the six-month mark of their embedment and 52 leaders were interviewed about the embedment process. Although soldiers were surveyed, this presentation will only discuss findings from the interview data. <br>In this presentation, cultural competence with reference to domain-specific knowledge and contextual intelligence will be central to the results (Hays & Brown, 2004). The discussion will include selecting the right PE to embed

in a battalion; ideal characteristics of an embedded PE; the challenges of initiating embedment in the hierarchical military system; best practices while coordinating engagements, teaching, coaching, and mentoring from the PEs' perspectives; and the leaders' perception of the effectiveness of the PEs embedded in their units.

### LEC-13D

#### **PERCEPTUAL COGNITIVE TRAINING IMPROVES REACTION TIME IN STUDENT PILOTS**

*Justin Foster, The Excelling Edge; John Gassaway, USAF*

The purpose of this retrospective cohort study was to explore the feasibility and effectiveness of a multi-faceted perceptual-cognitive training approach on visual search processing and reaction time in student pilots at a United States Air Force Base. High performers across a variety of arenas have demonstrated superior perceptual-cognitive skills such as anticipation, pattern recognition, and reaction time (Mann et al., 2007; Roca & Williams, 2016). Perceptual-cognitive skills are important for performance in the fighter pilot community, enabling accurate decisions and quick reaction under pressure in a dynamic environment. Building on prior research demonstrating the effectiveness of perceptual-cognitive training programs (Parson et al., 2014; Broadbent et al., 2015; Lie et al., 2020) this initial study explored the feasibility and effectiveness of improving perceptual-cognitive skills in pilot training students during an eight week training program. This study explored the relationship between perceptual-cognitive training on a simple visual search task and reaction time task which align with broadly identified components of perception, cognition, and action (Yarrow, Brown, & Krakauer, 2009). Outcome measures were assessed under two conditions to better understand the relationship between physiological stress and perceptual-cognitive skills. This study also explored whether the students' assigned airframe had an effect on the outcome measures. The findings of this study suggest integrated and multi-faceted perceptual-cognitive training may enhance critical skills needed for pilot performance.

### LEC-13E

#### **THE RELATIONSHIP BETWEEN SQUAD COMMUNICATION AND SHOOTING PERFORMANCE DURING BATTLE DRILL 2A: REACT TO CONTACT**

*Michael King, Quantum Improvements Consulting; Eric Sikorski, Quantum Improvements Consulting*

In challenging work environments, the need to communicate clearly, appropriately, and accurately is critical. When performance in these environments is time sensitive, high-stakes, and involves an active opposition, team communication must be precise. Team leader monitoring and communication is especially critical to ensure the relevant information is received by the appropriate team members. This presentation will discuss the results of a recent project for the U.S. Army that, in part, examined team leader communication, squad response and squad performance. *The research team recorded team communication and collected data on shooting performance from 18 squads conducting live exercises of Battle Drill 2A (BD2A): React to Contact. Four members of the squad's support-by-fire team, including the team leader, were equipped with audio recording devices to capture verbal*

communication and rate of fire. Shooting performance was collected from autonomous robotic targets that captured vital and non-vital hits. A communication framework with five main communication constructs that were pertinent to the task was adopted, and measures were developed to assess team members' communications. Measures assessed included frequency of explicit directions by the team leader, and the extent to which the team exchanged information that built situational awareness. Results from the analyses revealed the significant impact that team communication has on team performance. The findings from this study can provide valuable lessons for training tactical populations as well as for professional and collegiate sports teams. Consider preparing a basketball team captain for calling out a play and directing team members in the closing seconds of a game. The captain would need to ensure communication was received with the crowd at full volume, all while monitoring the clock and defense. This is not unlike a battle drill where vital information must be communicated effectively and in a timely manner to ensure effective performance.

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### LEC-14: Teaching

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#### LEC-14A

##### DOES A GAMEFUL COURSE DESIGN INCREASE MOTOR BEHAVIOR STUDENTS' INTRINSIC MOTIVATION?

Matthew Jones, Southern Illinois University Edwardsville;  
Jedediah Blanton, University of Tennessee;  
Rachel Williams, University of Tennessee-Knoxville

Self-determination theory (SDT; Ryan & Deci, 2020) has empirical support in understanding and enhancing motivation in a variety of contexts, including education and sport performance settings. Niemiec and Ryan (2009) have highlighted that using SDT in course design can lead to stronger fulfillment of an internal locus of causality regarding course work. One course design method anchored in SDT is gameful learning – structuring tasks that support intrinsic motivation, primarily increasing autonomy over learning (Aguilar et al., 2018). A gameful classroom (GC) may offer more assignments and points than minimally necessary for students to earn a passing mark, allowing students choice in which projects to pursue. Further research is needed to examine the degree to which students' motivations differ between a GC and a non-gameful classroom (NGC). The purpose of the current study was to determine if students in a GC were more intrinsically motivated than students in an NGC. Students were enrolled in a motor behavior course using a GC design (n = 27) or NGC design (n = 30) and completed an online survey—derived from the intrinsic motivation inventory and the test-anxiety questionnaire (Nist & Diehl, 1990)—at the beginning and end of the semester. In the GC, students started with zero points, and were offered multiple assignments with scaffolded difficulty to reach their desired grade. The NGC used a traditional 100% grade range, with only required assignments and exams, and students lost points for inadequate or inaccurate responses. Using multiple univariate analyses of covariance, controlling for survey pre-scores, it was revealed that students in the GC had higher perceived autonomy than students in the NGC (p < .001). How the course was designed to be more autonomy supportive will be discussed along with additional differences between the GC and NGC.

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### LEC-15: Youth Sport

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#### LEC-15A

##### OVERCOMING FEAR: MENTAL PERFORMANCE STRATEGIES FOR YOUTH GYMNASTS

Suzanne Pottratz, Barry University;  
Briley Casanova, Complete Performance Coaching

Like many sports, gymnastics requires athletes to push themselves both mentally and physically, often from a very young age (Massimo & Massimo, 2013). However, gymnastics is unique in that the skills themselves can be very dangerous and, if not done safely, can result in serious injuries. This means that in order to be successful, gymnasts must quickly develop bravery and trust in their abilities or they will face the effects of a sometimes crippling emotion: fear (Duarte et al., 2015). In our work with this population, we have found that the most common reason for youth gymnasts to seek the help of a mental performance coach is due to lack of (or loss of) confidence, which often results in fear of performing these skills. The purpose of this lecture is to present the specific techniques that we, mental performance coaches, use with youth gymnasts in overcoming fears and building confidence. Our program consists of three phases: Awareness, Confidence, and Trust. Building self-awareness through basic mindfulness practices is the first step in building confidence as it helps athletes identify which thoughts and feelings are beneficial and which are debilitating to their performance (Kaufman et al., 2018). The second phase involves self-efficacy enhancing strategies (Chase et al., 2005), and in the third phase, we teach athletes how to trust in themselves, their coaches, and their training to overcome the fears that hold them back from performing their skills and/or routines. In the presentation we will describe each phase in detail and provide several intervention strategies that we have found to be effective in building the confidence of youth gymnasts. Challenges we have faced in working with this population on mental performance will also be discussed.

### PANELS

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#### PAN-01

##### **A NEW PLAYBOOK: PREPARING FOR THE TOKYO OLYMPIC GAMES DURING (ANOTHER) YEAR OF UNCERTAINTY**

*Lennie Waite, Waite Performance Strategies LLC;  
Amanda Perkins-Ball, Rice University;  
Anne Shadle;  
Brian Zuleger, Adams State University;  
Cindra Kamphoff, Mentally Strong Consulting &  
Minnesota State University*

A team of Sport Psychology (SP) professionals working with a high visibility US Olympic Sport conducted a study with elite athletes and coaches related to SP services, specific and preferred needs and skills, as well as preferred delivery and communication methods. This study informed planning and delivery of SP services with these athletes in the subsequent months, which was part of the (postponed) 2021 Olympic cycle. As of early 2021, the status of the Games is still uncertain to some degree and will undoubtedly be marked by significant modifications. A notable indication of this unique Olympic cycle and event is the 'playbook' outlining a variety of social and behavioral rules which are aimed at safeguarding health and improving safety during an Olympic Games occurring concurrently with a global pandemic (Tokyo Playbook, 2021). These rules may directly impact how SP professionals in Tokyo are able to interface and work with athletes as they are accustomed. To ensure SP professionals can still meet the mental performance needs of athletes in an Olympic context, along with helping monitor mental health needs, preparations were made accordingly (Henriksen et al., 2020; Haberl & McCann, 2012; McGuire & Balague, 1992; McCann, 2008). The panelists are members of the USA Track and Field SP sub-committee and will discuss and reflect upon how they have collaborated with colleagues at the USOPC to support athlete mental performance and health needs in a team-oriented manner to prepare and adapt service delivery methods in a unique, fluid training cycle leading up to and during the Tokyo Games. Additionally, panelists will discuss the diversity of the sport of track and field, from an experience, event group, and ethnicity perspective in relation to service delivery.

#### PAN-02

##### **COACHING THE CORPORATE 'ATHLETE': PARALLELS TO ATHLETICS, SPECIAL CONSIDERATIONS, AND LESSONS LEARNED**

*Arlene Bauer, SAIC;  
Andrea Ray, SAIC;  
Liz Brookhouse, US Army;  
Richard Harris;  
Robert Castillo, SAIC*

According to Aoyagi & Portenga (2010), performance psychology focuses on improving the requisite knowledge, skills, and abilities that drive performers' outcomes. According to specific standards, a performer behaves on purpose, such as an expected proficiency at a given task, to a particular time and tied to consequences (Hays, 2012). Corporate settings demand task execution to prescribed quality and

time standards; therefore, skills training related to peak performance such as attentional processes, decision-making, psychophysiological regulation, self-talk, and goal setting is relevant and necessary for high-level execution.

A number of parallels exist between sport and business. Much like sport, burnout impacts performance in corporate settings (Zhu, 2019), which has particular relevance against the pandemic's backdrop as many need to maintain high work-output amidst new challenges. Likewise, resilience and mental agility are vital in sport and business, enabled through sharpened cognitive skills. Team dynamics are critical in both settings, as are managing daily pressures and 'game-time' performances.

This panel will share best practices and lessons learned from a one-on-one performance coaching program conducted with a Fortune 500 company in 2020. Informed by research in performance psychology, behavior change, and applied mental skills, panelists implemented an eight-week coaching program that improved working memory, resilience, and self-efficacy. Panelists are pursuing or accomplished CMPCs with more than ten years of experience working in sport and military populations before entering the corporate domain. The panel will address parallels and differences across performance domains, the critical nature of maintaining the scope of practice, tracking measures of effectiveness, and ethical considerations. This presentation will have relevant implications for applied professionals in establishing and maintaining programs with non-sport populations anchored to core sport psychology principles and implications for students and early professionals in determining their career path and job opportunities.

#### PAN-03

##### **CONSULTING WITH PERFORMERS IN HIGH-RISK OCCUPATIONS: CONSIDERATIONS FOR PRACTITIONERS**

*Aspen Ankney, BLND Health; Ian Ankney, KBR;  
Brad Baumgardner, Madigan Army Medical Center;  
John Evans, BLND Health; Daniel Sproles, SOCEP*

Sport and performance psychology (SPP) professionals are increasingly working with performers from high-risk occupations. Performers in high-risk occupations include law enforcement, firefighters, military service members, and combat surgeons, among others. The performance environment surrounding these performances is constantly changing and poses at least twice the level of threat to the performers as compared to other occupations (U.S. Department of Labor, 2020). As such, consulting with this population demands much of SPP practitioners as they learn to navigate the culture, biases toward mental training, and profound consequences of high and low performance. However, graduate level course work, supervision, and text resources may not be tailoring curriculum and discussions toward the increasing demand for service from high-risk occupations. The aim of this panel is to provide contextual considerations for consulting with these performers and to answer the most common questions practitioners have when working with this population. Panelists will share their combined 40 years of experience in consulting with high-risk occupations to provide practitioners with a glimpse into different approaches taken in their consulting work. Participants will enjoy an in-depth look at the applied work conducted in this complex and important performance



domain, with special attention paid to notable interventions, ethical dilemmas, success stories, and recommendations for any involvement in this subfield of SPP.

### PAN-04

#### LEAVING THE NEST: BUILDING AND MAINTAINING YOUR NETWORK AS AN EARLY CAREER PROFESSIONAL

*Morgan Eckenrod, University of Southern Mississippi;*  
*Terilyn Shigeno, Adler University;*  
*Danielle DeLisio, Infinity Mental Performance;*  
*E. Earlynn Lauer, Western Illinois University*

Sport psychology graduate students learn the value in building relationships, engage in conversations with other practitioners, and teach professionals (e.g., athletes, coaches) about the importance of developing strong working relationships with important stakeholders. Although we recognize the value in building, nurturing, and maintaining these relationships for others, we often fail to apply this learned relational knowledge to our own training and professional experiences. Graduate school not only provides students with a prime opportunity to build these relationships with both faculty and established practitioners in the field, it also connects them with other students within their program (Vosloo et al., 2014). Building relationships with other students can enhance our understanding and interpretation of information, help us better apply knowledge, and create collaborative opportunities in teaching, research, and service. Moreover, these peer-to-peer relationships may be even more important to develop and foster because these individuals will likely progress through many professional transitions together (Lorenzetti et al., 2019). For graduate students, a notable transition is that from the role of student to the role of early career professional (ECP). Therefore, the purpose of this panel is to explore the experiences of four female ECPs (i.e., two assistant professors, a certified mental performance consultant [CMPC] and business owner, a subcontracted CMPC for a sport national governing body)—who attended the same graduate institution—relative to building, maintaining, and expanding their professional network. Panelists will explore how this network has been crucial in navigating various career transitions (e.g., negotiating salary, developing relationships with new professional networks) and challenges (e.g., creating client pricing models, staying up-to-date with the literature). Finally, the ECPs will provide unique examples, practical strategies, and personal stories illustrating how they have built and maintained their relationships, and the strategies they regularly implement to stay connected and resourceful to one another.

### PAN-05

#### MAKING FEMINIST APPLIED SPORT PSYCHOLOGY MORE DIVERSE, EQUITABLE, AND INCLUSIVE: A NECESSARY DIALOGUE

*Leslee Fisher, University of Tennessee;*  
*Sharon Couch, University of Tennessee Knoxville TN;*  
*Diandra Walker, University of Tennessee, Knoxville;*  
*Victoria Bradshaw, University of Tennessee*

Feminist applied sport psychology (FASP; Carter, 2020; Gill, 2001) is an extension of human rights, civil rights, and social justice advocacy that is ongoing and connected to our core AASP value system. However, even though Ruth Hall (2001)

called for FASP to include more marginalized voices 20 years ago, until recently, feminist applied sport psychology work has been white feminist work. The purpose of this workshop is to engage in a meaningful dialogue related to dismantling white privilege in FASP work. Confronting unexamined practices that perpetuate systemic racism is a first step in exploring how racism works in FASP scholarship and practice. This panel brings together four sport psychology professionals (one Black PhD student, one African American MS student, one white PhD student, and one white faculty member) with distinct perspectives on feminist advocacy. Our facilitated dialogue with both ourselves and the audience focuses on: 1) what does it mean to be a white feminist advocate in FASP with its legacy of exclusion, apathy, and complacency related to racial social justice? 2) what are the institutional barriers that make access to and completion of graduate school harder for BIPOC students? 3) what are the experiences of white and BIPOC feminist advocates in terms of matriculating through graduate school and choosing research topics? 4) how do we talk about and address feminist whiteness, white privilege, anti-blackness, gendered racism, and racial trauma? 5) what models might be useful moving forward? Key learning points for attendees include: a) inviting white feminists to recognize their own racial identities; and b) broadening their understanding of their place in racial history. Collaboration with audience members will be encouraged. Attendees will leave with an understanding of how an initial collaboration could lead to future steps to take to dismantle white privilege in FASP.

### PAN-06

#### PULLING BACK THE CURTAIN: A PANEL DISCUSSION ON STUDENT EQUITY AND ENGAGEMENT IN THE PUBLICATION PROCESS

*Amanda Visek, The George Washington University;*  
*Thierry Middleton, Laurentian University;*  
*Travis Scheadler, ;*  
*Liam O'Neil, Michigan State University;*  
*Kylee Ault, Michigan State University;*  
*Alex Oliver, Glasgow Caledonian University;*  
*Monna Arvinen-Barrow, University of Wisconsin - Milwaukee*

Publishing original research in peer-reviewed journals is an indicator of promise as an early career scholar, yet there exist few formal opportunities for students to receive mentorship in publishing processes. To that end, AASP student members advocated for a research publication by which they could engage in unparalleled opportunities as authors, peer reviewers, and editorial board members – all within a mentored infrastructure. This activism, on the part of students, resulted in the development of AASP's newest scientific publication, the Journal for Advancing Sport Psychology in Research. Unlike most academic publications in which students' research competes with established scientists, the journal focuses on the dissemination of rigorous student-led research with heightened attention given to students' development as authors within the journal's publishing processes. As peer reviewers and editorial board members, students are also intricately engaged as gatekeepers of the scientific knowledge published by the journal. The purpose of this panel discussion is three-fold: (a) to "pull back the curtain" on the novel operating infrastructure of the journal (e.g., author submission process, peer-review training and reviewer platform, and mentor-matched editorial board structure), (b) to introduce aspiring

academics to the array of opportunities afforded within the journal (i.e., student positions, roles, and responsibilities), and (c) to hear first-hand accounts from students regarding their involvement with the journal and its role in their development as scholars. Through facilitated discussion, attendees will have the opportunity to interact and ask questions of panelists about their positions, responsibilities, opportunity benefits, and lessons learned while serving as a student member of the editorial board. The panel will close by sharing critical resources created and published by the editorial board that can benefit students in their pursuit of favorable publishing outcomes. Students and faculty curious about the journal's operating infrastructure and opportunities for involvement are highly encouraged to attend.

### PAN-07

#### **SAGE ON THE STAGE TO GUIDE ON THE SIDE: COACHES AND COLLEGIATE ATHLETES TIE THEORETICALLY-GROUNDED MODELS TO SPORT PERFORMANCE TRAINING AND EXPECTATIONS**

*Cody Sohn, Boise State University Athletics;*  
*Corey Ihmels, Boise State University Athletics;*  
*Olivia Johnson, Boise State University Athletics*

Sport and performance psychology clients often begin as mental performance novices who learn skills that move them through advanced beginner, competent, proficient, and finally expert categories (Benner, 1984). As the multidisciplinary field of sport psychology has grown it is apparent that practitioners who introduce skills attached to theoretically-based models experience higher levels of client performance excellence (Aoyagi et al., 2017). Equally important are teaching methods that enhance knowledge acquisition, transfer and application for the client (Michael, 2006).

An assistant coach/CMPC moderates this panel exploring a Pure Performance approach combined with constructivist learning methods. It includes a student athlete who describes how she and her teammates moved from novices to active/competent users of psychological skills while the head coach discusses how this approach resulted in a role change for him and the Division I team. The intersecting perspectives of the coach/athlete/CMPC triad detail the processes and time line for: 1) the Pure Performance approach developing skills in self-determination and belonging (relatedness), a sense of originating their own behaviors (autonomy), and a sense of being able to influence their environment (competence) for the athletes (Aoyagi et al., 2017); 2) the constructivist learning model (King, 1993) helping athletes apply theory to practice; and 3) building assessments to measure performance outcomes. Audience members will have a unique opportunity to hear how higher-level development and performance are supported by connecting pedagogy to sport psychology theories.

The science-practitioner model followed by this team integrates sport psychology into its training program with a goal of athletes and staff becoming consistent and competent practitioners of mental skills that foster performance excellence. Expanding and deepening sport psychology training requires identification and consistent application of theoretical approaches and appropriate delivery methodologies. This is a rare invitation to hear the triad voices sharing perspectives of expertise development through theory plus pedagogy.

### PAN-08

#### **SYSTEMS APPROACH TO HANDLING BOUNDARIES WITHIN HIGH-PERFORMING MILITARY UNITS**

*Sean Swallen, Magellan Health;*  
*Seth Haselhuhn, KBR;*  
*Ashley Herrell, Magellan Federal;*  
*Ashley Baskerville, Magellan Federal;*  
*Sam Whalen, KBR*

The growth of the field of Performance Psychology within military populations provides unique, non-traditional opportunities to work with high-level performers in settings where performance outcomes have real-world consequences. Embedded military performance practitioners, for example, provide consultation services outside traditional contexts of a behavioral health office or training classroom, and are able to inject concepts at the point-of-use in operationally relevant training exercises such as training missions, acute medical treatment exercises, and simulated combat scenarios. However, those opportunities are not without challenges in the military setting (Johnson & Landsinger, 2017). For example, practitioners may find themselves providing services during extended hours in remote locations miles away from the office setting with limited resources (e.g., cell service, electricity, training aids) where traditional consulting frameworks must be adapted to the situation in order to be effective (Park, Lunasco, Chamberlin, & Deuster, 2020).

Additionally, while the military has professional regulations and codes directing boundaries and behaviors within their organization, contracted military performance practitioners are often considered a part of the team, without being bound to the same rule-setting documents, leaving many boundary decisions to the discretion of the practitioner. Maintaining a professional identity through mentorship and consultation is an integral strategy at navigating unique circumstances (Barnett et al., 2007; Haberl & Peterson, 2006; Johnson, Ralph, & Johnson, 2005). Currently, access to formalized, on-going mentorship and clear ethical guidelines are a work in progress in the field to assist embedded military performance practitioners.

Through the presentation of case studies from four military performance psychology practitioners, the panel will provide a systems approach toward introducing, integrating, and navigating boundaries/ethics when working with military populations. Case studies will address cultural differences (e.g., civilians without military experience), gender considerations within a male-dominated team, managing professional competencies and roles, personal boundaries, and the utility that supervision/mentorship has in ethical decision-making.

### PAN-09

#### **TAKING PRIDE IN TEACHING, CONSULTING, COACHING, AND RESEARCH**

*Leslie Larsen, California State University, Sacramento;*  
*Hannah Bennett, Augusta University;*  
*Meghan Halbrook, Randolph College;*  
*Kendra Campbell;*  
*Estel Boix Noguera, River City Rowing Club*

Sport has historically been used to promote change around social issues such as racial injustice and gender pay inequity. However, sport has been a place of resistance for the

inclusion of lesbian, gay, bisexual, transgender, queer, and other individuals (LGBTQ+) who do not conform to the gender binary and heteronormative ideals that are reproduced within sport. The unique challenges faced by LGBTQ+ performers are often overlooked by sport and exercise psychology (SEP) professionals. In a recent review of AASP conference abstracts, less than one percent of the abstracts from 2008-2017 addressed sexual orientation (Bejar, Shigeno, Larsen, & Lee, 2019). To shift away from the heteronormative nature of sport and promote the inclusion of LGBTQ+ individuals, Krane and Waldron (2020) renewed their call for queering sport psychology. Further, they suggested that more resources needed to be developed and made accessible to SEP professionals. In response to this call, this panel will help better prepare SEP professionals to become change-makers and advocates for LGBTQ+ individuals in sport and exercise.

In this interactive panel, an Associate Professor of SEP, two CMPCs, and two professional coaches will provide expertise into how SEP professionals can be inclusive of and responsive to the needs of LGBTQ+ individuals in their teaching, consulting, coaching, and research. Specifically, this panel will highlight how professionals can take PRIDE in their work. PRIDE includes: P) Preparing SEP students to address implicit bias regarding LGBTQ+ individuals through teaching, R & I) Respecting the intersectional identities of LGBTQ+ clients and Integrating responsive approaches within consulting, D) Developing accessible, welcoming, and empowering for all LGBTQ+ athletes through coaching, and E) Expanding knowledge on the experiences of LGBTQ+ individuals within sport to better inform future teaching, consulting, and coaching through research. Audience members will be able to engage with the panelists through questions and discussion.

### PAN-10

#### THE DESIGN, IMPLEMENTATION, AND DELIVERY OF COMPREHENSIVE-INTEGRATED APPLIED SPORT PSYCHOLOGY PROGRAMS: A PANEL CONVERSATION

*Rick McGuire, University of Missouri;*  
*Mark Aoyagi, University of Denver;*  
*Traci Statler, Cal State Fullerton;*  
*Scotta Morton, University of Missouri Athletics;*  
*Amber Selking, Selking Performance Group;*  
*Patrick Ivey, University of Louisville*

In 2011, five models of sport psychology practice and delivery were identified that, in essence, isolated critical aspects of service delivery (e.g., psychological skills training, counseling, interdisciplinary sport science; Aoyagi & Poczwardowski). While there was certainly some overlap amongst these categories, for the most part they remained distinct. In contemporary sport psychology, with collegiate and professional sport organizations in the United States primarily requiring hires to be licensed psychologists and having CMPC as - at best - a desired (rather than required) credential, it is difficult to make the case there has been much progress made toward integrating the models of sport psychology practice. Yet, as Aoyagi and Poczwardowski argued, an effective path forward for the field would be to focus on systematization and consolidation of these models.

This purpose of this panel is to share the experiences of mental performance consultants who have designed, implemented, and delivered comprehensive-integrated sport psychology programs (e.g., Diment, Henriksen, & Larsen, 2020; McGuire, 2021). All members of the panel are mental performance consultants, and in addition some members have served as collegiate coaches and administrators responsible for hiring mental performance consultants and sport psychology programs. As will be further explained and demonstrated, comprehensive is defined as providing the full array of services including mental performance and mental health to individuals, teams, administrative staff, and support staff. Integrated means that the program is delivered and experienced throughout the athletic department/organization. Sport psychology is integrated into the culture, conversations, coaching, and management of the athletic department/organization. In short it is part of the everyday life of the sport. As such, the panel members were all part of the conversations, responses, and actions of their respective organizations in regard to the social justice pandemic, and will share how a comprehensive-integrated program can be critical to advocacy and cultural competency.

### PAN-11

#### THE SECOND ACT: CONTINUING THE ACCEPTANCE AND COMMITMENT THERAPY (ACT) JOURNEY

*Aspen Ankney, BLND Health;*  
*Ian Ankney, KBR;*  
*John Evans, BLND Health*

Acceptance-based approaches to enhancing performance are becoming more prominent in sport and performance consulting. Acceptance and Commitment Therapy (ACT: Hayes, Strosahl, & Wilson, 1999), in particular, has been recently applied across performance domains (e.g., youth through professional sport, military, law enforcement, and so forth). As practitioners grow more comfortable with the ACT framework and begin to adapt the philosophy to performance, they may find that they have a host of questions beyond their initial understanding of the theory. Despite the growing popularity of ACT in sport and performance psychology, the 2020 annual Association of Applied Sport Psychology (AASP) conference featured just two presentations using acceptance-based approaches, one which featured best practices (Clark, Hamilton, Guest, & Pindyck, 2020) and another which demystified common misconceptions about ACT (Wooding, Bartley, Coker-Cranney, & O'Connor, 2020). This panel addresses the need to provide a space for practitioners who are interested in and currently developing their competency with ACT to meet with other practitioners embracing the ACT journey. This panel will be a chance for novice to intermediate level ACT practitioners to: (a) delve deeper into the theory, including the utility of relational frame theory and functional contextualism for performance, (b) explore considerations for application in varied performance contexts, and (c) further develop their own ability to apply ACT as a viable performance enhancement strategy. The panelists will share their combined 22 years of experience in bringing ACT to a range of performance populations. This panel will use discussions, metaphors, and case examples to meet or just slightly exceed the knowledge and comfort level of novice to intermediate ACT practitioners in order to develop their skill level and enhance their capabilities in applying this framework.

### PAN-12

#### TOKYO GAMES TAKE 2: INSIGHTS FROM THE TEAM BEHIND THE TEAM

*Karen Cogan, USOC;*  
*Alexander Cohen, United States Olympic & Paralympic Committee;*  
*Sean McCann, USOC;*  
*Sara Mitchell, United States Olympic & Paralympic Committee;*  
*Lindsay Shaw, USOC;*  
*Caroline Rodriguez;*  
*Peter Haberl, USOC*

Olympic and Paralympic athletes experience increased stress during an Olympic/Paralympic year; preparing for a postponed Games during a pandemic creates an exponentially more stressful experience and potential mental health concerns for all involved (McCann et al., 2020). The COVID-19 Pandemic affected the Olympic and Paralympic sport world in unimaginable ways and has been accompanied by extraordinary change, uncertainty, anxiety, sadness, grief, and fear (e.g., Samuel et al., 2020). Not only was Tokyo 2020 postponed to Tokyo 2021, but Winter Olympic and Paralympic events leading into Beijing 2022 were also postponed or cancelled, raising questions about what to expect for the Beijing Games. Athletes, coaches, and staff alike experienced challenges in navigating the many unknowns and accompanying emotional turmoil. This panel will consist of five USOPC sport psychologists and a moderator and will offer insights into the process of preparing athletes for a global International event in the midst of a pandemic. Panelists will examine issues around transitioning back to in-person meetings from virtual sessions, managing a multitude of disruptions and distractions in a chaotic environment, complexities related to travel with teams while managing restrictions, quarantining in other countries, and fears around potential positive COVID tests, and creating additional competition-specific COVID resources for athletes and teams. Panelist will address unique challenges related to their specific roles, including hot topics around diversity, protests, and statements on the podium; right to compete issues; return to competition after many months of inconsistent training; and sport psychologists' own consulting rustiness at initial competitions. Finally, the panel will address integrating the new Director of Mental Health and Mental Health Officer roles at the Olympic and Paralympic Games to support athletes in the most unusual Games to date.

### PAN-13

#### TRANSITIONING INTO ACADEMIC LEADERSHIP POSITIONS: WHAT TO KNOW AND CONSIDER

*Alison Ede, Long Beach State University;*  
*Tiffanye Vargas, Long Beach State University;*  
*Elizabeth Mullin, Springfield College;*  
*Penny McCullagh, CSU East Bay;*  
*Jack Watson II, West Virginia University*

Leadership training, or preparation for the transition of an athlete into a leadership role, such as to captain or athlete to coach, is a critical element for team success (Chroni & Dieffenbach, 2020), and an area studied extensively in sport psychology. Coupled with other psychological skills routinely trained, such as stress management, autonomy supportive coaching, and team-building, sport psychology faculty may

be uniquely positioned to perform well in academic leadership positions, such as graduate coordinator, department chair, and dean. However, academia does not routinely support leadership development in its professoriate (Aziz et al., 2005) in the same intentional and sequential manner seen in athletics or professional organizations (e.g., president-elect, president, past-president), often resulting in a stressful, unorganized, and scattered transition into leadership positions and may lead to job role-strain and turnover (Tietjen-Smith et al., 2020). It is critical to better equip faculty who either aspire to, or are persuaded into, leadership positions with an understanding of the scope and tools needed to be successful in academic leadership through appropriate succession planning (Davis, 2019). In this panel, five administrators will share their varied experiences in academic leadership positions. Panelists will address typical duties and expectations of the position, discussing how psychology skills play a role in their successes. Panelists will also discuss the barriers experienced in their transition (departmental, university, societal) and the impact of being in leadership positions during a pivotal time in higher education as COVID-19 changes the landscape of instruction while colleges and universities nationwide (and society at large) are experiencing a reckoning with their roles in reproducing and reinforcing white supremacy and racism. Panelists will share their experiences of supporting their colleagues and students through this tumultuous and emotionally-challenging time. Presenters will provide initiatives proposed and implemented to address barriers and better support their students and faculty.

### PAN-14

#### UNPRECEDENTED TIMES: ADJUSTING AND CREATING OPPORTUNITIES FOR IMPACT IN 2020 & BEYOND

*Sydney Masters, Arizona Diamondbacks;*  
*Kensa Gunter, Gunter Psychological Services, LLC;*  
*Zach Brandon, Arizona Diamondbacks;*  
*Stephen Gonzalez, Dartmouth College;*  
*Charles Jauss, Arizona Diamondbacks*

Loss was a ubiquitous theme throughout 2020. However, the past year also fostered opportunities for mental performance consultants (MPCs) to service athletes and teams in new and novel ways. A valuable characteristic for effective MPCs is their ability to adapt to the needs of clients and contexts in which they operate (Fortin-Guichard, Boudreault, Gagnon, & Trottie, 2018). The COVID-19 pandemic presented several unique challenges for the entire sporting landscape (Dove et al., 2020; Grix et al., 2020; Schinke et al., 2020), but it also served as a catalyst for MPCs to adjust their services for athletes, staffs, and organizations beyond traditional mental skills training.

Many MPCs transitioned to remote service delivery (Callary et al., 2020), which shifted allocations of time, resources, and reach. In addition, witnessing the social injustices occurring within the U.S. led to an increase in discussions involving race and its intersection within sport. Amidst these uncertainties, the panelists leveraged their own values, organizational values and the AASP values (service, diversity, collaboration) as a guiding compass for quick, effective decision-making in service delivery (Moran, 2011).

The current panel consists of experienced CMPC's from both collegiate and professional (e.g. MLB, NBA, WNBA) sport settings. The panelists will address the following themes: 1) Personal and professional lessons learned through self-

reflective practice (Cropley, Hanton, Miles, & Niven, 2010), 2) Opportunities revealed through the challenges of 2020 and beyond, 3) Additional forms of service delivery and support (e.g. social justice discussions, leadership development, coach education, remote mentorship), and 4) Future implications for the panelists and others in the field of sport psychology (e.g. What is sustainable? How will/can it evolve?). Attendees will learn and be able to ask questions on how to navigate a blended (remote and in-person) learning environment and capitalize on reappraisal of challenges.

### **PAN-15**

#### **WORKING IN SOCCER: HAVE YOU GOT THE BALLS FOR IT?**

*Amanda Wilding, Bournemouth University;  
Sarah Murray, Brighton and Hove Albion;  
Spencer Amy, Southampton Football Club;  
Francesca Dean, AFC Bournemouth*

Sport is commonly viewed as a male dominated environment resulting in, gender inequalities perpetuated by reports of harassment, systematic sexist behavior with specific moments of discrimination (Hindman and Nefertiti 2020). Within the game of soccer, to date, many studies examine gender equity from the perspective of investment initiatives in order to minimize economic differences, as opposed to examining the role of females as part of the performance team (Hindman and Nefertiti 2020; Jacobs 2014). Yet, recently Arnold et al., (2019) reported there being, an ever-increasing number of women working in the elite space on both the performer and sport scientist platform. Consequently, Siegele et al., (2020) report the need to firstly, increase awareness and understanding of the challenges faced by female staff members in order to provide more effective support strategies. Secondly, dissect the culture norms associated with soccer in order to eliminate the inequalities from both the male and female perspective.

In this panel, five sport psychologists who work across Premier Leagues clubs, the Football Association and international teams in the United Kingdom, will dissect, discuss and share their experiences of being female in the elite soccer environment. Panelists include one neophyte doctoral student studying sport psychology and the soccer culture and four professional sport psychologists who hold between them over 50 years of experience in elite level soccer. All four are HCPC registered and one of whom holds a doctorate degree.

They will share how they entered the field, personal experiences of operating within the performance space and lessons learned. Recommendations for how to work with females and how to hold your own as a female will be provided. Audience members will be given the opportunity to interact in order to unpick the virtues of the male dominated environment.

### POSTERS

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#### Coaching

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##### P-01

##### **ARE COACHES ALWAYS SUPPORTIVE? A QUALITATIVE EXPLORATION OF THE DYNAMIC USE COACHING STRATEGIES**

*Lena Sloot;  
Daniel Brown, University of Portsmouth*

Coach need supportive behaviors are associated with positive effects on players' well-being and performance, with opposing effects known to exist for need controlling behaviors. Yet, little is understood about how the strategies are used in terms of their frequency and interchangeability. To explore these nuances and dynamics the present qualitative study sought to collect in-depth accounts from coaches operating within the United Kingdom. In total, six coaches were interviewed through Skype using a semi-structured guide and the transcripts were analyzed using thematic analysis (Braun et al., 2016). An abductive approach was taken whereby previous literature on coach behaviour (i.e., Bartholomew et al., 2009; Berntsen et al., 2019) was used to deductively categorize known behaviors and inductive coding was used to capture any new approaches. The analysis showed that both controlling and supportive behaviors were used (e.g., competitions, giving choices); however, this did not cover all strategies (i.e., tangible rewards) or sub-strategies (e.g., clarifying responsibilities, physical punishment). Additionally, novel behaviors were identified including those targeting teamwork/teambuilding off the pitch (e.g., team commitment). The findings from this study support previous work that has shown that coaches combine both types of behavior (Haerens et al., 2018), however there appeared to be a clear preference towards supportive actions. Despite this, some behaviors had limited effects on players, since coaches set low expectations for their players (e.g., punctuality, participation). In turn, players' lack of compliance required coaches to enact controlling strategies which caused coach discomfort and a subsequent lack of action. This pattern of behaviour fits to the chaos dimension as described by Delrue, et al. (2019) and supports the approach to adapt a multidimensional view on coach behaviour. This insight could help coaches to avoid chaotic behaviour and to balance supportive behaviors with structure, subsequently improving their coaching.

##### P-02

##### **COACHES' GOAL ORIENTATIONS, MINDFULNESS, RESILIENCY, AND MENTAL HEALTH**

*Susumu Iwasaki, Fort Lewis College;  
Mark Beattie, Fort Lewis College;  
Takahiro Sato, Western New Mexico University;  
Joe Claunch, Zuni Youth Enrichment Project*

Intercollegiate coaches face many stressors and challenges in their jobs (Norris et al., 2017). Although athletes' goal orientations have been examined extensively (Roberts & Treasure, 2012), coaches' personal definitions of success in their coaching are rarely investigated. Likewise, the relationship between mental health and psychological well-being among coaches has not

been explored. The current study examined the relationship among coaches' goal orientations, mindfulness, resiliency, and mental health. Coaches at various levels (e.g., high school, college;  $n = 119$ ) volunteered to complete a survey consisting of goal orientations (task and ego) in coaching, resiliency, mindfulness, and mental health. Reliability scores were acceptable ( $\alpha > .70$ ) and Pearson correlations reported significant associations ( $p < .05$ ) between task orientation and mindfulness ( $r = .34$ ), task orientation and resiliency ( $r = .22$ ), mindfulness and resiliency ( $r = .41$ ), mental health and mindfulness ( $r = -.50$ ), and mental health and resiliency ( $r = -.25$ ). A mediation model found that there was a significant mediation chain from task orientation to resiliency and, in turn, mental health, whereas direct effect from task orientation to mental health was not statistically significant. Taken together, coaches who adopt task orientation in their coaching and demonstrate resiliency, may experience more hope and pleasure in their daily activities.

These results offer administrators insight into their coaches' mental health. For instance, the mediating effect that resiliency had on the relationship between task orientation and mental health suggests that administrators should give feedback focused on their coaches' individual growth and development. Relatedly, administrators should offer personal and professional support, and emphasize long-term goals to help coaches respond to perceived setbacks. Exploring possible psychological constructs which may be connected to coaches' mental health and coaching behaviors can be of interest for future research.

##### P-03

##### **COLLEGIATE ATHLETES' GENDER IS RELATED TO THEIR PERCEIVED COACHING CLIMATES**

*Tsz Lun (Alan) Chu, University of Wisconsin-Green Bay;  
Trent Petrie, University of North Texas;  
Erin Albert, University of Michigan CAPS*

Compared to males, females may perceive coach-created climates as more negative due to a lack of social support and encouragement (Munk et al., 2014). Yet, few studies have empirically examined the role of gender in collegiate athletes' perceptions of coaching climates. Based on Duda's (2013) Empowering Coaching framework, we hypothesized that collegiate female athletes would experience lower levels of empowering coaching climates (task-involving, autonomy-supportive, relatedness-supportive) and higher levels of disempowering coaching climates (ego-involving, controlling) than their male counterparts.

Participants were 523 collegiate athletes ( $M_{age} = 19.75$  years; 53.0% male) who were drawn from NCAA Division I and II institutions; athletes represented 14 sports. Participants completed a survey including demographic and sport backgrounds and the Coach-Created Empowering and Disempowering Motivational Climate Questionnaire (Appleton et al., 2016).

The multivariate analysis of variance results indicated significant gender differences in perceived coaching climates, Pillai's Trace = .095,  $F(5, 517) = 10.88$ ,  $p < .001$ ,  $\eta^2 = .095$ . Follow-up univariate analyses showed that, specifically, female athletes reported significantly greater task-involving coaching climates ( $M = 4.21$  vs. 3.98,  $d = 0.38$ ),  $F(1, 521) = 19.05$ ,  $p < .001$ ,  $\eta^2 = .035$ , but lesser relatedness support

from coaches ( $M = 3.52$  vs.  $3.73$ ;  $d = 0.21$ ),  $F(1, 521) = 5.81$ ,  $p = .016$ ,  $\eta^2 = .011$ , compared to their male counterparts. Autonomy-supportive, ego-involving, and controlling climates were not perceived significantly different across gender.

The gender differences in perceived coaching climates may be partially due to female athletes (a) receiving more mastery-oriented and less performance-oriented feedback and (b) having greater needs for closeness and empathetic coaching when compared to male athletes (Norman, 2016). Sport psychology professionals may help coaches be aware of these differences and support them in enhancing task-mastery for male athletes and being more relationship-focused with female athletes.

### P-04

#### POSTER WITHDRAWN

### P-05

#### HEAD COACHES MAY INFLUENCE HIGH SCHOOL ATHLETES' PSYCHOLOGICAL NEEDS AND MOTIVATION MORE POSITIVELY THAN ASSISTANT COACHES

*Sthephany Escandell, University of Wisconsin-Green Bay;*  
*Tsz Lun (Alan) Chu, University of Wisconsin-Green Bay*

Although it has been shown that coaching behaviors influence athlete motivation (Stuntz, 2016), few studies have examined the influences of different types of coaches on athlete motivation. Guided by self-determination theory (Deci & Ryan, 1985), this study explored the roles of coach type and coach gender in former high school athletes' psychological needs and motivation.

Participants were 381 former high school athletes recruited from a Midwestern university. They completed an online survey that assessed their primary high school coach's coach type (head, assistant) and gender (male, female), psychological need (autonomy, competence, and relatedness) satisfaction and frustration, and motivational regulations (intrinsic, integrated, identified, introjected, external, and amotivation).

Two 2 (coach type)  $\times$  2 (coach gender) MANOVAs revealed significant main effects of coach type on motivational regulations, Wilks'  $\lambda = .959$ ,  $F(6, 311) = 2.243$ ,  $p = .039$ ,  $\eta^2 = .041$ , and basic psychological needs, Wilks'  $\lambda = .957$ ,  $F(6, 306) = 2.289$ ,  $p = .035$ ,  $\eta^2 = .043$ . Follow-up univariate analyses indicated that athletes having a head coach as the primary coach reported greater competence satisfaction ( $M = 5.70$  vs.  $5.08$ ), intrinsic motivation ( $M = 6.25$  vs.  $5.84$ ), and identified regulation ( $M = 5.78$  vs.  $5.27$ ), as well as lower relatedness frustration ( $M = 2.96$  vs.  $3.67$ ), introjected regulation ( $M = 3.32$  vs.  $4.02$ ), and amotivation ( $M = 2.59$  vs.  $3.58$ ) than those whose having an assistant coach as the primary coach. There were no significant coach gender or interaction effects.

Findings suggest that a head coach may more positively influence high school athletes' perception of psychological needs and motivation than an assistant coach. Sport psychology and coach education professionals can help assistant coaches be aware of these potential differences in athlete perceptions and identify ways to support athletes' psychological needs, such as building rapport and emphasizing mastery rather than competition outcomes.

### P-06

#### MAKING AN IMPACT IN COMMUNITY ATHLETICS: TEACHING SPORT PSYCHOLOGY TO HIGH SCHOOL COACHES

*Kristin Mauldin, California Baptist University;*  
*Dr. Ed Garrett, California Baptist University*

The Coaches' Clinic was created in order to 1) serve the community by teaching concepts and techniques in sport psychology to Riverside Unified School District (RUSD) high school coaches, and 2) to provide a training opportunity for students in the Master of Science Sport and Performance Psychology (MS SPP) program at California Baptist University. The Coaches' Clinic was formed as a result of a collaboration with RUSD and served to support RUSD's Three C's Initiative (Community, Character, Conditioning). Three 3-hour workshops were conducted over three different seasons to cover all of the coaches' off-seasons. These workshops were evaluated by the attending coaches. The results of these evaluations are presented followed by a discussion of the benefits of these workshops as well as areas of improvement. Finally, reflection is given to the benefit to the MS SPP graduate students and faculty.

### P-07

#### PERCEPTIONS OF NEED-SUPPORTIVE AND NEED-THWARTING COACHING IN ELITE FIGURE SKATING: A DEVELOPMENTAL PERSPECTIVE

*Diane Benish; Tucker Readdy, University of Wyoming;*  
*Johannes Raabe, West Virginia University*

In the research on self-determination theory (Ryan & Deci, 2017) in sport, there is extensive evidence illustrating the important influence of coach behavior on athletes' perceived basic psychological needs (i.e., autonomy, competence, and relatedness; Occhino et al., 2014). However, much of that research has been conducted with groups of athletes of similar developmental stages (e.g., children, adolescents, or adults). In figure skating, coach-athlete relationships are often maintained for several years, with coaches serving as the primary instructor for athletes from childhood into early adulthood, a time of considerable physical and psychological development (Vernon, 2004). Therefore, the purpose of this study was to explore developmentally appropriate coaching behaviors that can optimally foster elite figure skaters' perceptions of autonomy, competence, and relatedness in different age groups. Semi-structured interviews were conducted with 13 coach-athlete dyads across four age groups: middle childhood (6-10 years), early adolescent (11-14 years), mid-adolescent (15-17), and adult (18+). A thematic analysis (Braun & Clarke, 2017) of the 26 interviews revealed unique findings across each of the three basic psychological needs. Both coaches and athletes acknowledged that building a relationship (relatedness) takes time. Thus, as athletes got older coaches became more attuned to skaters' desired interpersonal style and were able to tailor their relatedness-supportive behavior more effectively toward the individual skater. As skaters got older coaches also increased the frequency and magnitude of choices available to the athlete (autonomy); a modification that was clearly desired by the athletes. While coaches' relatedness- and autonomy-supportive behavior changed with athletes' age, competence support was primarily contingent on athlete skill level. As athletes' proficiency and knowledge increased, coaches

adopted a more interactive style. Practical implications will be discussed that can help mental performance consultants facilitate behavior among coaches that optimally nurture youth athletes' basic psychological needs satisfaction throughout their development.

### P-08

#### **PRACTICAL CONSIDERATIONS FOR THE DEVELOPMENT AND IMPLEMENTATION OF GROUP NORMS FOR COACHES**

*Alex Cai, McGill University;*  
*Jordan Lefebvre, McGill University;*  
*Danielle Alexander, McGill University;*  
*Gordon Bloom, McGill University*

Group norms can be defined as a set of expectations that apply to and are shared by all members of a group (Eys et al., 2019). By simplifying expectations for behavior, coaches can use group norms to contribute to a team's structure and promote positive team processes and outcomes, such as communication and cohesion (Paradis & Martin, 2012). Although group norms have been shown to facilitate team dynamics, there remains a lack of literature providing coaches with practical strategies for utilizing group norms. Drawing on research from both sport and non-sport disciplines, this presentation will provide eight practical considerations for coaches when developing and implementing group norms in sport. With respect to developing group norms, coaches should first consider establishing team values with athlete input. Coaches may then create norms for multiple contexts including practice, competition, offseason, and social settings; develop injunctive norms that are related to team values; and fourth, develop descriptive norms to support injunctive norms. With respect to the implementation, coaches should utilize rewards and social sanctions to promote norm-aligned behaviors; enlist other team leaders to enforce norms and create an environment of accountability; ensure norms and norm-related sanctions are communicated clearly; and finally promote team unity as norms are more effective when team members have a strong affinity for their group. Taken together, norms can be useful tools to improve team dynamics, facilitating both individual and team outcomes, and this presentation will outline the ways that coaches can develop and implement group norms with their teams.

### P-09

#### **PSYCHOLOGICAL FLEXIBILITY AND EMOTIONAL EXHAUSTION IN COLLEGE COACHES**

*Stephenie Spencer, Springfield College*

College coaches face a variety of pressures and demands related to health and performance of their athletes (Bell, 1997). These pressures leave coaches vulnerable to burnout. Researchers have shown that psychological flexibility has been related to burnout development (Chang et al., 2018) and that therapeutic work to increase psychological flexibility can also reduce emotional exhaustion (a facet of burnout; Lloyd et al., 2013; Maslach et al., 1997). This study provides the opportunity to better understand the psychological effects of the social exchanges coaches endure and how psychological flexibility affects their level of resulting emotional exhaustion. This study can provide information critical to athletic departments as they work to better support their coaches, thus contributing

to a movement to reduce burnout in coaches. Using a social exchange theory framework, it's hypothesized that negative social exchange experiences will predict emotional exhaustion, and that psychological flexibility will play a moderating role in the relationship between negative social exchange experiences and emotional exhaustion. The secondary purpose of this study is to further investigate the ability of a Modified Multidimensional Psychological Flexibility Inventory (MMPFI; Rolfs, et al., 2016) to accurately capture coaches' level of psychological flexibility alongside the Acceptance and Action Questionnaire-II (AAQ-II; Hayes et al., 2004) through an exploratory factor analysis. Currently, the AAQ-II is a commonly used measure of psychological flexibility despite having critical psychometric concerns. By using the MMPFI alongside the AAQ-II, the researcher hopes to introduce a more accurate measure of psychological flexibility to the sport psychology literature. Data from NCAA, NAIA, and NJCAA coaches is being collected through a Qualtrics survey including a demographic questionnaire, the AAQ-II, the MMPFI, the Test of Negative Social Exchange (Ruehlman & Karoly, 1991), and the Coaches Burnout Questionnaire (Lundkvist et al., 2014). Results will be included upon completion of analyses.

### P-10

#### **ROLES AND COHESION IN SPORT: A SYSTEMATIC REVIEW**

*Caitlin Haworth, Springfield College;*  
*Elizabeth Mullin, Springfield College;*  
*Kathleen Mellano, Springfield College;*  
*Michelle Moosbrugger, Springfield College*

Sport coaches are faced with building a team consisting of individuals with unique experiences, while also incorporating various team dynamics essential for team success. Roles, defined as a set of behaviors related to a specific situation, exist within individuals across group settings, such as teams (Eys & Carron, 2006) and can play a role in group dynamics. The understanding of roles in sport is informed by work in various psychology disciplines, however role-related sport constructs remain relatively understudied. The purpose of this systematic review was to examine research analyzing the relationship between cohesion and roles in sport, including role-related constructs such as ambiguity, efficacy, acceptance, and conflict. Search terms included formal roles, informal roles, cohesion, and sport, incorporating additional keywords using Boolean operators. Twenty-two articles from 473 total results that represented 11 journals were included. The studies in the sample were classified based on formal ( $n = 10$ ), informal ( $n = 5$ ), or general ( $n = 7$ ) role structure, if formal or informal was not specified. Formal role ambiguity and role conflict were negatively related to cohesion (Anderson & Dixon, 2019; Bosselut et al., 2012; Eys & Carron, 2001; Leo et al., 2019) while formal role efficacy and role acceptance were positively related to cohesion (Benson et al., 2013; Eys & Carron, 2001). General role structure was studied within broader group dynamics constructs such as communication, socialization, and cohesion. The informal role studies primarily explored the connection of personality and roles; the relationship between role-related constructs, cohesion, and informal role structure remains unclear. More research is required to expand the general understanding of informal roles in sport. As formal and informal roles combine to contribute to both task and social orientations within a team, expanding the existing knowledge of informal roles could ultimately enhance group dynamics in teams.



### P-11

#### **WE NEED YOU COACH: HOW THE COACH-ATHLETE RELATIONSHIP AFFECTS COMMITMENT AMONG VOLUNTEER HIGH SCHOOL COACHES**

*Keith McShan, Wayne State University;  
E. Whitney Moore, Wayne State University*

Volunteer coaches are the lifeblood that help make the Canadian high school sports system possible. Each year thousands of volunteers take on the responsibility to coach high school sports in Canada. (School Sport Canada, 2021). However, schools are having an increasingly hard time filling their coaching positions (Gallant, 2011). It is believed the work conditions for these coaches need to improve to help sustain the Canadian high school sport system (Camiré et al., 2016). Previous research has shown coaching satisfaction, commitment, and retention have been positively affected by the quality of the coach-athlete relationship (Knight et al., 2015). Therefore, the purpose of this study was to investigate the antecedents and outcomes of the coach-athlete relationship among a group of Ontario coaches. A total of 52 Ontario volunteer high school boys' basketball coaches (Mage = 43.41; 92% male) completed online surveys measuring their coach-athlete relationship, task and ego goal orientations, perceived intrinsic motivation of their athletes, coaching-conflict, other life-conflict, coaching satisfaction, and coaching commitment. Path model analyses were conducted to test the hypothesis that the coaches' goal orientations, coaching-conflict, other life-conflict, and perceptions of athletes' intrinsic motivation would predict coaches' satisfaction and coaching commitment through the quality of their coach-athlete relationship. The hypothesized model was partially supported. The coach-athlete relationship was predicted positively by coaches' task goal orientation, their perception of their athletes' intrinsic motivation, and negatively by coaches' ego goal orientation and other life-conflict. Coaching satisfaction and commitment were, in turn, positively predicted by the quality of the coach-athlete relationship. Implications from this study suggest that developing a strong coach-athlete relationship can positively affect volunteer coaches' satisfaction and commitment in their coaching position. Having satisfied volunteer coaches who adopt task-oriented goals may help coaches to overlook other-life conflicts in their lives to continue to coach in the future.

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#### **Collegiate Sport**

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### P-12

#### **A COMPARISON OF MOTIVATION IN SPORT BETWEEN INTERNATIONAL AND DOMESTIC STUDENT-ATHLETES**

*Ingrid Lian, Barry University;  
Nataniel Boiangin, Barry University*

Approximately 20,000 out of 500,000 athletes competing in the National Collegiate Athletic Association (NCAA) are international student-athletes (International Student-Athletes, n.d.). Several studies have compared differences between international and domestic student-athletes, such as in scholarship status, and reasons for participation in sport (Popp et al., 2011; Potuto & O'Hanlon, 2007). However, there appears to only be one empirical article comparing the two populations' levels of motivation in sport. Stokowski and

colleagues (2013) found that differences did exist in levels of sport motivation between these populations in NCAA DI sports. The purpose of the present study was to expand on this pre-existing literature by including all three NCAA divisions, while also looking at gender differences, levels of homesickness and quality of life. The following were used to measure the previously mentioned variables: Sport Motivation Scale (SMS; Pelletier et al., 1995), Utrecht Homesickness Scale (UHS; Stroebe et al., 2002), and Athlete Life Quality Scale (ALQS; Gentner et al., 2011), respectively. MANOVA, independent samples t-test and Pearson correlation tests were used to analyze the data. It is the goal that findings from the present study can be used to increase practitioner knowledge base on how to work with international athletes to improve motivation, transition process, and quality of life.

### P-13

#### **ANXIETY AND COLLEGE ATHLETES: HOW DO GENERAL AND SPORT ANXIETY RELATE TO SPORT PERFORMANCE SATISFACTION?**

*Claire Flannery, The Catholic University of America;  
Hannah Thomas, Catholic University;  
Caroline Weppner, The Catholic University of America;  
Carol Glass, The Catholic University of America;  
Thomas Minkler, West Virginia University;  
Megan Hut, West Virginia University*

Collegiate sports can induce anxiety due to their competitive nature and risk of injury (Humphrey et al., 2000) as well as time demands, and sport anxiety can impact sport performance (Smith et al., 2006). Research also suggests that sport anxiety is related to lower perceptions of both athletes' sport skill and sport gratification (Scanlan et al., 2005), but to our knowledge, no studies have examined how general anxiety also might impact athletes' overall sport performance experience.

Participants were 119 collegiate athletes (M = 19.52 years, 64.71% female) from four DIII sports who completed self-report questionnaires, including measures of sport anxiety (Sport Anxiety Scale-2; Smith et al., 2006) and overall anxiety (Depression Anxiety Stress Scales-21; Lovibond & Lovibond, 1995). Additionally, athletes filled out the Sport Rating Form (Glass et al., 2018), which assesses self-reported satisfaction with aspects of athletic performance in physical, cognitive/emotional, and cohesion domains.

As predicted, athletes' general as well as their sport anxiety were significantly associated with perceived sport performance satisfaction. Specifically, sport anxiety (and concentration and worry subscales) was inversely related to average performance ratings,  $r = -.39$ ,  $p < .001$ , as well as physical ( $r = -.30$ ) and cognitive/emotional ( $r = -.35$ ) domains. Interestingly, symptoms of both general anxiety and stress were not significantly associated with ratings of physical performance, but were inversely related to cognitive/emotional aspects of sport performance ( $r = -.27$  and  $-.23$ , respectively,  $p < .05$ ); anxiety was also negatively correlated with ratings of team cohesion ( $r = -.23$ ,  $p < .05$ ).

Results support prior research suggesting that sport anxiety is related to lower levels of sport performance satisfaction, and provide evidence that symptoms of general anxiety may also impact perceived ability, including team cohesion. More fully understanding athletes' experiences of anxiety may help inform future interventions for athletes, reducing negative affect and increasing positive feelings toward sport.

### P-14

#### **COACHING THE COACHES: EXPANDING THE CONFIDENCE AND COMPETENCE OF UNIVERSITY ATHLETICS IN SUPPORT OF THE TRANSITION FROM A D-II TO D-I LEVEL THROUGH THE INNOVATIVE MODEL OF MINDFUL PERFORMANCE ENHANCEMENT, AWARENESS AND KNOWLEDGE (MPEAK)**

Corrie Falcon, UC San Diego;  
Brian Alexander, UC San Diego;  
Mariano Rayon, Student Intern, UC San Diego

The role of a coach at the Division I level extends beyond the performance of an athlete in their sport. Through the coach's actions and relationships, they can affect an athletes' psychological state and functioning. (Felton and Jowett, 2013). The goal of this lecture is to demonstrate how sport psychology consultants can fulfill the coaching gaps in mental skills training with attention given to diverse leadership styles and personality types. Furthermore, this lecture examines the psychological framework for transitioning from Division II to Division I athletics amidst the challenges of the global pandemic. This involves an understanding of preparing scholar athletes to succeed under increased pressure of competition and stress by being purpose driven and emulating modalities of mindful leadership. This education is guided by areas of mindful performance, enhancement, awareness, and knowledge (mPEAK), attributed to empirical evidence and neuroscientific findings including resilience, focus and flow. The aim is to equip coaches with the mindfulness skills to exhibit emotional regulation as self-aware leaders. This lecture incorporates the utility of book clubs studying performance psychology, behavioral assessments and guided mindful meditation sessions performed on a weekly basis to encourage the application and discussion of learned techniques amongst college coaches. Educating coaches in mental skills can enhance a coaches' ability to motivate, mentor and respond to athletes in diverse competitive environments (Smoll & Smith, 1989). The implications of such findings define the dual benefit of training coaches for optimal performance with the understanding that team psychology begins with a top-down approach. Research findings demonstrate that the leadership quality of both coaches and athlete leaders predicted a unique part of the variance of team confidence and team cohesion. (Fransen, 2016). This lecture provides careful consideration to equity, diversity, and inclusion by cultivating a culture of diversity and a commitment to increase anti-racism education.

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### P-15

#### **COLLEGE ATHLETES' GOAL ORIENTATIONS, MINDFULNESS, RESILIENCY, AND MENTAL HEALTH**

Susumu Iwasaki, Fort Lewis College;  
Takahiro Sato, Western New Mexico University;  
Mark Beattie, Fort Lewis College;  
Joe Claunch, Zuni Youth Enrichment Project

Student-athlete mental health has emerged as an area of concern among both scholars and practitioners (NCAA GOALS Study, 2020). Previous research has found that individuals who define success based on self-referenced criteria such as effort and improvement, are likely to report higher mindfulness (McCarthy, 2011). In addition, researchers have explored connections between performance and well-being related to mindfulness and mental health (e.g., Foster & Chow, 2020). The purpose of this study was to examine the goal orientations of college athletes, and the extent to which their mindfulness and resiliency are significantly linked to their mental health. Division II college athletes (n = 145) volunteered to complete a survey concerning goal orientations in sport (task and ego), resiliency, mindfulness, and mental health. Reliability ( $\alpha > .75$ ) was acceptable and the following bivariate correlations were significant ( $ps < .05$ ): (a) Task orientation with ego orientation ( $r = .18$ ), resiliency ( $r = .19$ ), and mindfulness ( $r = .19$ ); and (b) Mental health with mindfulness ( $r = -.41$ ) and resiliency ( $r = -.43$ ). A mediation model was built and tested with one independent variable (task orientation), two mediators (mindfulness and resiliency), and one dependent variable (mental health). The two mediating paths (task orientation – mindfulness – mental health and task orientation – resiliency – mental health) were found to be statistically significant, although task orientation was not significantly connected to mental health directly.

These results suggest that for task-oriented athletes, mindfulness and resiliency may offer a path toward improved mental health. Coaches can foster these traits by framing setbacks or complications as learning opportunities to improve and grow. For instance, when an athlete dwells on a poor performance, coaches can remind them of their successes, and help them focus on their next opportunity. Further implications and suggestions for future research will be presented at the conference.

### P-16

#### **COLLEGIATE COACHES', ATHLETIC TRAINERS', AND ATHLETES' PERCEPTIONS OF PROFESSIONAL TITLES IN SPORT PSYCHOLOGY**

Alexander Bianco, University of Tennessee;  
Sabrina Madson, Miami University;  
Robin Vealey, Miami University;  
Rebecca Zakrajsek, University of Tennessee

Professional title is an important consideration for prospective consumers of sport psychology services (Woolway & Harwood, 2015) and can reflect one's competencies (Maniar et al., 2001). The purpose of this study was to assess National Collegiate Athletic Association (NCAA) Division I head coach, athletic trainer (AT), and student-athlete perceptions of three common titles used in sport psychology: Certified Mental Performance Consultant (CMPC), mental conditioning coach (MCC), and sport psychologist (SP). Participants included 55 head coaches, 67 ATs, and 26 student-athletes. The online

survey included open-ended items in which participants identified the services they think each professional can provide followed by modified confidence and stigma subscales of the Sport Psychology Attitudes – Revised (Martin et al., 2002) or Sport Psychology Attitudes – Revised Coaches 2 (Zakrajsek et al., 2011). Participants accurately described potential services provided by SPs (“...overcoming performance anxiety”; “Everything from treating depression to how to hit a curve ball”). Student-athletes accurately identified services provided by CMPCs (“...not overthink during competition”; “Help with your mental game/mental toughness”). Responses from many ATs (“I have no idea what this title means”) and head coaches (“...SP but without the professional training or graduate program...”) about CMPCs demonstrated some misunderstanding. A mixed ANOVA found that ATs and student-athletes perceived significantly more confidence in the usefulness of services from SPs compared to CMPCs,  $F(1.59, 191.11) = 40.20, p < .001, \eta^2 = .251$ . Another mixed ANOVA revealed that student-athletes perceived significantly more stigma in using services from all three professional titles than head coaches,  $F(2, 120) = 8.70, p < .001, \eta^2 = .127$ . These results suggest that participants better understood the services SPs could provide and had greater confidence in the usefulness of SPs compared to CMPCs. This presentation will discuss how to best promote the CMPC professional title in NCAA Division I environments.

### P-17

#### COLLEGIATE STUDENT-ATHLETES' RESPONSES TO THWARTED GOALS

*Marcel Yoder, University of IL-Springfield;*  
*Mason Wisley, University of Illinois - Springfield;*  
*Keith Burton, St. Leo University;*  
*Lara Ault, St. Leo University;*  
*Matthew Bolton, St. Leo University*

Outcome dependence refers to situations in which the outcomes of two persons are mutually dependent (Bershield et al., 1976). Student-athletes in collegiate settings provide a unique perspective from which to analyze responses to thwarted goals in outcome-dependent situations (Conner et al., 2012). Participants in the current study were student-athletes in a medium-sized public NCAA division 2 university in the midwest. Participants were asked to think of a person who is currently blocking a goal of the participant and then briefly describe the behavior/situation and to generate as many thoughts, questions, and explanations as they could about the other's behavior. Initial results of this ongoing data collection show that 19 of the 34 athletes reported thwarted goals. Of those, 16 wrote about the experience, yielding 113 separate identifiable data points (e.g., thoughts/feelings). Participants expressed ambivalence toward the person thwarting their goals, with 10% of statements indicating liking and 15% expressing appreciation, but they also expressed negativity. Specifically, participants also said that the other hurt the participant's motivation (15%) and made them feel hopeless (10%). Participants viewed the other's actions as negative (11%), uncommitted (5%), and self-centered (4%). Results demonstrate the complexity of outcome dependence in a college team context. Conclusions are discussed within the framework of outcome dependence with special emphasis placed on how person-factors (e.g, gender or personality) might influence the intensity and type of negative responses to thwarted goals.

### P-18

#### CORONAVIRUS CHAOS: PREDICTING ATHLETE WELL-BEING AND DAILY EMOTIONS AFTER THE ABRUPT END TO A SEASON

*Caroline Weppner, The Catholic University of America;*  
*Carol Glass, The Catholic University of America;*  
*James Doorley, George Mason University;*  
*Hannah Thomas, Catholic University;*  
*Megan Hut, West Virginia University*

COVID-19, the most destructive pandemic in over a century, disrupted lives over the past year (Park et al., 2020), including those of NCAA student-athletes. In the present study, we hypothesized that baseline negative emotional states, self-compassion, and mindfulness would be related to athletes' daily negative and positive emotions following the premature end to their sport season.

Participants were 17 student-athletes (82.35% female) across multiple sports at a Mid-Atlantic NCAA D-III university. Baseline measures completed in January included the Depression Anxiety Stress Scales-21 (Lovibond & Lovibond, 1995), the Self-Compassion Scale (Neff, 2003), and the Five Facet Mindfulness Questionnaire-15 (Baer et al., 2012). After returning home for online classes due to COVID-19, student-athletes completed 14 consecutive end-of-day diary records focusing on positive and negative daily emotions.

As predicted, there was a strong relationship between higher levels of baseline self-compassion and higher daily positive emotions (e.g., gratitude,  $r = .64, p = .005$ ) and lesser daily negative emotions (e.g., nervousness,  $r = -.61$ ) following sport termination. Although not associated with less positive emotions, higher levels of baseline stress were associated with the experience of six daily negative emotions. Baseline depression predicted similar emotions following sport termination (e.g., sluggishness,  $r = .68, p = .003$ ). Finally, higher baseline mindfulness was associated with lower levels of nervousness ( $r = -.66, p = .004$ ) and sluggishness ( $r = -.62, p = .008$ ).

Although previous studies have used daily diaries to study athletes' experience (Reifsteck et al., 2021), this study is the first to demonstrate the importance of self-compassion, mindfulness and negative emotional states in predicting daily emotions following the premature end to athletes' sport season. Additionally, results offer a unique perspective into the effects of COVID-19 on student-athletes' well-being and resiliency. The implications for both athletes and coaches will be discussed, and suggestions made for future research.

### P-19

#### DIFFERENCES IN ATHLETIC VALUES BASED ON GENDER, ACADEMIC STANDING, AND TEAM V. INDIVIDUAL SPORTS

Jordan Collins, Saint Louis University;  
Kimberly Lowell, Saint Louis University;  
Luke Evans, Saint Louis University;  
Madeline Bruce, Saint Louis University;  
Lindsey Poe, Saint Louis University;  
Zachary Merz, Cone Health;  
Michael Ross, Saint Louis University

**Background:** Research investigating differences in intrinsic and extrinsic value importance across athletic subgroups is sparse. The current study sought to examine differences across gender, race/ethnicity, class standing, and team vs individual sport participation regarding the perceived importance of various athletic values.

**Methods:** Participants included a group of 65 student-athletes from a NCAA Division I private institution in the midwestern United States. Participants were asked to rank a list of 30 (21 intrinsic, 9 extrinsic) athlete generated values based on their perceived importance to athletic performance (i.e., most important, of average importance, least important).

**Results:** Although statistically significant gender differences did not emerge, a trend level difference was seen between males and females across the opportunity for future success value ( $U = 424$ ,  $Z = -2.103$ ,  $p = .035$ ). Regarding race/ethnicity, student-athletes who identified as Non-White/Caucasian placed a higher importance on team improvement relative to White/Caucasian student-athletes' ( $U = 370$ ,  $Z = -2.045$ ,  $p = .041$ ). Regarding class standing, no differences emerged. However, follow-up pairwise comparisons revealed a potential trend-level difference, with Sophomore athletes valuing team improvement greater than Senior/Graduate student-athletes ( $\chi^2(3) = 10.6$ ,  $p = .014$ ). Regarding sport type, student-athletes involved in team sports placed higher importance across values of team improvement ( $U = 509$ ,  $Z = -2.873$ ,  $p = .005$ ), trust in others (teammates, coaches, support staff;  $U = 537$ ,  $Z = -2.57$ ,  $p = .010$ ), financial gain (scholarship money;  $U = 536.5$ ,  $Z = -2.53$ ,  $p = .012$ ), leadership ( $U = 525$ ,  $Z = -2.733$ ,  $p = .006$ ), confidence ( $U = 512$ ,  $Z = -2.850$ ,  $p = .004$ ), selflessness/humility ( $U = 505$ ,  $Z = -2.844$ ,  $p = .004$ ), and future earnings potential ( $U = 592$ ,  $Z = -1.974$ ,  $p = .048$ ).

**Discussion:** As value-driven behavior is an integral part of sport psychology practice, it is important to understand differences in the perceived importance of common values across athletic groups. A better understanding allows for a more individualized or tailored approaches to performance enhancement when working with athletes.

### P-20

#### EXAMINING THE IMPORTANCE AND REASONING BEHIND BASEBALL BATTERS' PRE-BAT ROUTINES FROM A DEVELOPMENTAL VIEW

Olivia Vasiloff, Ball State University;  
Lindsey Blom, Ball State University;  
Khirey Walker, Ball State University;  
Lawrence Judge, Ball State University;  
Erin Sadler, Ball State University

A pre-performance routine (PPR) is the sequence of task-relevant thoughts and actions athletes engage in systematically prior to the performance of a sport or skill (Moran, 1996). Routines are developed based on a variety of factors such as coach influence, sport requirement, existing behaviors, preferred mindset for competition, and required outcomes for the execution of skill (Cotterill, 2011; Mellalieu et al., 2009). In the sport of baseball, pre-bat routines (PBR) have been found helpful (Otto et al., 2014). However, one area not understood well is how athletes develop their routine as they age. Significant amounts of cognitive development occur between the ages of 17-27 years in males (Donnellan, 2007). Thus, it is important to understand this development from a psychological standpoint. The purpose of this research study was to better understand the development of PBRs in high school and collegiate baseball batters. Six high school and six collegiate baseball batters were interviewed. To assess the developmental process of the PBR, themes were compared between high school and college participations, resulting in one major theme for high schoolers (prompted from knowledgeable individuals) and three for college (development of routine importance, development of increased trust in self, and routine development influences). Results from interviews indicated collegiate batters had more emphasis on cognitive components and mental skills which links to self-efficacy (Foster et al., 2006; Hardy et al., 2001). High school batters focused on the behavioral aspect of the routine, showing the use of social affiliation for self-definition within the sport (Grace & Cramer, 2003). From this research, mental performance consultants (MPC) learn key components batters focus on before bat execution. Therefore, MPC can begin to implement to high school batters' mental skills which have been proven to be applicable and beneficial beginning at an earlier age to receive maximum benefits over time.

### P-21

#### EXPLORING MEANING DERIVED FROM COMPETITIVE EXPERIENCE - FROM THE PERSPECTIVE OF WHOLENESS

Daisuke Takeda, Tokai University;  
Shizuka Hatakeyama, Tokai University

In some psychological support practices for athletes, approaches based on analytical or existential psychology seek to support athletes from a wholeness or a holistic perspective (Ronkainen & Nesti, 2019). Based on the belief that the body receives messages from the unconscious, practitioners capture the athlete's wholeness by the state of harmony between mind and body (Takeda, 2019). A narrative of an athlete's physical experience is interpreted as an expression of their spirituality. The narrative has a unique meaning for each athlete. Accumulation of data from psycho-practice provides evidence.

In this presentation, we introduce an attempt to explore the unique meaning given to an athlete's athletic experience based on a detailed career history that a college woman athlete narrated. She has been competing since childhood, and even after entering college, she played an active part in the play style she had cultivated up to now, namely, her strength and speed. In addition, she struggled with relationships in the club and was not strong enough to withstand the pressure of her seniors. After a while she ended up not being able to win and had to change her playing style.

Following advice to let the tension out of her shoulders and to use her body flexibly, she worked on improving how to treat her own body, gradually changing her sense of center of gravity in her lower body and how to apply strength across the racket. By this time, she had also played a major role in her team and was required to assert herself. Along with the transformation of how the ego was involved in her own body, her own independence was fostered.

In the above case, we considered the meaning of her athletic experience using concepts such as "lack of mind-body unity" and "aware of dominance of body over mind."

### P-22

#### **EXPLORING THE COPING MECHANISMS UTILIZED BY DIVISION III STUDENT-ATHLETES REPRESENTING A SINGLE ATHLETIC CONFERENCE IN RESPONSE TO THE COVID-19 PANDEMIC**

*Lauren Murray, McDaniel College;*  
*Jessica Ford, McDaniel College*

The Coronavirus pandemic (COVID-19) has negatively impacted student-athletes, causing increased anxiety, increased feelings of stress, feelings of helplessness, and decreased motivation (Bullard, 2020; NCAA, 2020). Due to the limited amount of funds, resources, and the uncertainty associated with the athletic seasons' ever-changing status (e.g., cancelled, modified, or not cancelled) (Brown, 2020; Bullard, 2020), it is speculated that Division III student-athletes may face unique challenges not experienced by other NCAA Divisions. Additionally, Division III conferences may differ in the types of protocols they can employ for athletes to compete safely, prompting the need to focus the research on student-athletes from one specific conference (e.g., Bullard, 2020). Recent studies have examined Division III student-athletes' well-being (Bullard, 2020) and the challenges college students have experienced throughout the COVID-19 pandemic (e.g., Hamza et al., 2020; Grubic et al., 2020; Rogowska et al., 2020). However, there has been little research examining how Division III student-athletes are coping with these added challenges, and to the authors' knowledge, none to date have included the prolonged impact of the 2021 season cancellations. Therefore, the purpose of this study is to explore the coping mechanisms utilized by Division III student-athletes representing a single athletic conference in response to the stressors associated with the COVID-19 pandemic. Student-athletes representing all sports from the 2020-2021 season(s) will be recruited from one conference to complete the Perceived Stress Scale (PSS; Cohen & Williamson, 1983), Coronavirus Anxiety Scale (CAS; Lee, 2020), COPE Inventory (Carver, 2013), The Brief Resilient Coping Scale (BRCS; Carver, 1997), and additional open-ended questions. Group comparisons across year in school, type of sport, and other sociodemographic factors will be

considered. This poster will present the findings and discuss the implications in relation to how this knowledge may inform future conference-specific programming efforts to support its student-athletes during these uncertain times.

### P-23

#### **EXPLORING THE RELATIONSHIP BETWEEN HARDINESS AND PERFORMANCE IN COLLEGE BASEBALL PLAYERS**

*Kevin Lou, West Virginia University;*  
*Scott Barnicle, West Virginia University;*  
*Sam Zizzi, West Virginia University;*  
*Jake Follmer, West Virginia University;*  
*Joe Wargo, West Virginia University*

With the increase of mental performance consulting positions in baseball, some practitioners and researchers have started to examine and develop players' personality in the face of anxiety. The purpose of this study was to explore the moderating effect of the individual personality characteristic of hardiness on the relationship between trait anxiety and objective performance within NCAA Division I collegiate baseball players. An updated and shortened version of the Personal Views Survey (PVS III-R) was used to measure hardiness after a confirmatory factor analysis (CFA) was conducted. Of the total 389 players that participated, 171 met inclusion criteria requirements and were split into two groups – hitters (N=394) and pitchers (N=380) – to identify differences in skills and how sub-constructs of hardiness (commitment, control, challenge) affected performance through a descriptive correlational design. The results show significant moderating effects of commitment for pitchers that accounted for the majority of variance in the relationship between perception of trait anxiety intensity and left on base percentage (LOB%) and wild pitches (WP). For hitters, significant moderating effects of control accounted for less variance in the relationship between perception of trait anxiety intensity on batting average on balls in play (BABIP) and double plays grounded into (GDP). The findings indicate there may be situational significance of hardiness' moderating effect on the relationship between trait anxiety and objective performance that may be present in game situations with runners on-base. Practitioners could use these findings to target mental skills that could develop a pitcher's commitment or hitter's sense of control to moderate their performance within baseball specific situations. Mental performance consultants or baseball coaches could also potentially use these findings to help reframe the intensity of cognitive or somatic anxiety during situations with runners on-base both during a pitcher's mound visit or before a hitter's important at-bat.

### P-24

#### **GRIT AND ITS RELATIONSHIP WITH ATHLETIC PERFORMANCE IN FEMALE COLLEGIATE ATHLETES**

*Luca Ziegler;*  
*Drew Brandel, Presbyterian College*

Grit, describing one's trait-like perseverance and passion for long-term goals, has been identified in prior research as an effective predictor of performance in a wide variety of environments. In this study, the relationship between grit and athletic performance was examined. The Short Grit Scale (Grit-S; Duckworth & Quinn, 2009) was administered to

each player on a D1 Women's Basketball team to establish baseline scores ( $N = 13$ ,  $M = 3.78/5$ ). As a proxy of athletic performance, Player Efficiency Rating (PER) scores for all eligible players were calculated from the 2019-2021 seasons. Power analyses suggested a larger sample size ( $N \approx 20$ ) could be needed for the strong negative correlation between baseline Grit-S scores and '19-'20 PER scores among returning players ( $r(7) = -.287$ ,  $p = .454$ ) to reach statistical significance. Next, the researchers developed and facilitated a series of customized "Cognitive Coaching" sessions targeting unique needs of the team and several research-based ideas related to improving grit (i.e., Team Culture, Growth Mindset, and Deliberate Practice). Using a brief, researcher-developed survey, data regarding the players' perceptions of each session's acceptability, feasibility of integration, and likelihood of implementation were collected. Data trends were analyzed to inform adaptations of the "Cognitive Coaching" sessions, and post-intervention Grit-S scores were collected ( $N = 15$ ,  $M = 3.85/5$ ). Relationships between quantitative session feedback and individual changes in grit were analyzed. Power analyses suggested the strong correlation between individual changes in grit and average session ratings ( $r(11) = -.482$ ,  $p = .096$ ) would have been significant with a slightly larger team ( $N \approx 20$ ). Recommendations for the further exploration of grit with larger and more diverse sample sizes, as well as explanations and implications related to improving grit, the collected data, and the "Cognitive Coaching" sessions will be discussed.

### P-25

#### IDENTIFYING SELF-AWARENESS OF LEADERSHIP ABILITIES IN COLLEGIATE TEAM CAPTAINS USING A 360 DEGREE FEEDBACK METHOD

*Stephen Cadoux, Barry University;*  
*Kimberly Shaffer, Barry University*

Self-awareness is one of the most vital characteristics to effective leadership (George, Sims, McLean, & Mayer, 2007), yet it is a trait rarely measured within leaders (Eurich, 2017). Without self-awareness, leaders place themselves in a position of weakness that can negatively impact their team's performance (Bratton, Dodd, Brown, 2011). Using NCAA Division II athletes, this study aimed to identify if captains of collegiate athletics teams are self-aware of their leadership abilities. The study was conducted via the Multifactor Leadership Questionnaire (MLQ) (Avolio & Bass, 2004) and a research technique known as the 360-degree feedback method (Drew, 2009). Teammates and coaches completed the MLQ about their team captain(s) leadership abilities. Meanwhile, the captain rated their own leadership using the MLQ. Results from the three participant groups were compared to identify how self-aware the captain is with their perceived leadership abilities. The applied nature of this study is valuable for creating leadership programs within collegiate athletic departments and provides a quantitative model for assessing self-awareness in leadership. The 360-degree feedback method (Drew, 2009) will allow certified practitioners to better understand the full extent of the captain's ability to lead their teams and the impact their leadership has on those around them.

### P-26

#### INTO THE ZONE: DIFFERENCES IN FLOW STATES ACROSS INDIVIDUAL AND TEAM SPORTS

*Madeline Bruce, Saint Louis University;*  
*Kimberly Lowell, Saint Louis University;*  
*Jordan Collins, Saint Louis University;*  
*Isabella Fiorenzo, Saint Louis University;*  
*Zachary Merz, Cone Health;*  
*Joanne Perry, Novant Health System;*  
*Michael Ross, Saint Louis University*

**Introduction:** Satisfying and personally meaningful performance is associated with a flow state, where the body and mind seem to function automatically and effortlessly (Csikszentmihalyi, 1975). Achieving flow has been a common focus of sport psychological science and practice. As an altered state of awareness, flow experiences may differ in relation to sport-specific demands. Specifically, athletes working with teammates likely need to integrate more components (e.g., team dynamics, team progress) into their awareness, whereas individual sport athletes have fewer and more proximal attentional demands. Flow is reportedly stronger in individual sport athletes at the elite level (Cathcart et al., 2014), but replication and extension in collegiate level athletes is lacking.

**Methods:**  $N = 68$  NCAA Division I student-athletes who sought sport psychology services completed the Flow State Scale-2 (Jackson & March, 1996), a post-event measure of perceived flow state. Facets include sense of control, merging action and awareness, activity difficulty, loss of self-consciousness, automatic experience, clarity of goals, concentration of task, transformation of time, and unambiguous feedback. One-way ANOVAs were run to assess mean differences between individual sport athletes and athletes in team-based sports.

**Results:** Athletes differed based on sport type in relation to the perceived clarity of goals,  $F(1, 67) = 6.82$ ,  $p = .01$ . Individual-sport athletes reported significantly clearer goals compared to team-sport athletes. No other differences were found.

**Discussion:** These results suggest that athletes having to operate within a team for their sport may experience less goal-oriented clarity, a point of potential intervention in improving team performance and cohesion.

### P-27

#### IS ATHLETE ACTIVISM A PREDICTOR OF RESILIENCE?

*Travis Scheadler,*

Several athletes have taken personal responsibility to engage in activism, often with hopes of bringing social and political change. While scholars have identified several barriers preventing athletes from engaging in activism (e.g., public criticism, status and job loss, withdrawal of funding, anticipated distress; Cunningham & Regan, 2012), other scholars have identified personal benefits from engaging in activism (e.g., improved confidence, self-concept, belief in change, agency, life meaning; Klar & Kasser, 2009; Rabkin et al., 2019). Distress from the barriers, however, may be prerequisites to enhancing resilience, a theoretical construct that may help explain the benefits of activism. Thus, by applying the metatheory of resilience and resiliency, the purpose of the present study was to examine the relationships between athletic identity (AI), activist

identity and commitment (AIC), perceived stress (PS), stress control mindset (SCM), and mental toughness (MT). Overall, the 204 NCAA student-athletes surveyed in the present study reported low AIC, potentially resulting in the lack of significant findings. Regression models did not find that the theorized benefits of athlete activism were related to AIC as originally thought. Nonetheless, the lack of a relationship between activist identity and commitment with stress control mindset and mental toughness suggests embracing an activist identity and commitment does not decrease stress control mindset or mental toughness as originally thought. Furthermore, the positive relationship between stress control mindset and mental toughness suggests stress control mindset should be further explored within sport psychology.

### P-28

#### **“KIND OF A SECONDARY THOUGHT”: EXAMINING THE EXPERIENCE OF FORMER STUDENT-ATHLETES WITH CAREER IDENTIFICATION, PREPAREDNESS, AND TRANSITION INTO THE PROFESSIONAL WORLD**

*Stefanee Maurice, California Polytechnic State University;  
Kenyon Mason-Perez, California Polytechnic State University;  
Bryce Oberhauser-Lim, California Polytechnic State University;  
Louise Torgerson, California Polytechnic State University;  
Brian Greenwood, California Polytechnic State University;  
Darren Avrit, California Polytechnic State University*

With almost a half-million student-athletes competing in NCAA intercollegiate athletics, the vast majority will have their competitive athletic endeavors come to a close at the end of their collegiate career (NCAA, 2021). The transition into a professional career following a student-athlete experience can be a difficult process. Some student-athletes find themselves unprepared for the transition into a professional career environment. The purpose of this study was to assess career identity, career preparedness, and career transition for former NCAA Division I student-athletes. Forty-three former student-athletes were interviewed to assess their experience in transitioning from a student-athlete into a young professional. Interview data were analyzed using inductive and in vivo coding methods. The former student-athletes identified successes and struggles they had while preparing themselves for the working world. Many identified a lack of preparedness due to a commitment to their sport. The subjects in this study also identified biases they experienced from others while in school and coming out of school into the workforce. Results of this study should be used to identify what needs student-athletes have that are not being addressed so that the transition into a professional career can be a smoother and more seamless experience.

### P-29

#### **MENTAL REPS- A STUDENT-ATHLETE SPORT PSYCHOLOGY INITIATIVE PROMOTED THROUGH INSTAGRAM LIVE**

*Halley Altieri, University of North Carolina Greensboro;  
Bianca Briones, University of North Carolina Greensboro;  
McKenzie Goebel, University of North Carolina-Greensboror;  
Sloan Johnson;  
Jennifer Farrell, University of North Carolina at Greensboro*

Due to the recent challenges of delivering mental skills training (MST) services to student-athletes during COVID-19, as

well as the increase in popularity of social media platforms on college campuses, it is necessary to develop alternative methods of service delivery. While Zoom has been popular for sharing MST content, many student-athletes are frequently on Zoom for classes and team meetings and may be experiencing “Zoom fatigue” (Wiederhold, 2020). Thus, there is a need to examine alternative, easily accessible methods for sharing content with a large audience. According to Cotterill & Symes (2014), social media platforms such as Twitter, Facebook, LinkedIn, and podcasts can be a useful tool for sport psychology practitioners to deliver MST. The use of Instagram Live is similar to podcasting in which a prepared topic can be projected live and then recorded with the ability for an audience to view later.

Therefore, this poster presentation will outline the design and content of “Mental Reps,” a series of brief MST sessions delivered through Instagram Live for collegiate student-athletes with the goal of enhancing performance and mental well-being. “Mental Reps” consisted of 15 minute information sessions led by applied sport psychology graduate students. “Mental Reps” topics included: enhancing concentration, stress management, reducing performance anxiety, understanding and enhancing self-talk, thought management strategies, relaxation tools, imagery techniques and identity and end of sport transition. The platform of Instagram Live increased accessibility to all student athletes on campus. Additionally, any athlete, who might have missed the helpful tip or technique, was able to watch it at another time. The presenters will also share lessons learned and tips for using Instagram Live for MST. Participants will be able to utilize content from this presentation to help develop their own mental skills training interventions via social media platforms.

### P-30

#### **MENTAL SKILLS TRAINING INTERVENTION: PRE-POSTTEST GROUP DIFFERENCES ON AN ESTIMATED ONE-REPETITION MAXIMUM TEST BETWEEN COLLEGE-AGED FEMALE ATHLETES**

*Fitni Destani, Keene State College;  
Samantha Audette, Keene State College;  
Lucia Calvi, Keene State College;  
James Emery, Keene State College;  
Makenzie Jankowski, Keene State College;  
Marissa Lamoree, Keene State College;  
Hannah Neverett, Keene State College*

According to the National Strength and Conditioning Association (NSCA), strength training settings are aimed to improve athletic performance. Alternatively, Mental Skills Training (MST) education for athletes has been minimally used in strength settings, but has been well established in actual game settings to aid in athletic sport performance (Vealey, 2007). Thus, the goal was to determine if a MST program resulted in strength gain differences on an estimated 1-repetition strength test (bench press) from the pretest to the posttest for two female athletic college Division III teams. Thirty-seven female student athletes aged 18-21 in an off-season strength conditioning program participated in this study. This study incorporated a 3-week MST (one-hour education phase, coaching feedback phase, testing phase) program that culminated in an estimated 1-repetition bench press posttest. A demographic questionnaire was collected that included questions related to athlete satisfaction in their off-season strength program, their openness to using mental

skills, as well as their perceived effectiveness in using mental skills they employed in the intervention. This study was a non-randomized quasi experimental 2X2 ANOVA design. One team received MST, while the other team did not. Two-way ANOVA was conducted that examined the effect of strength between sport,  $F(2, 29) = 1.069$ ,  $p = .310$ . Main effects showed a statistically significant difference for strength ( $p = .000$ ), but there was not a statistically significant difference between strength by sport interaction ( $p = .061$ ). However, a simple mean analysis did reveal that the treatment team employed more mental skill strategies ( $M = 4.54$  versus  $M = 2.80$ ) during the posttest strength test than the non-treatment team. Thus, this study has mixed results in the use of a MST program in strength and conditioning settings but a greater sample size with a manipulation check tool would be advised for future studies.

### P-31

#### MENTAL TOUGHNESS AND ATTRIBUTION OF PERCEIVED FAILURE IN COLLEGIATE ATHLETES

*Brielle Migur, Fresno State;*  
*Jenelle Gilbert, California State University, Fresno;*  
*Stephanie Moore, California State University, Fresno;*  
*Mariya Yukhymenko, California State University, Fresno;*  
*Wade Gilbert, California State University, Fresno*

Mental toughness and attribution are contributing factors to an athlete's mindset about performance and the performance itself (Cowden, 2016; Rasclé et al., 2008). While there is an abundance of individual research on mental toughness and attribution in the sports setting, there is limited research exploring the relationship between these two constructs (Cowden, 2017; Rees et al., 2005). Therefore, the purpose of this study was to examine the relationship between mental toughness and attribution of perceived failed outcomes of collegiate athletes. Eighty-one NCAA (American) and U Sport (Canadian) student-athletes participated in an online survey. The survey included the Sport Mental Toughness Questionnaire (SMTQ; Sheard et al., 2009), the short form version of the Sport Attributional Style Scale (SASS; Hanrahan & Grove, 1990), and a demographic questionnaire. SMTQ is used to assess overall mental toughness along three subscales: confidence, constancy, and control. SASS is used to measure attribution along five dimensions: internality, stability, globality, controllability, and intentionality. This study considered the relationship between mental toughness and attribution dimension across demographic information, the correlations between the two constructs, and whether mental toughness could predict attribution dimensions. Results revealed low correlations between several mental toughness and several attribution dimensions for both positive and negative events. T-tests and a one-way ANOVA found no significant differences between gender, country, and academic year, on mental toughness scores and the attribution dimensions. However, it was revealed that individual sport athletes ( $M = 11.39$ ) scored significantly higher on the confidence subcomponent of mental toughness than team sport athletes ( $M = 9.84$ ). Lastly, a multiple regression revealed that overall mental toughness and its subcomponents proved to be predictors for several attribution dimensions, such as internal control, stability, and globality. Overall, this study suggests that there is some association between athletes' mental toughness and how they attribute outcomes.

### P-32

#### MOTIVATIONAL PROFILES OF NCAA COLLEGIATE ATHLETES AND THEIR DIFFERENCES ACROSS DIVISIONS: A PERSON-CENTERED APPROACH

*Alec Treacy, UW-Green Bay;*  
*Tsz Lun (Alan) Chu, University of Wisconsin-Green Bay*

A person-centered approach, in which motivational profiles are analyzed, is useful for providing insight into how people are motivated multidimensionally (Vansteenkiste et al., 2009). However, previous research has not examined motivational profiles in collegiate athletes for designing evidence-based interventions. Thus, the purpose of this study was to investigate collegiate athletes' motivational profiles using cluster analysis and any differences across gender, division, and scholarship status.

Participants were 201 NCAA collegiate athletes (Mage = 19.72, 139 female) who completed surveys assessing their demographic information, sports backgrounds, and sport motivation. Motivational profiles were explored and validated through hierarchical and non-hierarchical (k-means) cluster analyses, respectively. Chi-square tests were also conducted to examine potential cluster differences based on gender (male, female), division (I to III), and scholarship status (full, partial, no).

The agglomeration schedule from the hierarchical cluster analysis indicated a large increase in the clustering coefficient from three- to two-clusters (28.56%). Inspection of the dendrogram indicated a two- or three-cluster solution, identifying three clusters as the best solution. K-means analysis then successfully validated the clusters that formed three distinct motivational profiles: "controlled" ( $n = 47$ ), "autonomous" ( $n = 115$ ), and "amotivated" ( $n = 39$ ). Chi-square tests revealed significant differences in motivational profiles across division,  $\chi^2(6) = 15.36$ ,  $p = .018$ , and scholarship status,  $\chi^2(4) = 11.03$ ,  $p = .026$ , but not gender,  $\chi^2(2) = 2.75$ ,  $p = .254$ . The autonomous profile consisted of significantly larger proportions of Division III (73.5%) and non-scholarship (67.5%) athletes than Division I (49.5%) and full-ride (42.1%) athletes. The amotivated profile consisted of significantly larger proportions of full-ride (31.6%) athletes than non-scholarship (9.1%) athletes.

Through a person-centered approach, sport psychology professionals can categorize collegiate athletes into motivational profiles and design motivational interventions accordingly, especially for a relatively large proportion of athletes with full-ride scholarships in the amotivated profile.

### P-33

#### NCAA COLLEGIATE ATHLETES' PSYCHOLOGICAL SKILL PROFILES: A NOVEL PERSON-CENTERED APPROACH

*Beaux Myers, University of Wisconsin - Green Bay;*  
*Tsz Lun (Alan) Chu, University of Wisconsin-Green Bay*

Athletic coping skills have been shown to predict athletic performance and differ across gender and sport type. (Christensen & Smith, 2016). However, previous research has used a variable-centered rather than a person-centered approach to examine these multidimensional skills. Therefore, the purpose of this study was to examine collegiate athletes' psychological skill profiles using cluster analysis (a person-



centered approach) and their potential differences across gender and sport type (individual vs. team sports).

Participants were 189 NCAA Division I to III collegiate athletes (Mage = 19.71; 130 females) who completed a survey assessing their demographic variables and levels of psychological skills utilizing the Athletic Coping Skills Inventory-28 (Smith et al., 1995). Hierarchical and nonhierarchical (k-means) cluster analyses were conducted to respectively explore and validate a cluster solution of psychological skills. Chi-square tests were also performed to investigate cluster differences based on gender and sport type.

An agglomeration schedule from the hierarchical cluster analysis showed large increases in the clustering coefficient from four-to-three (6% to 9%) and two-to-one (9% to 31%) clusters. Inspection of the dendrogram indicated a two- or four-cluster solution, so we identified a four-cluster solution, which includes the profiles of “high freedom from worry” (n = 44), “high coping skills” (n = 66), “low coping skills” (n = 42), and “low freedom from worry” (n = 37). Chi-square tests showed no significant differences between gender,  $\chi^2(3) = 4.64$ ,  $p = .20$ , or sport type,  $\chi^2(3) = 1.34$ ,  $p = .72$ .

“High coping skills” was the most common psychological skill profile among collegiate athletes. The findings suggest that psychological skill profiles may not differ across gender or sport type. Using a person-centered approach to assess athletes’ psychological skills could be helpful for sport psychology professionals and coaches to design and implement personalized interventions that target specific skills.

### P-34

#### **PREDICTORS OF ACADEMIC PERFORMANCE OF FIRST-YEAR STUDENT-ATHLETES UNDER THE COVID-19 CRISIS**

*Tatsuo Yagi, Tokai University*

Online courses were introduced in all Japanese universities after the first state of emergency for COVID-19 from April 7 to May 25, 2020, in Japan. This study used a time-lagged design and investigated if grit (Duckworth et al., 2007), SOC (Sense of Coherence; Antonovsky, 1979), life-styles, career choice, and gender predicted the academic performance of first-year student-athletes in the first semester of 2020.

The participants were 104 first-year student-athletes (89 men and 15 women) of Seiwa university in Japan. The participants completed the Japanese version of the 13-item Sense of Coherence Scale and the Japanese version of the 8-item Grit Scale, in May, during the first month of classes. They also responded to questionnaires inquiring about several background and life-styles variables, including the frequency of doing part-time work, the rate of skipping breakfast, and career choice (decided/undecided). We used the first semester’s credits as an indicator of academic performance in the first semester of 2020.

Multiple regression analysis indicated that independent variables including “perseverance of effort” which is a sub-facet of “grit” ( $\beta = .201$ ,  $p = .031$ ), gender ( $\beta = -.306$ ,  $p = .001$ ) and career choice ( $\beta = .250$ ,  $p = .008$ ) best predicted credits in the first semester.

The findings of this study emphasized gender differences in academic performance among first-year student-athletes. The results also suggested that perseverance through grit and career choice in the first month of classes predicted student-athletes’ first-year academic performance under the COVID-19 crisis. It is concluded that starting career education from the first-year and helping student-athletes make career decisions could improve their competitive performance and academic performance, even when facing adversities.

### P-35

#### **QUEST FOR STUDENT-ATHLETE ACHIEVEMENT: A PILOT STUDY USING GAMIFICATION TO ENHANCE FIRST YEAR STUDENT-ATHLETES’ ACADEMIC SELF-EFFICACY**

*Amber Shipherd, Texas A&M University - Kingsville / Next Level Mind Consulting;*  
*Joann Wakefield, Georgia Southern University Athletics;*  
*Hanna Lantz, Texas A&M University - Kingsville Athletics;*  
*Kadi Shipman Dyal, Texas A&M University - Kingsville*

Research has demonstrated a strong relationship between academic self-efficacy and academic performance (e.g., Honicke & Broadbent, 2016). Student-athletes hold lower academic efficacy beliefs than non-athletes (Jolly, 2008) and often report struggling with academics during their first year of college (Huml et al., 2019). Many NCAA institutions offer programming for first-year student-athletes, however, there is limited empirical data on programs at Division II or III institutions (Nite, 2012), and scarce data on the impact of such programming on self-efficacy. Gamification, or using game-based mechanics and aesthetics in a non-game environment, has been found to be an effective method of increasing learners’ motivation and self-efficacy and appeals to this generation of students (Kapp, 2012). Thus, this gamified pilot project aimed to increase student-athlete academic self-efficacy and awareness of resources and opportunities to support academic excellence. Three incoming student-athletes and eight non-athletes that served as a control group completed measures of academic self-efficacy and perceived academic stress at the beginning and end of the fall 2020 semester. Semi-structured interviews were also conducted after the program ended to improve program effectiveness and quality. This program, guided by Fink’s (2013) taxonomy, gamification principles, and feedback from prior student-athlete and faculty focus groups, consisted of synchronous virtual workshops designed to introduce and provide student-athletes experience with psychological skills training and with behaviors linked to successful academic performance. Participating student-athletes were also enrolled in a self-paced class using GradeCraft to further practice and master the skills learned in the workshops both individually and also in collaboration with others. While there were no statistically significant differences in academic self-efficacy or perceived academic stress between the two groups, qualitative feedback from student-athletes suggested the intervention may still have been effective in increasing academic self-efficacy and increasing their resiliency self-efficacy. Implications for faculty, athletic staff, and practitioners will be discussed.

### P-36

#### RETURNING TO PLAY AFTER COVID-19: CONCERNS OF COLLEGIATE ATHLETES

Virginia Iannone, *Stevenson University*;  
David R. McDuff, *Clinical Professor, Department of Psychiatry,  
University of Maryland School of Medicine*;  
Emily Bishoff, *Stevenson University*

The purpose of this study was to better understand the impact that the COVID-19 pandemic has had on collegiate athletes' training and preparation as well as the specific concerns of athletes as they prepare to return to play.

Participants were 145 collegiate athletes aged 18-25 ( $M=19.78, SD=1.45$ ). There was diversity in gender (53% male) but less so in race (82% white). They represented 20 different sports, primarily from NCAA Division III. Almost half of the participants were in season when the pandemic began and 70% of the sample lost  $\frac{3}{4}$  of their season or more.

Participants completed the Athlete Psychological Strain Questionnaire, a series of questions about their training experiences during the cancellation, and items about their specific concerns surrounding their return to play.

Results indicated a high level of psychological strain on the APSQ ( $M=22.51$ ), with 72% of athletes meeting the cutoff score for psychological distress ( $>17$ ) that would be worthy of further screening with the IOC Sport Mental Health Assessment Tool-1. Only 33% of athletes reported continuing to work with a coach or trainer once their season was cancelled. Many athletes said the pandemic resulted in lower levels of motivation to play (42%), and less opportunity to practice sport-specific skills (47%) and connect with teammates (55%) and coaches (37%). 85% of athletes acknowledged a general concern about the impact that the pandemic will have on their upcoming season as well as concerns that they will be less competitive due to the loss of fitness and skills.

These data provide a better understanding of the training losses experienced during the cancellation as well as the specific concerns of college athletes as they return to play. These findings have important implications for how coaches, trainers and we, as sport psychology professionals, help athletes prepare for their return to play.

### P-37

#### STAYING POSITIVE DURING THE COVID-19 PANDEMIC: THE IMPACT OF COLLEGIATE TEAM CLIMATE

Chelsi Scott, *University of Kansas*;  
Troy Wineinger, *University of Kansas*;  
Susumu Iwasaki, *Fort Lewis College*;  
Mary Fry, *University of Kansas*

The purpose of this study was to employ Achievement Goal Perspective Theory (AGPT; Nicholls, 1984) and a Caring Framework (Newton et al., 2007) to examine the relationship between athletes' perceptions of their team climate (caring [CC], task- [TI] and ego-involving [EI]), their perceived social support, and their positive thoughts during the COVID-19 pandemic. In the Spring of 2020, after most colleges had transitioned to online learning and sport seasons were cancelled, collegiate athletes ( $N=751$ ; 56.3% female; 43% male; 0.7% non-binary/other) participating in various sports

and sport leagues (e.g., junior colleges, NCAA Divisions I to III) volunteered to complete an online survey that included measures of their perceived team climate, perceived support from their coaches and teammates, as well as their positive thoughts during the COVID-19 pandemic. Athletes' perceptions of a caring and task-involving (CTI) team climate were positively associated with their perceived support from coaches and teammates, and their positive thoughts during the COVID-19 pandemic. Further, athletes' perceptions of an EI climate were, as hypothesized, negatively associated with their perceptions of support from coaches and teammates. Final SEM analysis supported a partially mediated model, whereby the Support from Coach positively mediated the relationship between CC to Positive Thoughts; in addition, there was a significant positive path from perceptions of a TI climate to Support from Teammates. Results suggest that when athletes perceived a CTI climate on their team, they were better suited to manage a major life event (i.e., COVID-19 pandemic). Specifically, athletes who perceived a CTI climate on their teams were more likely to experience strong support from their coaches and teammates. This support resulted in the athletes displaying a more positive outlook in dealing with the challenges brought on by the pandemic. This study reinforces the important role coaches play in their athletes' lives in and outside of sport.

### P-38

#### THE IMPACT OF COVID-19 ON COLLEGE ATHLETES: COGNITIVE APPRAISALS, EMOTIONS, AND BEHAVIORS

Jeff Frykholm, *University of Minnesota*

COVID-19 has become a global phenomenon, significantly affecting virtually all aspects of society, inclusive of the world of Sport. The many examples of COVID-19 spreading through and among teams and athletes of all levels reminds us that nobody — not even the most well-conditioned athletes on the planet — are immune from the virus.

This six-month qualitative study took place within the context of an NCAA Division 1 men's soccer program. The theoretical orientation for this study likened the impact of COVID-19 to that of a serious injury — one that not only alters the sport participation of athletes, but also has the potential to influence their mental health and well-being. Using well-regarded models of sport injury psychology (e.g., Wiese-Bjornstal, Smith, Shaffer, & Morrey, 1998), this study sought to understand athletes' cognitive appraisals of COVID-19 on their experiences, their emotional responses to the loss of athletic opportunities, and the resulting behaviors they evidenced in the process of finding new pathways and expressions of their athletic identity.

Thematic analyses (Braun, Clarke, & Weate, 2016) generated understandings of the athlete experience, and were oriented within the framework of the Scheme of Change for Sport Psychology Practice Model (Samuel & Tenebaum, 2011) which provides a lens to view COVID-19 as a career change event. In addition to field observations and research notes, in-depth group and individual interviews were conducted with 14 of the players. Processes of "indwelling" (Maykut & Morehouse, 1994), "participant reflections" (Smith and McGannon, 2018), and "critical friends" (Burke, 2016; Smith & Sparkes, 2012) were used to uncover salient features of the athletes' cognitive appraisals, behavioral changes, emotional reactions, and shifts in identity inherent in their experiences.

### P-39

#### **TRANSITIONING OUT-OF-SPORT: FACTORS ASSOCIATED WITH ANTICIPATED DIFFICULTY IN NCAA FOOTBALL ATHLETES**

*David Tobar, Bowling Green State University;  
Alyssa Mathews, Bowling Green State University;  
Bonnie Berger, Bowling Green State University;  
Lynn Darby, Bowling Green State University;  
David Owen, Brooklyn College of the City University of  
New York*

The transition out-of-sport after college may be difficult for some athletes (Miller & Buttell, 2018). Schlossberg's model (1984) of human adaptation to transition posits that individual characteristics may influence the transition process. This study examines athletes' anticipated difficulty transitioning out-of-sport with career maturity and subjective well-being. Division I (n = 49) and III (n = 55) football athletes reported on their anticipated difficulty transitioning out-of-sport and their extent of planning for a career after graduation (Mathews, 2019). Athletes completed the Career Decision Scale (Osipow, et al., 1976), and the Profile of Mood States (McNair, et al., 1992). Based on previous findings (Berger, et al., 2019), D-I and D-III athletes were analyzed separately. A majority of D-I (57%) and D-III (64%) football athletes anticipated difficulty with transitioning out-of-sport. Athletes who anticipated more difficulty with the transition reported less planning for a career after graduation (D-I:  $r = -.33$ ,  $p < .05$ ), lower career maturity (D-I:  $r = -.33$ ,  $p < .05$ ; D-III:  $r = -.37$ ,  $p < .01$ ), and more Tension (D-I:  $r = .29$ ,  $p < .05$ ; D-III:  $r = .33$ ,  $p < .05$ ), Fatigue (D-III:  $r = .30$ ,  $p < .05$ ), Confusion (D-I:  $r = .30$ ,  $p < .05$ ; D-III:  $r = .30$ ,  $p < .05$ ), and Total Mood Disturbance (D-I:  $r = .29$ ,  $p < .05$ ; D-III:  $r = .31$ ,  $p < .05$ ). In conclusion, both D-I and D-III NCAA football athletes who anticipated difficulty with the transition out-of-sport reported lower career maturity and less desirable moods. Among D-I athletes, the anticipated difficulty also was associated with less planning for a career after graduation. Although student athlete services were available to D-I athletes, these results indicate that additional assistance may be needed for athletes' transition out-of-sport.

### P-40

#### **UPPING OUR MENTAL GAME: A STUDENT-LED INITIATIVE SUPPORTING COLLEGIATE ATHLETES**

*Brea McLaughlin, University of Alberta;  
Danae Frenzt, University of Alberta;  
Ben Sereda, University of Alberta;  
Amber Mosewich, University of Alberta;  
Klaudia Sapieja, University of Alberta;  
Craig Hordal, Edmonton Police Service;  
Lydia Sokol, University of Alberta*

Student-athletes are typically challenged with managing a unique set of stressors as part of their post-secondary experience (Egan, 2019). In addition to both academic and sport demands, this past year's global pandemic posed numerous challenges with unpredictable and enduring consequences. COVID-19 profoundly influenced the landscape of collegiate sport, as competitive seasons ended abruptly and many still have yet to resume. Taken together, the circumstances of 2020 have undeniably accentuated the need for resources that support student-athlete mental performance and well-being.

In recognition of this need, a group of graduate students at a Western Canadian university have begun an initiative that aims to support the mental performance and well-being of its student-athletes. Designed to complement and bolster pre-existing programming, this student-led initiative brings together empirically-informed resources and members of the campus community with the goal of providing holistic support for student-athletes.

To provide holistic support, initiative members have developed mental training sessions, psychoeducational resources, and online materials tailored to needs identified by the student-athletes, coaches, and support staff. Plans for a mentorship program are also underway, with the aim of providing additional student volunteers with learning experiences in applied sport psychology settings. Although a nascent endeavour, this initiative has already garnered support from university sport administrators, coaches, and athletes. The founding members are encouraged to continue with its development and look forward to sharing the details of how the process has unfolded thus far. They will describe the working model, including initial development, organizational structure, and approach to program delivery. They will also share future directions for the project and encourage ongoing dialogue about similar initiatives within the AASP community.

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### Consulting & Interventions

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### P-41

#### **A CASE STUDY OF THE FACE-TO-FACE TO VIRTUAL TRANSITION OF AN APPLIED SPORT PSYCHOLOGY PROGRAM AT A LARGE PUBLIC UNIVERSITY IN THE USA**

*Gabriela Caviedes, Florida State University;  
Thomas Gretton, Florida State University;  
David Eccles, Florida State University*

At a large public US university, we studied the process of moving an applied sport psychology program, wherein graduate students learn consultancy skills from a face-to-face (FtF) mode, to a virtual (i.e., remote, online) mode in response to the pandemic. Our aims were to identify challenges and opportunities of this transition for supervisors, students, and clients, and best practices for virtual and FtF consultancy, especially given the need for, but little research on the proper and ethical use of telecommunication services for consultancy (Price et al., 2020). We adopted an autoethnographic case study method involving interviews with 3 supervisors, 8 consultants, 2 shadow-consultants, and 1 NCAA D1 coach, and also the recording and discussion of researcher observation and lived experience within the bounds of virtual work. A blended ethnographic and codebook thematic analysis was undertaken (Braun & Clarke, 2020; Hartmann et al., 2020) with methodological congruency (Poucher et al., 2019) and forms of triangulation promoting methodological rigor. We identified three superordinate challenges following our analysis: (1) communication challenges, (2) program structure challenges, and (3) direct work challenges. Communication challenges included (a) reduced opportunities in virtual mode for informal, ad hoc, and just-in-time "watercooler" discussions that have important instrumental and emotional functions during consultancy and (b) increased difficulty creating and maintaining client relationships due to a lack

of actual human presence and contact. Three superordinate best practice themes were also identified: (1) supervisor best practices; (2) consultant best practices; and (3) best practices in consultancy processes. For example, the transition to a virtual mode exposed points of vulnerability in relation to gatekeeper relationships between supervisor, consultant, and client/practicum site, which involved the communication challenges described. These vulnerabilities emphasized the need to establish more formal supervisor-consultant-client agreements, with specified communication lines and clear roles, expectations, and norms for undertaking collaborative consultancy work.

### **P-42**

#### **A QUALITATIVE EXPLORATION OF DYNAMIC RUNNING THERAPY FOR MINDFUL RUNNING**

*Megan Gossfeld, Headway Mental Performance Consulting, LLC, Owner;*  
*Cindra Kamphoff, Mentally Strong Consulting & Minnesota State University;*  
*Michelle McAlarnen, Minnesota State University, Mankato*

The purpose of this convergent-parallel mixed-methods study was to explore the mental experiences and mental health outcomes of runners throughout an eight-week mindful running intervention adapted from Dynamic Running Therapy (Pullen, 2017). Dynamic Running Therapy is a mindfulness-integrated cognitive behavioral therapy technique combining meditation, movement, and journaling to help runners intentionally acknowledge their present-moment thoughts, feelings, and sensations (Pullen, 2017). This quasi-experimental study included five adult recreational runners ages 23 to 46 years old who completed multiple scales and open-ended questions informed by a phenomenological orientation. Prior to beginning the mindful running intervention, participants completed a pre-test survey measuring their baseline trait mindfulness (Cognitive and Affective Mindfulness Scale-Revised; Feldman et al., 2006), anxiety (Generalized Anxiety Disorder 7-Item Scale; Pascal, 2017), depression (Patient Health Questionnaire; Kroenke, 2007), and stress (4-Item Perceived Stress Scale; Cohen, 1983). Once a week, participants listened to a 10-minute mindfulness meditation before their run. Immediately after the run, participants completed journal entries reflecting upon their mindful running experience. Post-test survey results administered after the eighth week indicated no significant change in mindfulness, anxiety, depression, or stress. Participants' journal entries produced five themes: thinking in the moment, thinking ahead, thinking externally, thinking about feelings, and thinking about thinking. Tables and figures supplement narrative data to create an enriched understanding of the new insights gleaned from participants' mindful running experiences. Future scholars can apply findings to further the practical use of mindfulness meditation to improve athletes' and exercisers' mental health.

### **P-43**

#### **A STORYTELLING-BASED IMAGERY PROGRAM FOR COLLEGIATE GOLFERS**

*Seong Kwan Cho, Texas A&M International University;*  
*Youngjun Choi, Jeju National University;*  
*Woong Kwon, Jeju National University;*  
*Hunhyuk Choi, Kangwon National University*

Imagery is one of the most popular psychological skills athletes use to enhance performance, improve concentration and motivation, and regulate emotional states (Cumming & Williams, 2013; Williams & Cumming, 2012). Research showed the effects of an individualized mental skills training program on golf performance (Ashbrook, 2018). Storytelling has widely been used for vicarious experiences, and it has been used for guided imagery (Utay & Miller, 2006). The purpose of this study was to explore the perceived effectiveness of an individualized storytelling imagery program for golfers. Five male and five female collegiate golfers aged from 19 to 23 years old participated in this study. The storytelling-based imagery program consisted of 19 sessions for 6 weeks. In the first session, lectures about imagery and storytelling were first provided, and the participants were asked to complete the questionnaires of imagery use, anxiety, and confidence. From the second session, the participants were asked to imagine playing on the course and writing the story about how they performed in the images. They were instructed to eliminate any negative words that could trigger negative thoughts and images and instead add positive words to elicit positive and desired images (e.g., making long putts). From the 10th session, they were asked to read aloud the story and add more content if necessary. They completed the questionnaires at the end of the 10th and the 19th sessions and participated in semi-structured interviews. Results indicated that the storytelling-based imagery sessions helped them reduce cognitive and somatic anxiety and increase confidence. The participants stated that writing a storybook of their golf performance and reading it aloud to others was fun, and thus, it was easy to create positive images. The findings of this study suggest the use of storytelling-based imagery programs to improve intrinsic motivation, reduce anxiety, increase confidence, and enhance performance.

### **P-44**

#### **AN IMAGERY INTERVENTION TO IMPROVE SELF-EFFICACY IN SOFTBALL PITCHERS**

*Jessica Rozick, The Pennsylvania State University, Berks Campus;*  
*Andrew Friesen, Pennsylvania State University*

Research on psychological skills usage to improve performance continues to strive towards demonstrating intervention efficacy. The purpose of this study was to examine whether a PETTLEP imagery intervention can improve perceptions of self-efficacy and performance in softball pitchers. PETTLEP is an acronym that describes key features of imagery to make the intervention most effective (Holmes & Collins, 2001). Cumming and Ramsey (2009) advocated that interventions that are personalized to the specific needs of the athlete (e.g., the dynamics of the sport) tend to be most favorably received by athletes. To date, there has been no published research that has investigated the effects of PETTLEP imagery interventions on softball pitching performance. Six NCAA softball pitchers (Mage = 19.8), with an average of 10 years of competitive softball experience,

participated in this study. The quasi-experiment follows a pre-test post-test intervention design. Participants firstly completed a modified Self-Efficacy Inventory that included items specific to softball pitching placement to different strike zones. Additionally, their pitching accuracy was measured by having them pitch 36 pitches through an apparatus that sectioned off a 3x3 zoned grid that represented a strike zone (i.e., 4 pitches through at each zone). After baseline data was recorded, participants undertook an intervention that included six imagery sessions over a two-week period. The imagery sessions utilized PETTLEP principles. Pitching-efficacy and performance were then measured following the intervention. Results from the data analysis indicated a significant improvement in self-efficacy  $t(53) = -3.036, p < .05$  from the pre-test ( $M = 70.44, SD = 17.51$ ) to post-test ( $M = 75.28, SD = 11.55$ ). However, there was no overall improvement in pitching performance scores. Imagery interventions that utilize PETTLEP principles are effective in helping to improve softball pitching self-efficacy. Implementation strategies specifically tailored towards softball are presented.

### P-45

#### **ARE ATHLETES READY FOR MINDFULNESS? A DESCRIPTIVE STUDY OF COLLEGE ATHLETES' INFORMAL USE OF MINDFULNESS AND MEDITATION**

*Thomas Minkler, West Virginia University;  
Sam Zizzi, West Virginia University;  
Blake Costalupes, West Virginia University*

Researchers have investigated the relationship between mindfulness and sport-relevant factors, and evidence of intervention effectiveness is emerging (Noetel et al., 2019). Extant literature primarily focuses on manualized mindfulness training protocols and less is known about athletes' informal use and understanding of mindfulness and how that relates to outcomes.

The purpose of the present study was to assess student-athlete attitudes toward and readiness to practice mindfulness, informal use, and connection between use and mindfulness scores. Using convenience and snowball sampling to complete the descriptive research design, 140 collegiate athletes completed the survey. Participants indicated which stage of change they were in regarding the adoption of mindfulness practice (Massey et al., 2015) and completed the 12-item Cognitive and Affective Mindfulness Scale-Revised (CAMS-R; Feldman et al., 2007). Athletes also answered questions about previous experience with sport psychology, their current use of mindfulness, and benefits of and barriers to practice.

Almost 20% of participants had a regular mindfulness practice (action or maintenance), roughly 40% practiced irregularly (preparation), and around 40% did not practice mindfulness at all (contemplation or precontemplation). Athletes in the maintenance stage had significantly higher mindfulness scores than participants in pre-maintenance stages, with a moderate effect size,  $d = .67$ , suggesting that regular practice of 6 months or more may contribute to changes in mindfulness. Qualitative responses indicate that participants in post-contemplation stages were more likely to note perceived benefits, which were often related to anxiety reduction, stress management, focus, and self-improvement; barriers to mindfulness, primarily discussed by those in pre-preparation stages, included lack of time, interest, and understanding of what it is and how to

do it. It may be important for future research and practice to consider prior mindfulness use, stage of change, and attitudes toward mindfulness prior to MBI implementation.

### P-46

#### **BEST PRACTICE FOR MINDFUL SPORT PERFORMANCE ENHANCEMENT: BEFORE OR AFTER PRACTICE AND DURING A PANDEMIC**

*Megan Hut, West Virginia University;  
Thomas Minkler, West Virginia University;  
Carol Glass, The Catholic University of America;  
Hannah Thomas, Catholic University;  
Caroline Weppner, The Catholic University of America;  
Claire Flannery, The Catholic University of America*

Research suggests that Mindful Sport Performance Enhancement (MSPE) may be effective for helping collegiate student-athletes realize improvements in sport anxiety, mindfulness, emotion dysregulation, and sport performance satisfaction (Glass et al., 2019; Minkler et al., 2020). However, no research has examined the role of differences in intervention delivery that could inform suggestions for best practice.

Twenty-seven male student-athletes on a collegiate rugby team were randomly assigned to receive a 6-week MSPE program on campus either prior to or directly after rugby practice. Athletes completed online measures both before and after the intervention. However, the final session had to be rescheduled and moved online due to the COVID-19 pandemic, contributing to fewer participants attending that session and/or completing post-program questionnaires.

Factorial ANOVAs did not reveal differential outcomes between groups, although athletes showed significant decreases in sport anxiety,  $F(1, 13) = 5.96, p = .030$  and an aspect of emotion regulation difficulties,  $F(1, 13) = 5.38, p = .037$ . However, there were significant increases in symptoms of depression,  $F(1, 13) = 53.59, p < .001$ , anxiety,  $F(1, 13) = 84.84, p < .001$ , and stress,  $F(1, 13) = 40.16, p < .001$ . Additionally, qualitative short-answer responses on a program evaluation questionnaire were coded using the consensual Qualitative Research-Modified (CQR-M; Spangler et al., 2012) protocol. Many pre-practice participants mentioned liking the effect the training had on their mindset and performance while post-practice participants enjoyed the group experience and the opportunity to learn something new. Athletes in both groups noted the impact of mindfulness training on aspects of their attention in rugby and everyday life.

Considering that the training began in February 2020, the pandemic may have affected our ability to investigate differences between before and after practice groups. Nonetheless, the study adds support for the effectiveness of MSPE, and like Bullard (2020), demonstrates the pandemic's negative impact on athletes' depression, anxiety, and stress.

### P-47

#### #BOSSUP: A SEASON OF MENTAL TRAINING WITH LIZZO

Lindsay Ross-Stewart, Southern Illinois University  
Edwardsville;  
Savana Robinson, Southern Illinois University-Edwardsville;  
Cameren Pryor, Southern Illinois University Edwardsville

“Bling bling, then I solve them that’s the goddess in me.” “Boss up and change your life.” Generation Z athletes have access to music at their finger tips at all times (Karageorghis, et al., 2018), whether they are listening while walking to class, or before they compete, music is part of how they identify with the world around them. Music has the power to impact psychological states, enhance performance and can be embedded within pre-event routines on an individual and collective basis (Karageorghis, et al., 2018). As sport psychology professionals, we are tasked with not just understanding the techniques we teach, but also with finding innovative and novel ways to help our athletes embrace and use mental training in their everyday sport experiences (Gould, et. al., 2020).

This lecture will focus on a mental training intervention that used Lizzo music and lyrics as a guide in implementing a season long mental training program with an NCAA Division I softball team. Using Lizzo’s music and videos from the softball season, this lecture will highlight the intervention design, implementation, and challenges that occurred. Special attention will be paid to how the lyrics of the songs were connected to sport psychology themes such as confidence, motivation, emotional control, and learning from failure. Tangible advice on how consultants can design their own interventions based on popular music will also be included.

### P-48

#### COLLEGIATE ATHLETES’ EXPERIENCES AND PERCEPTIONS OF USING VIRTUAL REALITY FOR SPORT TRAINING

Jarad Lewellen, Florida State University;  
David Eccles, Florida State University

Virtual reality (VR) is an emerging technology with an abundance of uses. While VR has been used in various fields (e.g., medicine and counseling; Botella et al., 2000; Piroomchai et al., 2015), it has only recently become a topic of research and application in sport. As such, it has become increasingly important to develop an understanding of how this technology can be used in sport. To date, little research has been conducted to examine coach and athlete attitudes toward the use of VR and its capabilities (Neumann et al., 2017). As such, while VR technologies have advanced, attitudes about the potential for VR use might not have kept pace, leaving VR under-utilized in research and application (Katz, 2001). Therefore, it is necessary to gather information on experiences and perceptions of VR use in sport. This study examined 278 NCAA athletes’ experiences and perceptions of using VR for sport training. Participants completed the Experiences and Perceptions of VR in Sport survey that was designed for this study. Results determined that VR is seldom used for skill training among collegiate athletes; only approximately six percent of participants had ever used VR for sport training. Results also indicated that, when comparing potential reasons for a lack of VR use, participants were significantly more likely

to have never considered using VR to train mental skills. There was also a significant difference in the skills participants believed VR may be useful to train (e.g., anticipation, decision-making, movement, coping, and motivation). The findings help to identify potential barriers to advancing VR in sport, illustrate the potential shortcoming of understanding regarding the use of VR in sport training, and outline the practical implications of the use of VR in sport training.

### P-49

#### DEVELOPING AN INTEGRATED TEAM APPROACH TO DELIVERING SPORT PSYCHOLOGY: INTRODUCING THE 4A’S CONCEPTUAL FRAMEWORK

Amanda Wilding, Bournemouth University  
Henriksen et al., (2011) suggest, many service delivery papers hold the underlying assumption that service provider’s work independently from one another with the freedom to select their own practices and modes of delivery. Yet, research by Reid and Thorne (2004) previously noted an increasing number of sporting organizations demand effective athlete management through successfully functioning integrated teams. Despite Henriksen et al’s., call in 2011 for an integrated service delivery model, to date, there still appears to be no comprehensive framework which recognizes the wider context of collaborative operations.

The purpose of the ethnographic action research was to evidence the process of developing an integrated service delivery framework. The project was undertaken over an 18month period at a Premier League Soccer club that holds Category one academy status. The project was divided into four stages of development. 1) The identification of current delivery practices and protocol’s, 2) the establishment of measurable performance constructs. 3) The articulation of one overarching key performance indicator, and 4) the development of an integrated service delivery process.

Four phases of service delivery emerged aligned with participation current practices. 1) Assessment of client’s needs, the demands of the task and the contextual environment in order to understand those factors which influence optimal performance states. 2) Acceptance of the existing internal and external cognitive processes and resources available at any given time. 3) Adaptation training to ensure individuals can adjust to the task and/or environment, and 4) apply concerned teaching individuals to operationalize behavioral interventions. This cyclical process was found to ensure, robust and consistent implementation across the psychologist’s service delivery due to collective responsibility in the development and delivery of the framework. Lack of such a collaboration was found to allow exogenous variables to enter the system which impacted effective implementation due to differences in delivery patterns.

### P-50

#### DEVELOPMENT OF MINDFULNESS-BASED AND TRADITIONAL PSYCHOLOGICAL SKILLS TRAINING PROGRAMS FOR COLLEGIATE ATHLETES

Robert Lynch II, University of Wisconsin Green Bay;  
Tsz Lun (Alan) Chu, University of Wisconsin-Green Bay

Most sport psychology interventions are grounded in traditional psychological skills training (PST) or mindfulness-based approaches. Mindfulness is grounded in awareness

and acceptance without actively controlling internal processes (i.e., thoughts, emotions, and sensations). In contrast, traditional PST is a systematic cognitive-behavioral approach driven by regulating internal processes, such as using self-talk, imagery, and relaxation to change thoughts and feelings (Whelan et al. 1991). Despite the use of both approaches, few attempts have been made to systematically develop these interventions and compare their effectiveness using a scientist-practitioner approach (Rothlin et al., 2020). In this presentation, we will discuss how we designed our project to do so with collegiate athletes.

Before the intervention, the athletes completed a survey assessing their levels of mindfulness, psychological skills, anxiety, depression, stress, and anxiety. Based on their responses, we used a matched-group design to assign them to the mindfulness or tradition PST group to ensure similar levels of mindfulness and psychological skills between the two groups. The mindfulness group followed an abbreviated version of the Mindfulness Meditation Training for Sport (Baltzell & Summers, 2018) focused on breathing and moving meditations, thought and emotion labeling, and self-compassion applications. The PST group completed a program similar to Rothlin et al.'s (2020) program focused on progressive muscle relaxation, self-talk, and imagery.

We chose and modified these programs due to their inclusion of core mindfulness and PST skills taught in a progressive format that worked within the college athletic schedule. Both programs last for four weeks with two 30-minute sessions and an optional homework exercise each week. After the intervention, the athletes completed another survey assessing the same psychological variables for us to determine the effectiveness of the programs and their differences. We will present the findings and implications to help practitioners decide which programs to use with their athletes.

### **P-51**

#### **EXPERIENCES AND EFFECTIVENESS OF A SMALL GROUP MENTAL TRAINING COURSE FOR NCAA DIVISION I STUDENT-ATHLETES: A CASE STUDY**

*Seth Rose, University of Idaho*

Research exploring the effectiveness of mental skills training (MST) continues to improve the current knowledge base, and several detailed reviews and meta-analyses have supported MST effectiveness with results showing over 128 interventions producing moderate to large positive performance enhancement results (Greenspan & Feltz, 1989; Meyers, Whelan, & Murphy, 1996; Vealey, 1994; Weinberg & Comar, 1994). In addition, MST intervention packages have been used by combining strategies to create a more robust and individualized intervention, and limited research has examined the effects of systematic programs on the performance of athletes (Daw & Burton, 1994; Schoenfelt & Usry-Griffith, 2008). Inconsistencies in frameworks to implement MST programs exist and considerable variability in the implementing strategies are practiced by sport psychology professionals (Weinberg & Williams, 2014). More recently, university courses for mental training and performance enhancement have been developed by sport psychology faculty and professionals hired through athletic departments to provide performance enhancement and well-being training for university student-athletes. These courses have been designed and approved

by University processes, yet literature supporting the performance enhancement and psychological benefits for course offerings is limited (i.e., non-traditional mental training settings). The current case study analyzes the effectiveness and experiences of a 16-week university mental training course offered through a Movement Sciences department specifically designed for Division I student-athletes in various sports. Six Division I student-athletes participated in a single subject design where the course measured various psychological constructs with pre-test baseline measures, followed by post-test (i.e., end of the semester) measures. Additionally, qualitative interviews will be conducted mid-semester interviews will be conducted to assess perceptions, experiences, and challenges experienced during the first half of the semester. Results will be presented and suggestions for practical application of the study's outcomes will be provided, including university course intervention recommendations for varied performance domains and future research suggestions.

### **P-52**

#### **FROM SCIENCE TO PRACTICE: PRACTICAL RECOMMENDATIONS FOR INTEGRATING MENTAL PERFORMANCE ASSESSMENTS INTO CONSULTING**

*Justine Vosloo, Ithaca College;  
Tara Stilwell, Ithaca College;  
Chloe Ouellet-Pizer, Ithaca College;  
Sebastian Harenberg, StFX University;  
Anthony Fragnoli, Ithaca College;  
Jennifer Buckman, Ithaca College;  
Lindsey Kozuch-Nash, Ithaca College*

The integration of assessment and program evaluation has been acknowledged as a key component of evidence-based practice (Moore, 2007). The skills associated with performance planning and assessment are listed as required tasks and knowledge areas on the CMPC exam (AASP CMPC Candidate handbook). Assessment can also provide additional information that allows for understanding the client(s) needs and concerns, further assisting in case conceptualization. Graduate training settings are ideal environments for developing these important skills and provide the foundation for evidence-based, scientist-practitioner development. This presentation will focus on one graduate program's adoption of formal assessment procedures throughout the consulting process. This presentation will describe a) the processes used when selecting different forms of assessments based on the focus of interventions (e.g., questionnaires, self-assessments, qualitative information), b) the report writing process (e.g., compiling relevant information from assessments, observations and sessions), c) how subsequent meetings and sessions using assessment data to inform the intervention plan, and finally, d) both the student and faculty mentor perspectives on the benefits and challenges of integrating mental skills assessments into the consulting process. Finally, the presentation will highlight how assessment, and report development may inform the scientist-practitioner philosophy of practice and furthers the development of evidence-based decision making in mental performance practice. Best-practice and applied recommendations for future implementation will be provided.

### P-53

#### **GIRLS' EMPOWERMENT AND LEADERSHIP THROUGH SPORT AND EXERCISE**

*Makenna Henry, Orange Coast College;  
Leilani Madrigal, Long Beach State University*

According to the National Federation of State High School Associations (NFHS), 7,980,886 students participated in high school sports, 43% being female athletes (NFHS, 2018). Previous studies have determined that participation in sport is correlated to a reduction in dropout rates and increased likelihood to pursue higher education (Ecker-Lyster & Niileksela, 2016). Johnson et al., (2008) suggest that early interventions with at-risk youth is essential since 10th grade is a peak time in which they are vulnerable to dropping out of high school. Specifically, youth from minority and low-income backgrounds may be especially vulnerable to detach from school during the transition between middle and high school environments and subsequently more likely to struggle academically and drop out. The purpose of this project was to create a community outreach organized sport opportunity (i.e., The Girl's Empowerment and Leadership camp in partnership with a local community college) for those who may otherwise not had access to an environment that is focused on developing positive youth development (PYD) skills in a supportive sport environment. A total of 12 high school soccer athletes participated in this camp that spanned four-days, lasting approximately two hours a day. The emphasis on the camp was to introduce protective factors to combat risk factors during the transition from middle school (i.e., 8th graders) to high school. These targeted skills were cultivated through sport-specific games and competition and psychoeducational activities (i.e., team building, leadership interventions). In addition, SEP graduate students volunteered their time and helped create and co-lead activities to foster these protective factors (i.e., leadership, confidence, competency). Based on results from the Youth Experiences Survey 2.0, the intended outcomes (i.e., confidence, leadership) were positively received by the participants. Additionally, the local community colleges' women's soccer program expressed interest in maintaining the camp and its structure on a yearly basis.

### P-54

#### **INFLUENCE OF SELF-TAUGHT QUIET EYE TRAINING ON INTERNAL PROCESSES AND PERFORMANCE**

*Taylor Casey, University of North Texas;  
Romero Greer, University of North Texas;  
Keely Hayden, University of North Texas;  
Scott Martin, University of North Texas*

During the past three decades the use and effectiveness of the quiet eye (QE) technique, the prolonged final gaze at a target just before executing action (Vickers, 2007), has been a topic of interest in sport, exercise, and performance psychology. Although past research provides insight into the basic tenets of how to use the QE technique within some sport settings, limited research is available on whether it is effective for self-learning of new tasks that require fine motor movements. Also, no available research exists that specifically examines the influence of the QE technique on important internal processes for performance enhancement. The primary purpose of this study was to investigate the influence of QE training on college students' internal processes associated with performing a

novel task. College students (N = 90) voluntarily participated in a 10-week QE training (Mage = 22.43 ± 1.72). Self-efficacy, self-regulation, and mindfulness were assessed before and after the intervention, with outcome performance and self-perceptions measured weekly. Following the intervention, a focus group was used to gather information about participants knowledge, experience, thoughts, behaviors, and actions regarding the QE technique. Results of multiple repeated-measures ANOVAs revealed that target task self-efficacy and outcome performance were statistically significant from pre to post intervention ( $p < .05$ ). Reflection themes included: strategy, focus, experience, and personal influence. Similarly, focus group themes included: influence of learning and practice, confidence, and emotions; evolving task and performance expectations; and developing perspectives of attentional focus. The quantitative and qualitative results indicate that learning and practicing the QE technique for 10 weeks and integrating self-teaching strategies based on self-perceived feedback may influence participants' target task self-efficacy and outcome performance. In addition to guiding future research, these findings may help sport coaches and performance psychology professionals provide attentional focus training instruction.

### P-55

#### **INTEGRATING CAREER GUIDANCE SERVICE INTO COLLEGE CURRICULUM: EXPLORING THE EFFECTIVENESS OF A COURSE-BASED CAREER DEVELOPMENT PROGRAM FOR FIRST-YEAR COLLEGE STUDENT ATHLETES IN TAIWAN**

*Jen-De Chen, National Changhua University of Education*

The importance of career planning among college student athletes (CSA) can never be overemphasized. However, research has found underutilization of career service among CSAs due to time constraints and other factors such as counselors' unfamiliarity and inexperience of sports. Hence, career assistance program embedded in the curriculum might be beneficial to accommodate for CSAs' academic/training schedule while ensuring familiarity of sport experience. A novel course titled "Athlete Career Planning" (ACP) was implemented for the sport-majored first-year CSAs in a university located in central Taiwan. This 18-week, 3 credit hour elective course comprised of 5 major areas: 1.meanings/theories of career development, 2.exploration of self (including interest, personality, competence, values, and aspiration), 3.exploration of the work world and careers, 4.career decision making skills and 5.personal career plan. The course was delivered by a faculty member in the department who has professional competence in counseling and sport psychology. Emphasizing a participant approach, the teaching protocol integrated lectures, psychological testing, work site visit field trip, group projects, personal interviews, and integrative learning portfolio. Totally, 130 CSAs enrolled in 2018 and 2019 ACP class and 115 consented to participate in the present study. 3 research instruments were employed to measure the effectiveness of the ACP including: Career Belief Scale, Career Decision Making Difficulty Scale, and Career Self Efficacy Scale. All scales were administered to the participants prior and after the course was implemented. Significance of difference was analyzed using pair sample t test with SPSS v24. Results indicated significant decrease in career decision making difficulties including anxiety and indecisiveness, lacking of individual knowledge, and lacking of career/education information. Significant enhancement were found in career



self-efficacy including: goal setting, self-assessment, career planning, and information gathering. Findings supported the feasibility and effectiveness of curriculum based approach in enhancing career self-efficacy while eliminating career barriers among first-year CSAs.

### **P-56**

#### **“JUST DO IT” WON’T CUT IT: CONNECTING THE DOTS TO MENTAL BLOCKS**

*Miata Walker, Ball State University;  
Stacey Herman, So Connected*

Literature defines mental blocks (MBs) as the loss of the ability to perform skills that athletes once perceived as automatic (Maaranen et al., 2017). Strategies used to reduce MBs involve sport psychology tactics, such as imagery, self-talk, mindfulness, and relaxation techniques, but have demonstrated limited effectiveness (Day et al., 2006; Lawrence, 2016; Maaranen et al., 2017). MB researchers have suggested that future studies should examine different strategies (Lawrence, 2016), and tactics from neurolinguistic programming (NLP) are a possible option. NLP involves linking cognitions, language, and patterns of learned behavior through experiences to achieve a desired outcome (Kotera, et al., 2019). More specifically, NLP proposes that negative self-belief, which is linked to MBs, occurs when the conscious and unconscious mind are incongruent, creating a disconnect between the mind and body (O’Conner & Seynour, 2011). NLP may be effective with reducing MBs because of its focus on aligning the conscious and unconscious mind by working toward the root of the initial disconnect, however, it has not been examined thoroughly. Thus, for this study, researchers compiled MB literature from the last ten years about the effectiveness of current strategies used to reduce MBs, identified themes from six interviews conducted with athletes about their approaches to reducing MBs, and recorded anecdotal work from an NLP practitioner who has extensive experience working with collegiate athletes in various sports over the last ten years. Findings highlighted the effectiveness of NLP strategies that align the mind-body connection. Due to this, NLP strategies may reduce MBs, and ultimately improve athletes’ performance. Studying the effectiveness of NLP strategies may enhance practitioners’ competence when working with athletes who are experiencing MBs. Furthermore, using NLP in this way may assist with closing the intervention gap for MBs (Duarte et al., 2015; Maaranen et al., 2017).

### **P-57**

#### **MINDFULNESS TRAINING AND FLOW: DOES SPORT EXPERIENCE MATTER?**

*Thomas Minkler, West Virginia University;  
Hannah Thomas, Catholic University;  
Carol Glass, The Catholic University of America;  
Megan Hut, West Virginia University*

Mindfulness-based interventions (MBIs) have increasingly been utilized in the field of sport psychology (Noetel et al., 2019). Additionally, mindfulness has consistently been linked to flow (Cathcart et al., 2014; Kee & Wang, 2008) and research suggests that mindfulness training may facilitate flow states (Chen & Meggs, 2020). Swann and colleagues (2012) observed that flow is associated with high levels of perceived ability

and that athletes high in mastery orientation experience flow more often than those athletes low in mastery. Many questions regarding MBI effectiveness and the mechanisms through which they may promote change are still unanswered, and one possible influence is experience in a particular sport.

Participants in the present study were 81 student-athletes from four different teams at an NCAA Division III University in the mid-Atlantic region. Ranging in age from 18-22 (M = 19.44) and consisting of 74% female participants, student-athletes completed measures of flow, anxiety, mindfulness, emotion regulation, and satisfaction with their sport performance both before and after they received mindfulness training with their teams.

Pearson correlations yielded no significant associations between years playing their sport and change in flow. However, a repeated-measures Analysis of Covariance with years of sport experience as the covariate revealed a significant increase in flow from pre- to post-intervention,  $F(1,77) = 5.95$ ,  $p = .017$ , suggesting that MBIs may be similarly beneficial in promoting flow with athletes who have varying amounts of sport experience. Controlling for experience, participants also improved significantly on the measure of sport anxiety,  $F(1,76) = 6.63$ ,  $p = .012$ , but not on measures of mindfulness, emotion regulation, or satisfaction with sport performance. MBIs may thus be similarly beneficial to promote flow regardless of length of sport experience, and further research exploring the mechanisms through which they may promote change are warranted.

### **P-58**

#### **PERFORMANCE PSYCHOLOGY CONSULTING WITH THE UNITED STATES ARMY ESPORTS (USAE) TEAM**

*Steven Cohen, Magellan Federal*

The United States Army’s Marketing and Engagement Brigade is tasked to develop the Army brand by demonstrating elite Army skills and capabilities while raising awareness of Army career opportunities. One avenue this unit has pursued to spread the Army brand to their target audience is the booming esports industry. A small group of selected Army Soldiers represent the Army brand in the competitive gaming world. Simply put, the better the team does, the more recognition they bring to the Army. Professional esports athletes face similar demands and mental challenges as their traditional sport counterparts. As a result, sport psychology interventions have been found to be a benefit to this population (Cottrell et al., 2018).

Over an 8 month span, six USAE team members and one coach attended performance enhancement training sessions virtually. The purpose of these sessions was to develop the cognitive resources necessary to maintain the mental toughness for high competitive play along with the team cohesion required for long term trust (Williams, 2010). Teambuilding discussions that targeted culture were reported to be most beneficial as a result of the impact team chemistry has on success in their particular game.

The nature of delivering this training with a team in a predominantly virtual setting led to the need for creative adjustments to the content delivery. The virtual setting did provide several unique benefits including the comfort these

Soldiers had conducting the training in the same setting they compete in. Additionally, the virtual setting allowed the consultant uncensored access to team communication before, during, and after their competitions.

This presentation will conclude with lessons learned and future implications for supporting the massively growing performance population of esports athletes across the world.

### **P-59**

#### **PIVOTING FOR THE PANDEMIC: HOW MINDFULNESS-BASED PROFESSIONAL TRAINING, DIRECT ATHLETE SERVICES, AND ONGOING RESEARCH WERE ADAPTED IN RESPONSE TO COVID-19**

*Megan Hut, West Virginia University;*  
*Carol Glass, The Catholic University of America;*  
*Timothy Pineau, MSPE Institute;*  
*Keith Kaufman, Keith A. Kaufman, Ph.D., PLLC*

Any attempt to describe how disruptive the pandemic has been would be an understatement. COVID-19 has upended our lives, personally and professionally, in addition to its negative impact on athlete well-being (Bullard, 2020). Like many of us, we were in the midst of various projects when the pandemic struck and needed to adjust quickly. This lecture will detail the changes made and lessons learned as we adapted to the pandemic to continue offering mindfulness-based services, including professional workshops, trainings with college teams, and ongoing research. In particular, the steps necessary to transition these activities from in-person to virtual platforms will be outlined, along with the ways that we changed our approaches as we learned more about best practices under these conditions.

For instance, many activities that were typically done in person (e.g., interactive discussion; yoga routines) had to be significantly adapted for the virtual space, which forced us to think creatively about how to offer remote mindfulness training and professional workshops that were still authentic and experiential. We also pivoted to find ways to complete an outcome study of mindfulness training for college student-athletes, finishing the final team session and post-program individual interviews via Zoom and collecting quantitative data using Qualtrics. Finally, we will also highlight some of the unexpected positive outcomes from changes that were initiated with the mindset of just making the most out of a difficult situation. Some of these creative adaptations (e.g., more real-world activity-based prompts that people can do on their own) we are likely to continue, even after the return to in-person activities. We have also come to appreciate the benefits of offering services virtually (e.g., more international attendance for trainings), and will discuss how to continue to integrate virtual services post-pandemic.

### **P-60**

#### **RECENT TRENDS IN THE EMPLOYMENT OF SPORT PSYCHOLOGY CONSULTANTS BY MAJOR LEAGUE BASEBALL ORGANIZATIONS**

*Bruce Klonsky, The State University of New York at Fredonia;*  
*Alan Kornspan, University of Akron;*  
*Joseph Carbone, Magellan Federal;*  
*Kelly Vincent, The State University of New York at Fredonia;*  
*Lucian St. John, The State University of New York at Fredonia;*  
*Cameron Criss, The State University of New York at Fredonia*

In recent years, there has been increasing interest among scholars and practitioners in the expansion of sport psychology employment opportunities in the United States and around the world (e.g., Connole et al., 2014; Mugford et al., 2017). Some investigations have focused on the utilization of sport psychology consultants at the intercollegiate level (e.g., Hayden et al., 2014). More recently, several studies (e.g., Klonsky et al., 2013, 2015, 2018, 2019, 2020) have examined the nature and prevalence of sport psychology services in professional sports. The present study was based upon previous research which examined the percentages of NBA, MLB, NHL, NFL, MLS, and EPL teams providing sport psychology services. Based upon the culture and demands of baseball (e.g., Ravizza & Hansen, 1995; Lemire, 2015), it was predicted that Major League Baseball (MLB) would continue to be a major employer of sport psychology consultants. In order to test these predictions, content analyses of online media guides/directories and team websites were conducted. In addition, Google and Linked In searches were employed to more accurately assess the proportion of MLB teams utilizing the services of sport psychologists and mental skills consultants. These predictions were confirmed as 100% of MLB teams employed sport psychology consultants in 2021. This was approximately a 10% increase since 2015 (Klonsky et al., 2015). In addition, interjudge agreement in classifying sport psychologists and mental skills consultants was consistent with prior studies. The proportion of teams utilizing Certified Mental Performance Consultants (CMPCs) will also be reported. Further research will explore the expanding employment opportunities for women in the provision of sport psychology in professional baseball.

### **P-61**

#### **SEEING AND BELIEVING: AN INTEGRATED VISUAL PERCEPTION AND MENTAL SKILLS TRAINING PROGRAM**

*Halle Gydesen, Midwestern University;*  
*Angela Breitmeyer, Midwestern University;*  
*Thomas Virden, Midwestern University*

Quality care for the total athlete is accomplished through multidisciplinary collaboration. The multidisciplinary sports medicine team is enhanced by the inclusion of clinical and sports vision optometrists (Carson et al., 2014). A program combining the tasks and practices of clinical optometry and psychology with sport optometry and psychology may increase athlete performance and overall well-being. Utilization of optometrists and psychologists has been shown to provide benefits (Lardon & Fitzgerald, 2013; Stelmack et al., 2012). Sports vision training (SVT) and mental skills training (MST) have also both been shown to improve sport performance (Afshar et al., 2019; Slimani et al., 2015). Clinical

optometrists employ a comprehensive eye examination to inform the diagnosis of refractive errors, blurred vision, and more. Vision therapy is the most commonly practiced treatment for vision issues. Clinical psychologists utilize a range of cognitive, personality, neuropsychological, and behavioral assessments to inform diagnosis of psychological disorders. Most clinical psychologists then implement psychotherapy from either a psychoanalytic, cognitive-behavioral, or existential approach. Sport vision optometrists typically use an abbreviated eye exam that fits the needs of the athlete, which informs diagnoses of potential eye impairments or injuries. Consequently, SVT, e.g., perceptual-learning-inspired and naturalistic sports training programs, are administered. Similarly, mental performance consultants employ instruments focused on sport enhancement or measurement of a specific skill, which directs the identification of (a) particular athletic domain(s) that need improvement. MST techniques can then be implemented. An integrated program combining both clinical and sport optometry and psychology would incorporate tasks from these disciplines in a systematic manner. More specifically, perceptual-learning-inspired and naturalistic training programs will be combined with imagery/visualization, self-talk, relaxation, goal setting, and mindfulness. The proposed integrated model would be able to more comprehensively address all aspects of the total athlete by focusing on mental skills in conjunction with visual, perceptual, and oculomotor skills.

### **P-62**

#### **THE EFFECT OF PSYCHOLOGICAL SKILL TRAINING PROGRAM ON STUDENTS' POSITIVE PSYCHOLOGY IN PHYSICAL EDUCATION CLASSES IN MIDDLE SCHOOL**

*Sungho Kwon, Seoul National University;*  
*Minkwon Moon, Seoul National University;*  
*Taiwoo Kim, Seoul National University;*  
*Doheung Lee, Seoul National University*

The purpose of this study is to verify the effect of physical education classes applied with PST(psychological skill training) program on students' positive psychology. To that end, 342 first-year students from two middle schools located in Seoul were divided into group that applied PST program and group of control. To check the effectiveness of the PST program, the moderating effect was analyzed through pre-post measurement of positive emotion, resilience and internal motivation. As a result of the analysis, the positive emotion, resilience, and perceived competence(internal motivation) scores of group participating in the PST program increased to a significant level, while the students who participated in the general physical education class did not change significantly. Considering that there was no difference in the pre-measurement score between the two groups for each variable, it can be interpreted that the application of the PST training program in the physical education class had a significant effect on the positive psychology. Through this study, we have provided an opportunity to explore the possibility of expanding the scope of PST, which is being conducted mainly on specific subjects, into physical education classes.

### **P-63**

#### **THE EFFECTS OF A CENTERING INTERVENTION TO IMPROVE VOLLEYBALL PERFORMANCE**

*Marley Printz, The Pennsylvania State University, Berks Campus;*  
*Andrew Friesen, Pennsylvania State University*

Athletes have an optimal zone of functioning when it comes to the emotion-performance relationship (Hanin, 2000). If an athlete's emotions are too far from an ideal state, the athlete will engage in emotion regulation strategies to bring actual and desired emotions in line with each other (Lane et al., 2013). One such strategy is centering, a breathing method that has been shown to improve performance in basketball (e.g., Haddad & Tremayne, 2009) and hockey (e.g., Rogerson & Hrycaiko, 2002). The purpose of this study was to examine whether a centering intervention can improve volleyball service and serve-receive accuracy. Female volleyball players (N = 88) ranging from 10 to 18 years of age and playing for a private volleyball club participated in the study. Participant expertise ranged from novice to players with over 10 years of experience. This study followed a pre/post intervention design. Pre- and post-intervention data were collected during competitive tournaments. The centering intervention included an education phase, a practice phase, and an implementation planning phase that lasted two weeks. Data was tallied by the players' respective coaches. Service statistics were calculated using a weighted formula that measured service aces, serves-in-play, and service errors. Serve-receive statistics were calculated using a weighted formula that measured available options for the setter from serve-receive passes (i.e., how many front-row players did the setter have an option to set to as a result of the pass) and errors. Assistant coaches performed manipulation checks of observed centered breathing behaviors. Data analysis showed significant improvements in both service and serve-receive performance post-intervention. Centering is an effective psychological skill to help with volleyball performance. Implementation strategies specifically tailored towards volleyball are presented.

### **P-64**

#### **THE IMPACT OF DOGS ON COLLEGIATE LACROSSE PLAYERS' RECEPTIVITY TO AND LEARNING FROM SPORT PSYCHOLOGY SESSIONS: A PILOT STUDY**

*Jamie Robbins, Methodist University;*  
*Aiden Sherry, Methodist University*

"Pets are good for us" (Wells, 2009, p. 536). Theoretically, this is due to Human Animal Interactions (HAI) which have positive, calming, socializing, motivational and cognitive benefits (Busch et al., 2016). If true, then animals can promote the preconditions needed for effective learning (Beetz, 2017). Optimal learning environments minimize stress while promoting positive mood, motivation, concentration, and attention (Blakemore & Frith, 2005). Sport psychology practitioners are continually trying to be creative in their consulting, starting with gaining entry to ultimately teaching mental skills that are learned and retained by athletes. This requires gaining the attention of busy and often overwhelmed individuals. As such, the purpose of the current study was to observe the effects of HAI on collegiate athletes' stress and mood, along with their receptivity to sport psychology sessions, and learning of sport psychology principles. A women's Division III lacrosse team participated in four, 30-minute sport psychology sessions. Dogs were present at all sessions for play and as examples for topics covered.

Researchers collected data through pre- and post-session questionnaires. Mood was assessed before and after each session using the abbreviated Profile of Moods State (POMS; Grove & Prapavessis, 1992). Although stress levels were not significantly different from pre to post study, overall mood did improve by the end of most sessions. Additionally, responses to open-ended post-study questions demonstrated retention of major sport psychology lessons (i.e. accepting differences, cognitive reappraisal, letting go) by almost all athletes. Taken together, findings show the possible benefit of utilizing dogs in sport psychology sessions to enhance mood and ultimately improve learning. The researchers will discuss possible confounding variables that impacted results of the current study and make recommendations regarding future animal studies and use of animals in sport psychology practice.

### P-65

#### THE ROLE OF AN ESTABLISHED MINDFULNESS PRACTICE FOR COLLEGE STUDENT-ATHLETES IN MINDFUL SPORT PERFORMANCE ENHANCEMENT TRAINING

*Hannah Thomas, Catholic University;  
Thomas Minkler, West Virginia University;  
Carol Glass, The Catholic University of America;  
Megan Hut, West Virginia University*

Research suggests that time spent engaging in formal meditation exercises is associated with improvements in dimensions of mindfulness, which may be related to psychological functioning (Carmody & Baer, 2008). Although more research is needed regarding both mindfulness dosage and adherence to practice (Gardner & Moore, 2017), most investigations have been conducted in clinical domains. To our knowledge, no studies have examined the potential impact that prior mindfulness practice has on outcomes following mindfulness-based interventions for athletes.

Participants were 81 varsity college student-athletes ( $M = 19.44$  years,  $SD = 1.10$ , 73.2% female) at an NCAA Division III university. Before receiving Mindfulness Sport Performance Enhancement training (MSPE; Kaufman et al., 2018) with their teams (lacrosse, field hockey, track and field, and rugby), athletes completed questionnaires that assessed current meditation and/or yoga practice and measures of flow, anxiety, mindfulness, and emotion regulation. After the training, athletes completed the same measures as well as a program evaluation form that asked for self-reported frequency of weekly mindfulness practice between sessions and the perceived helpfulness of the training.

Independent t-tests indicated that participants who already practiced yoga or meditation pre-intervention engaged in formal MSPE exercises significantly more often ( $M = 2.82$  days/week) during the training compared to those who did not have a prior practice ( $M = 1.92$ ),  $t(79) = 2.70$ ,  $p = .009$ , suggesting greater adherence from athletes exposed to mindfulness before the intervention. Additionally, Pearson correlations revealed that those who practiced formal MSPE exercises more frequently during the training perceived the intervention to be more helpful in allowing them to make improvements in ability to be in the zone, reduce anxiety, pay attention, and handle failure. Regardless of amount of practice, paired samples t-tests revealed that athletes made significant improvements in flow, anxiety, and satisfaction with sport performance from pre- to post-intervention.

### P-66

#### THE USE OF IMAGERY ASSISTED VIRTUAL REALITY FOR PITCH RECOGNITION IN NCAA DIVISION ONE SOFTBALL

*Victoria Roberts, Southern Illinois University-Edwardsville;  
Landon Braun, Southern Illinois University-Edwardsville;  
Lindsay Ross-Stewart, Southern Illinois University  
Edwardsville*

The purpose of this lecture will be to review the findings of a recent study on Imagery Assisted Virtual Reality in Sport and discuss the implications of these findings for applied practice. The purpose of the study was to investigate the effect of an Imagery Assisted Virtual Reality (IAVR) protocol on softball players imagery ability and pitch recognition. IAVR is the combination of imagery and virtual reality film to create an immersive simulation of a real environment. Eleven NCAA Division I softball players from the same team completed the Sport Imagery Ability Questionnaire and a Pitch Recognition Test, that assessed pitch type and pitch location. Data was collected at baseline and again after one month of using the IAVR protocol. The results from this study indicated a statistically significant increase in global imagery ability as well as in affect imagery ability. While pitch recognition was not statistically different from baseline to post testing, there was a change that from an applied perspective is important to note. The average score for pitch type recognition at baseline was 55 percent which increased to 76 percent after one month of using the IAVR protocol. Seeing this type of change based on a psychological intervention is clinically significant, as this type of increase can give a batter an edge while at the plate. IAVR allows athletes to practice imaging and pitch recognition anytime, including while injured. IAVR assists athletes in staying mentally engaged with the sport and increase their efficacy, imagery ability and pitch recognition. Imagery scripts and virtual reality film can also be altered based on the player's needs, allowing IAVR to progress with the athlete. Overall, this study adds to the existing literature to suggest that IAVR can create an impactful experience to assist athletes in improving their performance and psychological skills.

### P-67

#### WHEN, WHERE, AND WHY DO COLLEGE ATHLETES AND COACHES USE MINDFULNESS?

*Sam Zizzi, West Virginia University;  
Thomas Minkler, West Virginia University;  
Blake Costalupes, West Virginia University*

Though there is emerging evidence linking mindfulness-based interventions to improved performance (McAlarnen & Longshore, 2017), there is little research focused on understanding the experiences of athletes and coaches outside of a structured intervention. The purpose of this descriptive research project was to explore the usage patterns of a broad sample of athletes and coaches from the US. The pilot-tested survey instrument included measures of athlete readiness (Massey et al., 2015) and mindfulness (Feldman et al., 2007). Participants also answered questions about previous experience with sport psychology, and their current use of, and attitude towards, mindfulness. After convenience and snowball sampling, 194 college athletes and 48 coaches completed the survey, including 12% who identified as a racial or ethnic minority, and 52% who identified as male. Approximately 47% of respondents had prior experience with sport psychology, 30% had tried meditation, and 11%

had used an app for mental training. Approximately 1 out of 7 respondents reported practicing mindfulness for six months or more, and another 7% had started within the last six months. Motivation to start or continue mindfulness typically focused on reducing stress, improving attitude or performance, or focusing thoughts. Athletes and coaches were most likely to practice at home (11%) through mostly informal methods (i.e., mindful walking, eating). Participants were most likely to practice randomly throughout the day (informally, to reduce stress) or prior to competition (to relax, focus thoughts). At least 14 participants (5%) reported a previous negative experience with mindfulness, such as increased anxiety or negative thoughts. Future research is needed to learn more about client experiences with informal mindfulness, and how popular apps such as Calm and Headspace could be integrated effectively into our work.

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### Diversity & Culture

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#### P-68

##### AN EXAMINATION AND CALL TO ACTION OF BIPOC UNIVERSITY STUDENTS' EXPERIENCES ON CAMPUS

*Micha Shaw, Long Beach State University;  
Jahnna Green, Long Beach State University;  
Anastasia Blevins, Long Beach State University;  
Leilani Madrigal, Long Beach State University*

Perceptions of diversity on campus have strongly influenced BIPOC (Black, Indigenous, People of Color) students' sense of inclusion and participation (Johnson et al., 2007). Given the magnitude of COVID-19 and social unrest, it is important to understand current experiences university students are facing and how it impacts their sense of belonging. The purpose of this study was to examine BIPOC college students' experiences on campus and how to address their concerns. A total of 473 students of color completed an online survey that included open-ended questions about their campus experiences based on their ethnicity/race and what they needed more from the university. Students identified primarily as LatinX (60.3%), Asian (28.1%), Black (7%) and other (4.7%), with a mean age of 22.18 (SD =5.71) years. Using content analysis, researchers identified three themes: a) positive experiences (i.e., increased awareness, pride, advocacy), (b) negative experiences (i.e., school-focused, societal, emotions, perspective) and c) call to action (i.e., school-focused, societal-focused). Black students reported mostly negative school experiences, LatinX students reported mostly positive experiences, and Asian students reported mostly negative societal experiences. Additionally, four themes were identified in terms of what students wanted from the university. These included: training and resources, conversations, policy reinforcement, and increased diversity on campus. Through the examination of on-campus experiences and the seven identified themes, negative experiences overshadow positive experiences amongst students of color. It is our hope that CMPCs, coaches, and other educators recognize the challenges students (student-athletes) face and contribute to fostering inclusion by providing necessary resources.

#### P-69

##### ATHLETE AND SPORT PSYCHOLOGY CONSULTANT IDENTITIES

*Tess Palmateer, University of North Texas;  
Randi Jackson, University of North Texas;  
Heather Kiefer, University of North Texas;  
Trent Petrie, University of North Texas*

Identity matches between clients and counselors (e.g., gender, race) have been shown to strengthen the therapeutic alliance and improve retention, as many clients feel more comfortable talking with someone with shared identities (Bhati, 2014). Thus, we examined college student athletes' perceptions of the importance of having shared identities with a sport psychology consultant (SPC) in relation to them seeking mental health care from that person; we considered these perceptions by gender and race.

Participants were 263 Division I athletes representing nine different sports; 57.4% identified as Black, Indigenous and People of Color (BIPOC) and 53.2% identified as women. Athletes responded to a list of identities (e.g., age, sexual orientation, race) and, for each, indicated how important it would be to share that specific identity with the SPC if they were going to seek mental health care from them (1, Not at all important, to 5, Extremely important).

Although athletes indicated that it was minimally important to share any identity with SPCs (all M's < 2.3), there were significant differences in importance across the identities,  $F(6.73, 1654.51) = 31.70, p < .001$ . Overall, athletes' rated SPCs' ability to openly discuss similarities and differences in identities as most important, followed by SPCs' having been a collegiate athlete (or higher) and played the same sport. Through two-way ANOVAs (gender by race), we found that BIPOC athletes rated sharing racial/ethnic ( $p < .001$ ) and gender ( $p = .006$ ) identities with their SPCs as more important than White athletes.

Although shared racial/ethnic identities are important to BIPOC student-athletes, overall athletes primarily want SPCs who are able to comfortably and openly discuss how they are, and are not like, their athlete clients in terms of salient identities. Learning how to have such discussions will be key to SPCs being able to establish strong working alliances.

#### P-70

##### DO YOU SEE WHAT I SEE? AN EVALUATION OF MEDIA EFFECTS ON FEMALE ATHLETES' SELF-OBJECTIFICATION

*Raena Ramirez, Long Beach State University;  
McK Baker, Long Beach State University;  
Alison Ede, Long Beach State University*

While media coverage of women's sports is much lower than that of men's sports, the types of images also differ. Images of female athletes are likely to emphasize appearance or sexuality instead of performance. Previous studies have examined the impact of viewing sexualized images on self-objectification, which is the internalization of an observer's perspective and leads to body image disturbances and negative mental health outcomes (Fredrickson & Roberts, 1997). However, recently

there has been more media coverage of female athletes as mothers, but little is known about the impact of those images on their audiences. In the current study, thirty-three current or former female collegiate athletes, ages 18 to 22, viewed images of female athletes in in one of three conditions: a) a performance/athletic setting, b) athletes in sexualized/objectified poses, or c) portraying family/motherhood. The same set of athletes were featured in each condition, and consisted of famous athletes in soccer, MMA, tennis, and volleyball. Participants were then asked to complete a modified version of the Twenty Statements test (Daniels, 2009) by completing "I am" statements describing how they felt after viewing the photographs. Words were coded into the following categories: appearance-related (e.g., beautiful, sexy), physicality-related (e.g., fierce competitor), or trait-related terms (e.g., driven, smart). Across all conditions, trait-related words were used the most frequently (47.3%), the majority of which came from the family/motherhood condition. The highest frequency of performance-related words were elicited by the performance condition (32.5%), and the objectified condition resulted in the highest frequency of negative words about appearance and body size, although those frequencies were small (10.0% combined). Results showed that regardless of image type, viewing images of female athletes evoked primarily positive, intrinsic statements, indicating that female athletes may feel empowered when viewing images of other female athletes.

### P-71

#### EXAMINING HOW COUNTRY OF ORIGIN RELATES TO COLLEGIATE STUDENT-ATHLETES' ALCOHOL USE

*Jennifer Forse, Florida State University;*  
*Svenja Wolf, Florida State University*

It has been well researched that college student alcohol use is a public health concern and that college students, more specifically student-athletes, are at an increased risk for excessive alcohol use and binge drinking (Martens et al., 2006). Collegiate student-athletes have been found to be more likely than their peers to report alcohol-related negative consequences and consume more alcohol (Leichtner et al., 1998; Wechsler & Nelson, 2001). To help understand why athletes drink more than their peers, previous research purports that motives for alcohol use stem from both general and sport-related motives (Pitts et al., 2019). Social norms theory, particularly descriptive and injunctive norms, has also been used to explain alcohol use habits in college students and student-athletes (Lewis & Paladino, 2011; Yang & Nan, 2019). Alcohol use is also strongly influenced by cultural norms and beliefs that one may develop in their country of origin (Brooks-Russell et al. 2014; Caetano & Clark 1999; LaBrie et al. 2012). The purpose of this study was to bridge current gaps in the literature by investigating alcohol use among international and domestic student-athletes and the resulting relationship between factors such as alcohol consumption, drinking motives, negative consequences of alcohol use, and a student-athlete's country of origin. In a sample of 1330 NCAA athletes, multiple linear analyses resulted in statistically significant differences in alcohol use behaviors based on an athlete's country of origin (e.g., United States or International). Results of this study have implications for helping practitioners understand how alcohol use behaviors differ between domestic and international student-athletes. Furthermore, these findings can aid in the creation of specialized alcohol prevention programs.

### P-72

#### EXPERIENCES OF ELITE ROWERS WITH VISUAL IMPAIRMENT

*Jason Rich, College at Brockport;*  
*Lauren Lieberman, College at Brockport;*  
*Pamela Beach, College at Brockport;*  
*Melanie Perreault, College at Brockport*

Due to the accessibility of the sport of rowing for individuals with visual impairment, rowers with visual impairment are a unique population because they have the potential to be just as competitive outside of Para-rowing as sighted rowers. The purpose of this study was to examine and explore the lived experiences of elite rowers with visual impairment. Adopting an Interpretive Phenomenological Analysis (IPA) approach to guide data collection analysis and interpretation, eight participants with visual impairment who rowed on the division I level or higher were recruited and interviewed. The analysis identified four major themes: "Benefits and Opportunities," "Promoting Accessibility," "Stigma and Acceptance," and "Relationships." The identified themes illustrate the influence of rowing upon the participants' life, career, and success, as well as the disability awareness of the coaches and peers influencing their experiences.

### P-73

#### MULTICULTURAL TRAINING AND AWARENESS AMONG SPORT PSYCHOLOGY PRACTITIONERS

*Rena Curvey, University of Kentucky;*  
*Emily Murphy, University of Kentucky;*  
*Shannon White, Penn State;*  
*Travis Scheadler, Student;*  
*Myles Englis, Student;*  
*Laura Phelps, University of Kentucky*

Despite the demographic diversity represented within the realm of sport, the movement for sport psychology as a field to implement cultural competence has lagged significantly behind other fields, such as clinical and counseling psychology (McGannon et al., 2014; Schinke & Moore, 2011). Thus, this study aimed to explore the lived experiences of sport psychology professionals to better understand their multicultural training and competence within the realm of sport psychology. A sample of 5 women and 7 men, from culturally diverse backgrounds, whose ages ranged from 27-51 years old participated in semi-structured interviews from March 2020 to May 2020. An interpretivist-constructivist paradigm (Ponterotto, 2005) and a phenomenological framework (Neubauer et al., 2019) were used to guide the study. Themes in the current study were developed solely from the data being examined in the present inquiry. The six phases of thematic analysis (Braun & Clark, 2006) were employed by the research team to analyze the data and develop themes. The results of this study identified the following themes: 1) A Call to Reform Training Programs, 2) A Shift from Multicultural Competence to Cultural Humility, 3) Professional and Ethical Responsibilities of Sport Psychology Practitioners, and 4) Reflective Practice and Culturally Sensitive Interventions. Study findings support the notion of expanding multicultural training for students of sport psychology graduate programs, in addition to continuing education for practitioners in the field. Further study findings and clinical implications will be discussed.

**Key words:** Sport Psychology, Multiculturalism, Training

### P-74

#### PERCEIVED DIVERSITY AND INCLUSION IN ROLLER DERBY

*Chelsea Duncan, James Madison University;  
Stephanie McKee, University of Virginia*

Roller derby has a reputation as an open and inclusive sport and community, especially for female and LGBTQ+ populations (Becker, 2018; Donnelly, 2016). However, many individuals have begun sharing negative experiences, including racism and sexism, they have incurred on and off the track within the derby community. These accounts and the 2020 Black Lives Matter movement have led many organizations to begin evaluating, discussing, educating, and promoting more diversity and inclusion. Positive diversity beliefs and inclusivity are important in team sports to help build healthy team environments and produce quality outcomes (Anderson & McCormack, 2018; Van Dick et al., 2008). As there is no specific research concerning diversity and inclusion within roller derby, a line of research is planned to assess these and their impact on team interactions and outcomes, leading to plausible solutions to increase these within organizations and leagues.

This pilot study focused on collecting data concerning individual diversity beliefs and perceptions of diversity and inclusion within leagues (Hentschell et al., 2013; Jansen et al., 2014; Van Dick et al., 2008). Data was collected from 119 members of leagues who have been active for at least two of the last six years. Findings revealed high diversity beliefs from the seven-point scale ( $M=6.32$ ,  $SD=.83$ ). Interestingly, higher diversity beliefs correlated with lower perceived diversity of a league ( $r(108) = -.194$ ,  $p = .044$ ), while higher perceived diversity was positively correlated to higher perceived inclusivity ( $r(106) = .309$ ,  $p = .001$ ). Furthermore, higher perceived identity-related diversity (gender identity, ethnicity, etc.) increased perceptions of inclusivity ( $r(106) = .298$ ,  $p = .002$ ), while higher values-related diversity (learning goals, attitudes about challenge, etc.) decreased perceptions of inclusivity ( $r(106) = -.337$ ,  $p < .001$ ). A future study will explore low diversity in leagues as well as the relationship between identity and value-related diversity and inclusivity.

### P-75

#### UNTAPPED POTENTIAL: PSYCHOLOGICAL SKILLS ANALYSIS IN DOMINICAN ATHLETES BASED ON THEIR LEVEL OF EXPERIENCE

*Emmanuel Goico-Montes de Oca, New York Mets/ Florida State University*

We studied the relationship between psychological skills in athletes comparing their different levels of experience in the different disciplines practiced in the Dominican Republic. The levels of control of anxiety, motivation, team cohesion, concentration, imagery, and confidence were measured in 173 athletes of the Elite, Pre-Elite and non-Elite levels; and it was compared between the different populations how these levels of psychological skills are presented and verified the existence of differences in the participants based on their level of experience. It was found that there is a significant difference between the groups according to their level of experience in the skills of control of anxiety, motivation, concentration, imagery,

and confidence according to the scores obtained using the Psychological Skills Inventory for Sports in its Spanish adaptation (PSIS R-5; Lopez-Walle, 2002). We also found a positive correlation between psychological skills in athletes. These results will throw more clarity in the field of Dominican sports psychology in relation to the state of psychological skills in athletes, providing useful data for better development of the psychological skills of the athletes, in addition to presenting information for better training programs. They also show which are the skills that are present at higher levels to maintain a certain type of status within the most demanding levels. In this way, it is possible to know with greater certainty how to maximize the investments made to the athletes hoping that they are returned through the performance on the field.

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#### Elite/Pro Sport

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### P-76

#### A CONTENT ANALYSIS OF COMMUNICATION IN PROFESSIONAL ESPORTS

*Jessenia Otalora, Florida International University;  
Logan Burrows, Student;  
Renata Pavanelli Pereira, Professor;  
Sabrina Gomez, Student;  
Jason Kostrna, Florida International University*

In the past two decades, esports has grown exponentially and attracted more public attention and research interest. In particular, researchers examining esports communication have focused on non-verbal communication (e.g., pings) which is integral to communication but can cause a distraction if used ineffectively. This focus on non-verbal communication has largely excluded the examination of verbal communication within teams. Previous research on communication in sport has used leader-member exchange theory (LMX) to understand intrateam communication. LMX hypothesizes that athletes' within-group relationships influence communication and relationships with teammates. This study is the first to analyze how esports athletes use communication within teams, focusing on what they say and how they say it, while exploring the role of effective communication. Content analysis, a qualitative technique that uses codes and themes to identify patterns, was used to analyze and interpret the data. Two independent research teams transcribed a publicly accessible video of a high-stakes esports competition which included full audio of intrateam communication. Three independent researchers then coded the transcription using open coding to identify emergent themes and patterns. Emergent themes were compiled and included productive feedback, uncertainty, negative feedback, looking for approval, repetition, support, orders, and assumptions. Productive feedback was the most prevalent theme resulting in positivity and high energy. A shared pattern among all themes was a subsequent reassurance or positive criticism. The in-game leader avoided using commanding language suggesting he is part of the team and doesn't have power over the team. Results support the importance of effective communication, team roles, and effective leadership.

### P-77

#### **A LONGITUDINAL STUDY OF PSYCHOLOGICAL SKILLS AND CHARACTERISTICS OF RUGBY UNION PLAYERS IN A PROFESSIONAL ACADEMY**

*Julianne McAuliffe, Abertay University;*

*David Lavalley, Abertay University;*

*Mark Campbell, University of Limerick*

Athletes must possess a range of psychological skills and characteristics (PSCs) to successfully negotiate talent development pathways (e.g. Abbott et al., 2002; Macnamara & Collins, 2015). PSCs are important for talent development as they assist athletes in overcoming the challenges associated with progressing to elite sport (Ericsson et al., 1993). Recommendations from previous research is that the PSCs should be formally taught to athletes engaged in talent development pathways. However, PSCs needed for development may be context specific and may vary between sport. To date, limited research has been conducted on the PSCs of rugby players. The aim of the current study was to monitor the PSCs of rugby players in a professional academy (Years 1 to 3) over the course of a full season to examine (a) any changes in PSCs, (b) differences between those in the different years of the academy, (c) differences between those that are rated by coaches as likely to succeed or not. Twenty male rugby union players that were part of a professional academy completed a series of self-report questionnaires measuring PSCs including self-regulated learning, coping skills, perfectionism, goal orientation, motivation, basic needs satisfaction and performance strategies at four time points throughout the season. This study revealed novel findings including (a) players in Year 1 of the academy scored higher in confidence, intrinsic motivation to experience stimulation, extrinsic motivation identified and reflection than those in Year 3; (b) those rated by coaches as moderately likely to succeed scored lower in coping with adversity than those that were rated as less likely to succeed; (c) PSCs were also found to predict the number of caps a player had, specifically ego orientation, basic needs satisfaction and extrinsic motivation. The findings of this study have practical implications for the deployment of psychological supports in talent development programmes.

### P-78

#### **COLLECTIVE EMOTIONS IN DOUBLES TABLE TENNIS**

*Alexander Freemantle, University of Portsmouth;*

*Lorenzo Stafford, University of Portsmouth;*

*Chris Wagstaff, University of Portsmouth;*

*Lucy Akehurst, University of Portsmouth*

Previous researchers have found that the emotions that athletes experience during sporting competition can be transferred between team members to create collective emotions and aggregated emotional states. The concept of convergent team emotions has been quantitatively and qualitatively investigated within large team sports, although no study has previously investigated the presence of these collective emotions in a dyad sporting context. In this study, we measured the emotional experiences of 68 doubles table tennis players (34 dyads) at three time points, pre-competition, in-competition and post-competition. The athletes' emotions were assessed on the five principal factors of anger, happiness,

excitement, dejection and anxiety. The athletes were found to experience a range of emotions across positive or negative match situations. Moreover, in-competition anxiety, dejection and anger were shown to have a negative effect on subsequent subjective performance assessments, and anxiety was also shown to negatively impact subsequent objective athlete performance. Most pertinently, within-dyad emotional aggregation was identified for both athlete happiness and dejection at the in-competition time point and for happiness, dejection and anger at the post-competition time point. These findings represent the first quantitative evidence for emotional aggregation in sporting dyads and supports previous research which has presented evidence to indicate the existence of collective emotions in sport. We hypothesise that this within-dyad emotional congruence arises as a result of emotional contagion and is facilitated by outward emotional expression, such as facial expressions, tone of voice and gestures. A greater understanding of the emotional contagion process in team sports will aid athletes, coaches and practitioners to better manage the affective tone of their teams, recognise when athletes may need additional emotional support and ultimately improve team performances.

### P-79

#### **EXPLORING THE EXPERIENCE AND RESPONSE OF CONFIRMATION BIAS DURING THE COACHING BEHAVIOR OF SOCCER COACH**

*SungHo Kwon, Seoul National University;*

*Dojin Jang, Seoul National University;*

*SeungJoo Lee, Seoul National University*

The purpose of this study was to investigate how confirmation bias is experienced from the view point of the coaching behavior in coaches who have been making judgement and decision making in their sports teams. Data were collected through semi-structured individual interview from 11 research participants who have been coaching football players on the field. The data were analyzed by using the grounded-theory of Strauss & Corbin(1998). According to the evidence of the grounded-theory, it consists of the 13 core-categories extracted from the result that is divided into 155 concepts words and 27 sub-categories, and these constructed the paradigm model of the research. In the contextual situation such as a reinforced experience of success, an others' expectation to coaches' leadership, and a lack of sense of crisis, the coaches' stereotype based on their philosophy in soccer and coaching is the causal condition that makes the phenomena of confirmation bias in coaching behavior. The coaches' confirmation bias, which consists of sticking to pre-existing beliefs and stopping the search for new information, is a universal cognitive bias that human-being has. With the intervening condition, however, such as an advice from others, a democratic system of decision making in teams, and an accessibility to new information, coaches can cope with the phenomena of confirmation bias by using the action-interaction strategy (active or passive responses), and the result is that the confirmation bias is overcome, or sustained. The research findings could stimulate sport coaches in field to recognize the existence of confirmation bias in coaching behavior and explore the more effective coping strategy with it.



### P-80

#### THE ROLE OF GRIT IN PROFESSIONAL ATHLETICS

*Jaxson Judkins, West Virginia University;*  
*Cindra Kamphoff, Mentally Strong Consulting & Minnesota State University;*  
*Michelle McAlarnen, Minnesota State University, Mankato;*  
*Scott Barnicle, West Virginia University*

Gritty athletes have always been celebrated in sports as the motivators of human performance, but surprisingly few studies have examined grit from a professional athlete perspective. The purpose of this study was to explore grit development among professional athletes with the intent of boosting one's grittiness in sport. Eighteen elite-level athletes from various sport domains (e.g., NFL, WNBA, Olympics, Paralympics, CFL, ECHL, and USA Rugby) were interviewed and surveyed how they interpreted their personal development of grit. This study utilized a grounded theory approach yielding five primary and overarching themes describing characteristics of a gritty athlete: (a) Unwavering Social Support, (b) Relentless Passion, (c) Inner Drive to Test Limits, (d) Goal-oriented Ambition, and (e) Handling Adversity in Stride. New insights given by professional athletes demonstrated that grit development can be strengthened by a notable life-changing event and teaching grit-like qualities to the rising generation. With statistically significant findings in each of the five thematic areas, this study deepens the notion that grit is malleable and an important facet to develop in athletics. Practical implications for mental performance consultants, coaches, and athletes emphasize the importance of having a strong network of support and making the decision to embrace struggle optimistically. Athletes are encouraged to seek moments to push past their limits and view struggle as an opportunity to grow.

### P-81

#### UNDERSTANDING ORGANIZATIONAL RESILIENCE IN ELITE SPORT: AN EXPLORATION OF PSYCHOSOCIAL PROCESSES

*Kirsten Fasey, Nottingham Trent University;*  
*Mustafa Sarkar, Nottingham Trent University;*  
*Chris Wagstaff, University of Portsmouth;*  
*Julie Johnston, Nottingham Trent University*

Organizational resilience is the dynamic capability of an organization to successfully deal with significant change and uncertainty, such as changes in key staff, performance, and funding, even global pandemics. It is a multi-level phenomenon, emerging from interacting individual, team, and organizational characteristics and processes, which supports an organization in preparing for, adapting to, and learning from significant change. Although researchers (Fasey et al., 2021) have recently identified the characteristics of elite sport organizations that successfully deal with significant change, further research is needed to understand how such organizations function. The purpose of this study was to explore the psychosocial processes underpinning organizational resilience in elite sport. Using qualitative methods, data were gathered during 43 interviews with 22 individuals from 10 elite sport organizations across a 6-month period, supplemented by timelines compiled from documentary analysis of online sources. The participants held roles as chief executive officers (n=5), directors (n=7), board members (n=2), middle managers (n=4), support staff (n=2), head coach (n=1), and senior athlete (n=1). Reflexive

thematic analysis of the qualitative data was conducted from a critical realist standpoint. The data analysis yielded two core processes of sensing (viz. internal and external mechanisms, diversity of perspectives, evaluating and monitoring) and adapting (viz. mirroring current resource availability, open and frequent communication, acute versus chronic change), and two supporting processes of strengthening resources (viz. quality and quantity of human and financial resources, relationships as source of additional resources) and shielding from risk (viz. internal risk mitigation, external influencing). Our interpretation of these results is that they provide a unique framework and practical implications to help those working in and with elite sport organizations successfully navigate uncertainty and change. Specifically, key learning points for attendees will include considerations for developing resilience within elite sport organizations at individual, team, and organizational levels.

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#### Exercise/Health/Fitness

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### P-82

#### BEARS CONNECT TO MOVE: A SELF-DETERMINATION THEORY-BASED INTERVENTION APP FOR STUDENT PHYSICAL ACTIVITY AND HEALTH NEEDS

*Danielle Wong, University of Northern Colorado;*  
*Megan Babkes Stellino, University of Northern Colorado;*  
*Bryson Kelly, University of Northern Colorado;*  
*Kolton Vinzant, University of Northern Colorado*

College students are in a critical developmental stage of emerging adulthood where the mental and physical health habits they create will most likely be the lifestyles that endure long-term (Melnyk et al., 2012). Student retention remains a challenge for institutions of higher education because of the fluctuations in mental and physical health across a given college campus with students of different backgrounds (ACHA, 2021). According to Basic Needs Theory, a mini-theory of Self-Determination Theory (SDT; Deci & Ryan, 1985), the extent that individuals' basic psychological needs of autonomy, competence and relatedness are satisfied predicts their relative levels of self-regulation and psychological well-being (Ryan & Deci, 2000).

The application (APP), 'Bears Connect to Move', was developed based on the contentions of SDT to address the importance, and promote the maintenance of, physical activity (PA), mental health, and connection among students in a specific campus community. This APP was designed with particular focus and consideration of students' needs satisfaction in efforts to promote physical and mental health and increase student retention.

The purpose of this presentation is multifaceted in that it will highlight the theoretically-based impetus for the development of the APP, features of the APP functionality, how the APP can bring awareness to the challenges of college students' engagement in health and wellness behaviors and some initial evidence of effective APP usage at a mid-size university in the Rocky Mountain region of the United States. The use and dissemination of this APP provides students with a platform to connect with one another to maintain mental and physical health. The practical implications of the 'Bears Connect to Move' APP may then communicate and reflect

the needs of a more diverse and inclusive student community to school administrators, exercise science professionals, sport and exercise psychology practitioners/professionals, and counselors.

### **P-83**

#### **BULKING UP FOR PERFORMANCE: WHAT HAPPENS AFTER THE CAREER IS OVER?**

*Brian Butki, Colorado State University*

The relationship between body image and physical esteem is well reviewed in the literature. A potential gap in the literature centers on the concept “body utility,” especially among athletes in sports that require greater bulk for sport performance reasons. For many of these individuals, especially those who played football, rugby, or other size-based sports, the physical size increases can result in post-career health concerns after their playing careers are finished. Complaints of being too large, problems with limited mobility, cardiovascular problems, and myriad injuries (joint, bone, and muscle problems) have been attributed to sport-mandated size gains. To explore the extent of these issues, we questioned former elite-level football players about their ideal and actual weights during their playing careers, currently, and 15 years into the future. We also asked about “ideal” relative to performance vs. normal life activities. The questions centered on body utility and their perceived importance of reaching the ideal. Further, players were asked to describe any “real-life” problems they have experienced as a result of their football-related body changes. 171 former NFL, CFL, and NCAA FBS-division football players responded to the survey, and the results revealed significant discord between the physical characteristics required for sport and those preferred for post-sport reality. The vast majority of the athletes reported at least a moderate level of dissatisfaction with their post-sport bodies, and nearly all of the respondents described injuries and other factors that negatively affected their post-sport lives. Most also expressed regret about their past body size. Very few respondents noted that they felt like the sport-driven physical changes were a benefit in their non-sport lives, and many noted the humbling effects of the loss of strength and size as psychological factors associated with their negative self-perceptions. Results are discussed relative to the overall physical and emotional development of these athletes, and suggestions for future research are noted.

### **P-84**

#### **DEVELOPMENT OF A BEHAVIORAL TRANSITION PROGRAM FOR PREVENT T2 - A CLINICALLY SUPERVISED T2 DIABETES MELLITUS PREVENTION PROGRAM**

*Kimberly Fasczewski, Appalachian State University;  
Sara Powell, Missouri State University;  
Kayla Chipman, Appalachian State University*

Type 2 diabetes mellitus (T2DM) is a chronic disease that occurs due to physiological changes in the body. Although these changes do enhance the development of T2DM, the disease is typically caused by excessive weight, diet, and physical inactivity. To help those who are at risk of developing T2DM, intervention programs have been created to modify nutrition and increase physical activity (PA). While these programs are initially effective, long-term adherence and compliance with PA guidelines is low. Research has suggested that self-efficacy

and self-determined motivation content can increase long-term PA adherence. However, these behavioral components are typically overlooked in PA programming. Therefore, the purpose of this project was to develop a transition program to increase levels of self-efficacy and self-determined motivation for participants in a T2DM intervention program. Data were collected through observation of participants completing the Prevent T2 program (N = 23; 82.6% female, 211.4 ± 41.2 lbs), interviews with the program staff, and through consultation with the developer of a similar program for post-bariatric surgery patients. Observation of participants during Prevent T2 meetings identified barriers for PA participation and confirmed the need for a behavioral transition program. Participants indicated experiencing health-related stress, difficulty prioritizing personal needs, and barriers to participating in and tracking physical activity. Other psychological barriers to physical activity included lack of self-confidence and motivation. This information led to development of the Moving In a New Direction (MIND) behavioral program as a supplement to Prevent T2. MIND is based off of the FLOW program (Powell et al., 2018), and aims to increase participant self-efficacy, self-determined motivation, and long-term PA adherence through weekly intervention sessions with program participants. Future research will test the efficacy of the MIND program through implementation and assessment of those with T2DM participating in Prevent T2.

### **P-85**

#### **INDIVIDUAL AND GROUP EXPERIENCES ON COVID-RELATED BARRIERS TO EXERCISE DURING A VIRTUAL EXERCISE INTERVENTION**

*Elaine Porsmyr, California State University Long Beach;  
Alison Ede, Long Beach State University;  
Ayla Donlin, Long Beach State University;  
Jackie Dawson, Long Beach State University*

The purpose of this pilot study was to examine the effectiveness of individual and group goal-setting on physical activity (PA) and social connectedness during an 8-week virtual exercise intervention. Fourteen participants (13 female, 1 male) ages 19 to 51 were randomly assigned to either a synchronous fitness class (n= 7), led by an instructor over videoconference 3x/week, or an asynchronous group (n= 7) who received 3 pre-recorded exercise videos every week. The Myzone MZ-3 fitness tracker and mobile app was utilized to foster social connectedness and objectively measure PA during the program. PA was calculated using Myzone Effort Points (MEPs), which provide a measure of time and intensity of exercise. Participants were given a target individual weekly goal of 300 MEPs/week (corresponding to national guidelines of 150 minutes per week of moderate PA) and a group goal of 2100 MEPs/week, and could view one another's workouts and progress using the app. Pre-intervention, participants reported that their motivation to exercise was lower than before the pandemic began (78.6%), and they did not know what to do for exercise (64.3%); however, they also reported a desire to use technology during exercise (57.1%). Perceived importance of meeting the weekly individual goals was correlated with PA ( $r = .633, p < .05$ ) across the whole group, and was stronger for those who did not utilize any connections on the app ( $r = .933, p < .05$ ). The importance of meeting group goals was not significantly related to PA and there were no differences between conditions. Findings suggest that individual goals were more meaningful for participants' PA levels, in comparison to the social connections through the

online group settings or the app. This study supports the use of technology and its efficacy in promoting physical activity and addressing COVID-related barriers to exercise.

### **P-86**

#### **INFLUENCE OF USING PRE-PERFORMANCE ROUTINES ON ANXIETY, CONFIDENCE, AND OVERALL PERFORMANCE IN PUTTING**

*Lauren Greenspoon*

Due to the precision required, putting is the most challenging aspect of golf (Pelz, 1991, 2000). Avoiding multiple putting attempts often leads to lower golf scores and handicaps (Stachura, 2017). Therefore, the primary purpose of this study was to explore whether golfers regularly use pre-performance putting routines and which types of routines are most often used. A secondary purpose was to explore whether pre-performance putting routines are perceived to increase pre-putt confidence and reduce pre-putt anxiety at different putting distances (8, 16, and 40 feet). Participants (N = 61; 47 male, 14 female) responded to an online survey that requested demographic information (golf handicap, use of a routine, etc.) and included the Revised Competitive State Anxiety Inventory – 2 (CSAI-2R; Cox, Martens, & Russell, 2003). Results indicated that golfers commonly used pre-performance putt routines such as visualizing movement of the ball to the target, assessing green (i.e., reading the break, assessing the grain), and taking practice strokes. An analysis of variance (ANOVA) was used to determine if differences existed in anxiety and confidence between golfers who use only a cognitive routine and those who use both a behavioral and cognitive routine. Overall, results showed golfers who use only cognitive strategies had lower somatic and cognitive anxiety levels, and higher self-confidence, compared to golfers who use both cognitive and behavioral components. Despite these results being consistent across the three putting distances, those that use behavioral and cognitive components showed lower somatic anxiety at 8 and 16 foot putts. Understanding the relations among pre-performance putt routines, anxiety, and confidence may help golfers, golf coaches, and practitioners in developing individualized routines specifically for putting, different putting distances, and individuals with different handicaps.

### **P-87**

#### **THE ALCOHOL-EXERCISE PARADOX: THE ROLE OF COMPETITIVENESS**

*Samuel Davis, Colorado State University;  
Madison Colley, Colorado State University*

Despite the largely protective aspects of exercise, research has demonstrated that college student-athletes and frequent exercisers are more likely to consume alcohol and engage in heavy episodic drinking than their non-athlete peers. Several factors have been identified to help explain this, including motives and norms. However, little research has explored whether facets of competitiveness (i.e., general, dominant, affect, and enhancement) are associated with varying alcohol use rates. It is therefore of great importance to better understand the potential factors contributing to the positive relation between exercise and alcohol misuse. This study explored patterns in facets of competitiveness, and their relation to several alcohol use variables in a sample of

Colorado college exercisers (n = 356) that reported exercising, on average, the same amount as a typical college athlete (at least 13 hours per week). A Latent Profile Analysis (LPA) was conducted to identify profiles of competitiveness facets. Following the identification of profiles, differences in alcohol use, descriptive norms, injunctive norms, drinking motives, and weekly exercise were tested. Findings indicated that a three-profile solution best-fit the data. Profile 1 (LoC) was characterized by low average competitiveness in all four facets, Profile 2 (MoC) was characterized by moderate competitiveness in all four facets, while Profile 3 (HiC) was characterized by high competitiveness. Difference tests identified no significant differences between profiles' reported alcohol use in a typical and heavy week of use. MoC reported significantly more motivation to drink to feel good than LoC. HiC reported exercising significantly more per week than LoC. Findings suggest that, while competitiveness may still be a risk factor for alcohol misuse, varying levels of competitiveness across all four facets were not associated with greater alcohol use or factors associated with increased alcohol use. Interventions might consider competitiveness as a situational risk factor for alcohol misuse.

### **P-88**

#### **THE EFFECTS OF FACE COVERINGS ON RATING OF PERCEIVED EXERTION AND ATTENTION ALLOCATION**

*Elizabeth Warfield, Texas Christian University;  
Jessica Renteria, Texas Christian University;  
Ashlynn Williams, Texas Christian University;  
Kaitlyn Harrison, Texas Christian University;  
Robyn Trocchio, Texas Christian University*

The COVID-19 pandemic has impacted the entire world from lockdowns to various recommended restrictions including social distancing and wearing face coverings. However, exercising in a safe environment is important for both physical and mental health. Due to the universal recommendation of wearing of face coverings, researchers are investigating the physiological impacts during exercise and report only minor physiological changes (Epstein et al., 2020; Haraf et al., 2021; Roberge & Roberge, 2020). However, no current research has examined how face coverings may impact rating of perceived exertion (RPE) or attentional allocation. Shifting attentional focus toward the body (association), such as the feeling of face coverings, instead of environmental stimuli (dissociation), may increase one's perceived level of exertion (Tenenbaum, 2005). The purpose of the current study was to examine the effects of face coverings on RPE and attention allocation during an exertive stepping task. Participants included a total of 54 individuals (male = 16; female = 38) between the ages of 18-50 years of age (21.19±5.51). Participants completed a stepping task with a weighted vest at 20% of their bodyweight until volitional fatigue while either wearing a face covering (n = 24) or not wearing a face covering (n = 30). Heart rate (HR), RPE, and attention allocation were collected at 30-second intervals. Performing the stepping task resulted in a gradual increase of both HR and RPE along with a shift from dissociative to associative attention across both conditions over four time points (30s, 1/3 time to exhaustion, 2/3 time to exhaustion, and exhaustion). At the second time, there was trend (p = .057) for the face covering condition to have more associative attention compared to those without. The results of this study have relevance for applied practitioners implementing physical activity interventions that require face coverings. Future research and limitations will also be discussed.

### P-89

#### THE IMPACT OF PHYSICAL ACTIVITY ON LEARNING READINESS AMONG LEARNERS WITH BEHAVIORAL ISSUES

Brian Butki, Colorado State University

Research supporting the benefits of physical activity (PA) on psychological and emotional variables is plentiful. Further, PA has been examined as a therapeutic intervention for myriad emotional and behavioral issues, and the majority of that research has been positive, but there has been a paucity of research examining the benefits of PA on learning variables, especially among children. Classroom behavior management is key to effective teaching, and it becomes even more important among children with behavioral disorders. The purpose of this study was to examine the influence of physical activity on negative classroom behaviors among elementary school children with behavioral issues. Thirty-eight children from self-contained elementary school classes participated in the study. Participants were of normal intelligence, but all had been diagnosed with behavioral or conduct disorders. For eleven weeks, children were evaluated relative to a behavioral checklist, which included distracted attention, talking-out, disruptive noises, non-compliance, aggression, out-of-seat-behavior, and emotional outbursts. Following a baseline week, the classes alternated between exercise and non-exercise weeks for ten weeks (ABAB design). During exercise weeks, children participated in 20 minutes of running exercises twice a day, in addition to their normal recess time. During non-exercise weeks, children participated in academic subjects during the delegated time period. Daily classroom activities were recorded, and each child was retroactively rated by two separate experts relative to the behavioral scale. Evaluators were blind to the research hypothesis, and the recordings were evaluated in random order. Results revealed that children exhibited significantly better scores on six of the seven behavioral scales during the exercise weeks than during the non-exercise weeks. Additionally, academic performance did not decline during the exercise weeks. These results strongly support the idea that physical activity participation can be an effective and immediate tool for decreasing negative and disruptive behaviors in the classroom.

### P-90

#### THE INFLUENCE OF A MOTIVATIONAL CLIMATE INTERVENTION ON PARTICIPANTS' PHYSIOLOGICAL MEASURES OF EFFORT AND MUSCLE PERFORMANCE

Troy Wineinger, University of Kansas;  
Daniel Rosen, University of Kansas;  
Sheryl Miller, Western University of Health Sciences;  
Jonathan Miller, University of Kansas;  
Mary Fry, University of Kansas;  
Andrew Fry, University of Kansas

The purpose of this study, grounded in the Achievement Goal Perspective Theory (AGPT) and a Caring framework, was to examine the impact of an instructional weight training climate intervention on participants' physiological levels of effort and voluntary and non-voluntary levels of strength. Specifically, pre- and post-measures of neuromuscular contractile performance of the quadriceps muscle group included an interpolated twitch assessment (maximal voluntary contraction torque [MVC], evoked twitch torque, % voluntary activation [%VA]),

and a single post-intervention isometric time to exhaustion test. Female university students (N = 17) who were physically inactive and met inclusion criteria participated in the study. Participants were randomly assigned to one of two experimental group weight training sessions where the instructor created: 1) a caring and task-involving (CTI) climate or 2) an ego-involving (EI) climate. Participants exposed to the EI climate demonstrated decreased voluntary strength and muscle endurance, and decreased %VA but no change in evoked twitch torque. Those exposed to the CTI climate demonstrated no changes in neuromuscular performance. Although athletes and physical activity participants in previous research have consistently reported maladaptive outcomes when exposed to an EI climate, researchers have noted that the findings would be more compelling if objective measures (i.e., rather than simply self-report) of participants' effort were included. The results of this study indicate that, contrary to the results for the CTI climate group, exposure to an EI climate meant participants were unable to voluntarily recruit their muscles to maintain force productions, even though their muscles were capable of producing the same force when stimulated. These findings are important because they highlight how EI climates may directly and negatively impact participants' physiological levels of effort in the physical domain. Overtime, if participants exert lower effort in exercise programs, they may not reap optimum health or performance benefits, which could affect long-term participation in physical activity.

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#### Injury/Rehabilitation

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### P-91

#### A PILOT STUDY OF RE-INJURY ANXIETY IN COLLEGIATE POWERLIFTERS

Stefanee Maurice, California Polytechnic State University;  
Angelo Alfano, California Polytechnic State University

Powerlifting, a rapidly growing strength sport, has an inherent risk for injury much like other sports that can be magnified by athletes' trait anxiety, social support, and coping mechanisms (Warpeha, 2015; Williams & Andersen, 1998). Following injury, athletes can experience re-injury anxiety causing negative physiological and psychological effects that can cause further injury. Despite being an understudied population, research suggests that powerlifting has unique stressors that contribute to the potential for injuries (Pavelic, 2017). College-level athletes, such as those in this study, are exposed to various forms of physical and academic stress that have been shown to have pervasive effects on individuals' physiological and psychological performance (Judge et al., 2016; Lu et al., 2012). The purpose of this study was to analyze re-injury anxiety and trait anxiety in collegiate powerlifting athletes (n=39) using the Re-injury Anxiety Inventory (Walker et al., 2010) and State-Trait Anxiety Inventory trait subscale (Spielberger et al., 1968). A positive relationship was found between a powerlifter's trait anxiety and re-injury anxiety in both rehabilitation,  $r(37) = .45$ ,  $p < .001$ , and re-entry into competition,  $r(37) = .48$ ,  $p < .001$ . No relationship was found between the number of injuries experienced and re-injury anxiety in rehabilitation,  $r(37) = .03$ ,  $p = .82$ , or re-entry into competition,  $r(37) = -.09$ ,  $p = .57$ . The results of this study provide direct insight on the relationship of trait and re-injury anxiety within collegiate powerlifters, and how injuries affect re-injury anxiety. Although there is extensive literature on re-injury anxiety within sports, this study focuses

on the unique and understudied perspective of powerlifting. This presentation will explore stressors unique to powerlifting and provide recommendations for the use of psychological skills training with injured powerlifters.

### P-92

#### **AN EXPLORATION OF THE INFLUENCE OF DEMOGRAPHIC AND PSYCHOSOCIAL VARIABLES ON REHABILITATION AND OVERADHERENCE IN ATHLETES**

*Lindsey Leatherman, Student at Southern Illinois University;  
Julie Partridge, Southern Illinois University Carbondale*

An estimated 8.6 million sports- and recreation-related injuries are reported each year and 50% required treatment at a doctor's office or other health clinic (National Health Statistics Reports, 2016). Given this injury prevalence, it is important that rehabilitation protocols address both the physical and psychosocial aspects inherent to injury. The visible nature of an injury (e.g., compound fracture vs. concussion) may impact several rehabilitation outcomes (Bloom et al., 2004). A desire to quickly return to sport can elicit overadherence to rehabilitation programs and may be influenced by numerous demographic, emotional, and social factors (Hilliard et al., 2017). Thus, the first purpose of this study was to investigate the impact of athletic identity, self-presentational concerns, guilt/shame proneness, sport type and sex on rehabilitation overadherence. The second purpose was to explore athlete perceptions of invisible injury. Participants (n = 168) completed the Athletic Identity Measurement Scale (AIMS; Brewer et al., 1993), Self-Presentation in Sport Questionnaire (SPSQ; McGowan et al., 2008), Test of Self-Conscious Affect (TOSCA; Tangney et al., 1989), and Rehabilitation Overadherence Questionnaire (ROAQ; Podlog et al., 2013). They also provided answers to open-ended questions regarding perceptions of invisible injuries, how those perceptions impacted decisions to seek out and adhere to treatment protocols, as well as the impact on social relationships. A total of 61.4% of the sample reported having experienced an invisible injury at some point in their athletic career. Results indicated that invisible injuries did lead to greater self-presentational concerns and recognition of the importance of social support from significant others. Specifically, validation of invisible injuries by significant others was reported as a critical factor in determining how an athlete responded to their injury. These results provide greater understanding regarding the uniqueness of the invisible injury experience, and the associated cognitive, social, emotional, and behavioral outcomes that can result.

### P-93

#### **ATHLETIC TRAINER STRATEGIES FOR NURTURING ATHLETES' BASIC PSYCHOLOGICAL NEEDS DURING SPORT INJURY REHABILITATION**

*Matthew Bejar, Mount Mercy University;  
Johannes Raabe, West Virginia University;  
Kim Tolentino, West Virginia University;  
Kaleb Hage, Mount Mercy University*

Among the vast array of psychosocial challenges injured athletes experience, athletic trainers (ATs) have expressed a particular interest in learning more about their motivation during sport injury rehabilitation (Clement et al., 2013). Self-determination theory (Deci & Ryan, 2000) is an auspicious framework for understanding how ATs can influence injured

athletes' motivation, specifically through the fulfillment (or frustration) of the three basic psychological needs of competence, autonomy, and relatedness. Recently, Bejar et al. (2019) found that injured U.S. National Collegiate Athletic Association (NCAA) Division I athletes' perceptions of need fulfillment and motivation were largely influenced by the presence or absence of particular AT behaviors, such as providing encouragement (competence), soliciting input (autonomy), and building rapport (relatedness). To date, however, there is limited research centered on ATs' perceptions of motivation generally and strategies they employ to foster injured athletes' basic psychological needs specifically. Therefore, the purpose of the current study was to qualitatively explore ATs' perceptions of: (a) how they satisfy (or do not satisfy) athletes' sense of competence, autonomy, and relatedness during sport injury rehabilitation and (b) the subsequent impact of need fulfillment and thwarting on their motivation during sport injury rehabilitation. Semi-structured interviews were conducted with 13 U.S. NCAA Division I ATs (eight female, five male; 12 Caucasian, one Asian). Using a deductive thematic analysis (Braun & Clarke, 2006), we constructed three themes focused on strategies that nurture each of the three basic psychological needs. Examples of strategies included maintaining athletes' involvement with their teammates (relatedness), demonstrating rehabilitation exercises (competence), and providing a rationale for rehabilitation protocols (autonomy). While participants perceived all three needs as important, they especially emphasized relatedness as a foundation for successfully implementing strategies aimed at competence and autonomy and, in turn, cultivating optimal motivation during sport injury rehabilitation.

### P-94

#### **ATHLETIC TRAINERS' PERCEPTIONS OF VARIOUS PROFESSIONALS' QUALIFICATIONS TO IMPLEMENT PSYCHOLOGICAL STRATEGIES DURING SPORT INJURY RECOVERY**

*Alexander Bianco, University of Tennessee;  
Rebecca Zakrajsek, University of Tennessee;  
Mary Estep, Bethel University;  
Johannes Raabe, West Virginia University;  
Scott Martin, University of North Texas*

Athletic trainers' (ATs) are often considered "gatekeepers" to injured athletes (Zakrajsek et al., 2016). As the primary healthcare professional, ATs may be vital in integrating others to help address athletes' psychological needs during the sport injury recovery process (Arvinen-Barrow & Clement, 2013). The purpose of this study was to explore National Collegiate Athletic Association (NCAA) Division I ATs' perceptions of various professionals' qualifications to implement psychological strategies with athletes during sport injury recovery. Specifically, 485 NCAA Division I ATs considered the qualifications and abilities of ATs, physical therapists, coaches, mental performance consultants (MPCs), and psychologists to use seven psychological strategies (attentional control, effective communication, goal setting, imagery, relaxation strategies, self-talk, and time management) with injured athletes. Results of a one-way repeated measures MANOVA revealed statistically significant differences in ATs' perceptions of the five professionals' qualifications to implement the seven psychological strategies,  $p < .001$ . Post-hoc tests revealed that 67 out of the 70 group differences reached significance ( $.20 \leq d \leq 2.75$ ,  $p < .01$ ). Psychologists were perceived to

be the most qualified to incorporate all of the psychological strategies into injury recovery. MPCs were perceived to be the second most qualified professional to implement self-talk, attentional control, imagery, and relaxation strategies; whereas ATs were considered to be the second most qualified professional to utilize goal-setting, effective communication, and time management. In contrast, coaches were perceived to be the least qualified to integrate all of the psychological strategies. These results indicate that ATs may be unsure of the qualifications and roles of MPCs for injury recovery. This stresses the need for interprofessional education, which may create more effective interprofessional care teams in rehabilitation settings. Recommendations will be made regarding how professionals (e.g., ATs and MPCs) can take advantage of one another's expertise to enhance the sport injury recovery process.

### P-95

#### COVID-19 AND IMPACT ON PLAY: ATHLETE PERCEPTIONS

Conor Dauer, Pacific University;  
Tamara Tasker, Pacific University;  
Shawn Davis, University of Nottingham

This research study investigates the relationship between the impact of the COVID-19 pandemic and athlete perceptions, specifically on areas of life of an athlete: social, personal, and academic. Research regarding the impact of today's pandemic on athlete perception is new but can be derived from other studies researching the impact of injury, off season and retirement on an athlete's perception. The development of the change process is underlined by key decisions, manifested in sport performers' attempts to implement responsive change in these dimensions (Samuel, Tenebaum & Galily, 2020). Physical changes that need to be made to better suit an athlete's life to the ever-growing restrictions of the COVID-19 pandemic can take a large toll on the individual's perception of themselves and their role in athletics. During a study conducted by Samuel, Tenebaum & Galily (2020) they found that due to the pandemic, athlete motivation and future aspirations dropped. With no accurate end date of the COVID-19 pandemic, it is crucial to explore the inner workings of an athlete's perception due to the inability to continue with their sport and daily lives. It is important to note that research in this area is new and will have to compare to previous research using other domains of external forces that had impacted the perception of athletes. The current study hopes to continue to add to the growing literature on how the COVID-19 pandemic impacts athlete perceptions.

The research questions explored: 1) How does the COVID-19 pandemic impact athlete perception? 2) How has the COVID-19 pandemic impacted athletes' self-identity in important aspects of life: Social, Personal and Academic?

### P-96

#### EFFECTS OF A PETTLEP MOTOR IMAGERY INTERVENTION ON SPORT-CONFIDENCE OF COLLEGIATE ATHLETES WITH AN ORTHOPEDIC INJURY

Kellen Lee, San Francisco Giants

The purpose of this quantitative experimental study was to determine if, and to what extent, pre-test sport-confidence and the use of a mental imagery intervention predict post-test sport-confidence of collegiate athletes with an orthopedic injury. The PETTLEP Model of Motor Imagery informed the mental imagery intervention (Holmes & Collins, 2001). For the dependent variable, the Trait Sport-Confidence Inventory (TSCI) and the State Sport-Confidence Inventory (SSCI) assessed sport-confidence (Vealey, 1986). Sixty-eight collegiate athletes with an orthopedic injury participated in the study. Participants were randomly assigned to either the experimental or control group. Multiple linear regressions were used to analyze the data. Results indicated that pre-test sport-confidence and the use of the imagery intervention significantly predict both post-test state and trait sport-confidence. Based on these results, mental imagery may be implemented into return-to-play protocols for collegiate athletes with an orthopedic injury to enhance sport-confidence. This study added to the existing literature in both sport psychology and sports medicine by administering an imagery intervention within the context of physical injury rehabilitation.

Sports medicine professionals acknowledge the importance of psychological skills in the rehabilitation process but, generally, lack the training of how to integrate effectively (Hamson-Utley et al., 2008). Callow et al. (2017) state that research should extend its understanding of the benefits of internal or kinesthetic imagery across other domains than performance, specifically, in rehabilitation. Ghazi et al. (2018) state that additional research is needed to determine the most effective intervention strategies that facilitate self-efficacy in patients with orthopedic injuries. Attendees will be provided with an overview of the study and the practical implications that emerged from the results.

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### P-97

#### EXAMINATION OF RESILIENCE AND MENTAL HEALTH SYMPTOM SEVERITY IN INJURED ATHLETES

Joanne Perry, *Novant Health Orthopedics and Sports Medicine*;  
Alexa Landers, *Novant Health Orthopedics and Sports Medicine*;  
Imogen Cowper, *Novant Health Orthopedics and Sports Medicine*;  
Isabella Fiorenzo, *Saint Louis University*;  
Michael Ross, *Saint Louis University*;  
Jerry Barron, *Novant Health Orthopedics and Sports Medicine*

**Introduction:** Athletes experience a variety of negative psychological consequences following sport injury, including depression and anxiety, both of which are identified risk factors for poor injury outcomes. Recently, research has shifted towards identifying psychological variables that are related to positive injury outcomes. Resilience is associated with decreased pain, increased functionality, and decreased psychological distress. Therefore, the current study sought to examine levels of resilience in a sample of injured, self-identified athletes.

**Methods:** Participants (N = 201) were self-identified athletes attending their first appointment at an orthopedic clinic. Data was collected via self-report questionnaires administered prior to the appointment. All participants completed the Patient Health Questionnaire-8 (PHQ-8), the Generalized Anxiety Disorder-7 (GAD-7), and the Brief Resilience Scale (BRS). Results: Participants were organized into symptom severity groups based on GAD-7 (i.e., mild, moderate, and severe anxiety) and PHQ-8 scores (i.e., below clinical cut-off, above clinical cut-off). Between-group analyses were conducted to examine differences in resilience between symptom severity groups. A one-way ANOVA revealed that athletes with mild anxiety (M = 25.07) reported significantly higher resilience than individuals with moderate (M = 21.36) and severe anxiety (M = 20.80),  $F(2,189) = 16.843$ ,  $p = .000$ . Additionally, a t-test demonstrated that individuals scoring above the clinical cut-off on depression had significantly lower resilience scores (M = 22.70), when compared to individuals scoring below the clinical cut-off (M = 25.02).

**Discussion:** Findings show that injured athletes with less psychological symptom severity report significantly higher levels of resilience. It appears that individuals who report symptoms above established diagnostic thresholds have significantly lower resilience than groups who report subclinical symptoms. The current study utilized an atemporal design, so results cannot address causation. However, findings suggest that resilience may be a protective factor against the development of mental health disorders in athletes following a sport injury.

### P-98

#### IMPACT OF PRIOR SPORTS INJURY ON CURRENT HEALTH-RELATED QUALITY OF LIFE IN FORMER NCAA DIVISION I WOMEN'S SOCCER PLAYERS

Shannon Cross, *CSU Los Angeles*;  
Diane Gill, *UNCG*; Pam Brown, *University of North Carolina at Greensboro*;  
Erin Reifsteck, *University of North Carolina at Greensboro*

Previous research suggests former college athletes may experience lower health-related quality of life (HRQoL) and declines in physical activity (PA) after retirement from sport. Prior sport-related injury may play a role in these challenges (Russell et al., 2018). This study examined current HRQoL of former NCAA Division I women's soccer players who had a prior severe sport-related injury. Participants (n = 261, Mage = 35.85 ± 7.30) completed an online survey including self-reported measures of HRQoL, disablement, and leisure time PA, plus open-ended questions. About a third (n = 81) of participants reported injury-related reasons for their retirement from competitive soccer. Higher levels of disablement were associated with lower levels of HRQoL (r = -.615 physical; r = -.640 mental), and higher levels of PA with higher levels of HRQoL (r = .249 physical; r = .146 mental). Greater physical disablement was associated with less strenuous PA participation (r = -.135). Most participants (n = 234) rated their overall QoL as good or excellent. However, open-ended responses indicated some negative consequences such as physical impairments (n = 90), difficulties participating in desired forms of PA and/or being forced to make adjustments to activity (n = 59), fear of injury/pain or physical issues in the future (n = 22), and negative impact on mental health (n = 18). Thus, while these former athletes reported high quality of life overall, there is evidence of lingering effects on HRQoL, disablement, and PA. Finding alternative forms of PA can enhance mood, motivation, and return to health for athletes unable to perform desired forms of PA due to prior sport-related injury (Wiese-Bjornstal, 2009). Sport psychology professionals should consider strategies to support athletes with transitioning to a physically active lifestyle to promote wellbeing, especially when modification is necessary due to the long-term consequences of sport-related injury.

### P-99

#### INJURY-RELATED FEAR AND KNEE PAIN IN INDIVIDUALS WITH A HISTORY OF ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION

Shelby Baez, *Michigan State University*;  
Francesca Genoese, *Michigan State University*

Injury-related fear is a primary barrier for return to sport after anterior cruciate ligament reconstruction (ACLR) (Ardern et al., 2014). Additionally, 12% of patients after ACLR are diagnosed with early-onset knee osteoarthritis (OA), which is characterized by the presence of knee pain (Ingelsrud et al., 2015). While relationships between fear and pain have been investigated in patients with radiographic knee OA (Scopaz et al., 2009), it has yet to be explored in patient populations susceptible for the development of early-onset knee OA, such as individuals post-ACLR. Identification of these relationships could provide insight into secondary injury prevention strategies to mitigate the development of early-onset knee OA. Therefore, the purpose of this study was to examine differences in knee pain in individuals with a history

of ACLR with high fear compared to those with low fear. We hypothesized that individuals with high fear would exhibit increased knee pain when compared to those with low fear. Forty participants with previous ACLR ( $\geq 1$ -year post-operative) enrolled and completed the Tampa Scale of Kinesiophobia-11 (TSK-11) and the Knee Injury and Osteoarthritis Outcome Score Pain Subscale (KOOS-P). Participants who scored  $\geq 17$  on the TSK-11 were considered high fear ( $n=23$ ). The KOOS-P is a 9-item subscale scored from 0 to 100, with higher scores indicating decreased knee pain.

A Mann-Whitney U test and a Hedges  $g$  effect size were used to examine knee pain differences in individuals post-ACLR with high fear compared to low fear. Individuals post-ACLR with high fear (median = 86.2[5.5]) exhibited increased knee pain when compared to individuals with low fear (median = 94.4[11.1]) ( $p=0.009$ ; hedge's  $g = 0.80$ , 95% CI = (0.2-1.4)). Overall, these results suggests that fear may be associated with early-onset knee OA in individuals post-ACLR. Future research should explore psychological interventions to decrease fear and knee pain in patients post-ACLR.

### P-100

#### PSYCHOLOGICAL CONSEQUENCES OF SPORT INJURY: IMPACT OF COMPETITIVE STATUS

*Joanne Perry, Novant Health Orthopedics and Sports Medicine;  
Imogen Cowper, Novant Health;  
Alexa Landers, Novant Health Orthopedics and Sports Medicine;  
Isabella Fiorenzo, Saint Louis University;  
Michael Ross, Saint Louis University;  
Jerry Barron, Novant Health Orthopedics and Sports  
Medicine*

**Introduction:** Sport injuries represent a major stressor that result in a variety of negative psychological consequences. Although the response to sport injury depends on a variety of factors, the development of psychological consequences impacts individuals at all athletic levels. Research has identified level of competition as an important factor that impacts one's psychological response to injury. This study examined differences in psychological responses to sport injury in competitive vs. non-competitive athletes.

**Methods:** Participants ( $N = 214$ ) were self-identified athletes attending their first appointment at an orthopedic clinic. Data was collected via questionnaires administered prior to the appointment. All participants completed the Patient Health Questionnaire-8 (PHQ-8), the Generalized Anxiety Disorder-7 (GAD-7), and the Sport Injury Anxiety Scale (SIAS).  
**Results:** Analyses examined differences between competitive ( $n = 41$ ) and non-competitive athletes ( $n = 173$ ) on measures of depression (PHQ-8), anxiety (GAD-7), and sport injury anxiety (SIAS). Data violated the assumption of homogeneity of variance; therefore, Kruskal-Wallis H Tests were conducted. Groups did not differ on measures of depression or anxiety ( $p > .05$ ). Findings did reveal differences in total sport injury anxiety,  $\chi^2(1) = 7.915$ ,  $p = 0.005$ , between competitive (mean rank = 111.34) and non-competitive athletes (mean rank = 84.44). Competitive athletes also demonstrated higher ranks on three subscales of the SIAS: losing athleticism ( $p = 0.002$ ), letting down important others ( $p = 0.031$ ), and re-injury anxiety ( $p = .003$ ).

**Discussion:** Findings reveal that competitive and non-competitive athletes may not significantly differ on general

measures of mental health symptoms; however, results suggest that competitive athletes do report higher levels of anxiety specific to sport injury. Competitive athletes may be more likely to experience negative appraisals of the sport injury experience. Results reinforce the importance of using sport-specific measures, as they might illuminate differences that general mental health measures do not capture.

### P-101

#### PSYCHOSOCIAL FACTORS ASSOCIATED WITH ATHLETE ADAPTATION TO SPINAL CORD INJURY: A SYSTEMATIC REVIEW

*Derek Zike, UW Milwaukee;  
Monna Arvinen-Barrow, University of Wisconsin - Milwaukee*

Spinal cord injury (SCI) resulting in acquired disability elicits a wide range of physical, psychological, and social consequences. Thus far, existing published reviews have focused on the role of psychosocial factors in (a) adjustment to SCI (Peter et al., 2012; North, 1999), (b) overall health (Galvin & Godfrey, 2001; Müller et al., 2012), (c) quality of life (Chevalier et al., 2009; van Leeuwen et al., 2012), and (d) subjective well-being (Post & van Leeuwen, 2012) among individuals living with SCI. Although SCI incurred in sport plays a substantial role in SCI etiology (Lee et al., 2014), thus far, no comprehensive review of the psychosocial factors involved in adaptation to SCI among injured athletes exists. This presentation reviews existing research on psychosocial factors associated with athletes' adaptation to SCI. A systematic review was conducted in March 2020. CINAHL, MEDLINE (Pubmed), PsychINFO, PsycARTICLES, and SPORTDiscus databases were used and studies published since 2000 were considered for inclusion. Publications were identified according to predetermined eligibility criteria, and a total of 16 publications were included in the review. The results identified many psychosocial factors associated with adaptation to SCI. The most prominent psychosocial factors were identity, the lived body, sport involvement, social support, and cultural narratives. The findings provide further contextualization to the understanding of athlete response to SCI, highlighting limitations of current psychology of sport injury and sport career transition models in explaining athlete adaptation to SCI. The findings may also benefit future research in this field, highlighting the need for innovative methodologies, diverse perspectives, and sampling. Practitioners should also (a) recognize the importance of being aware of the narratives framing and constraining athletes' rehabilitation experience, and (b) benefits of introducing athletes with SCI to alternative narratives, connecting them with appropriate socializing agents, and social support.

### P-102

#### SOCIAL IMPLICATIONS OF SPORT-RELATED TBI: ASSESSING RISK IN HIGH IMPACT SPORTS

*Natalie Golub, University of Denver;  
Hollis Lyman, University of Denver*

A traumatic brain injury (TBI) is defined as "an alteration in brain function or other evidence of brain pathology, caused by an external force" (Menon et al., 2010, p.1637). In the last decade, there has been increased awareness and expanded efforts to identify and manage traumatic brain injuries across settings, especially in sports. There has been very little



attention paid to the identification of TBI in more vulnerable populations including persons who are involved in the criminal justice system. This study aimed to explore the intersection of sport-related brain injury history in criminal justice. The study collected self-reported TBI history from 974 participants in the Colorado criminal justice system. TBI history data was collected from inmates in five county jails, and juvenile and adult probationers from five probation programs. According to the CDC, sport-related TBIs account for about 10% of total TBIs in the general population (CDC, 2014). This study's data suggest that the percentage of brain injuries that are sport-related TBIs (24.51%) is higher among the justice-involved population. Another implication of the research relates to the racial discrepancies in the justice system. This study will report the mechanisms of TBI in this population and report on characteristics including race, ethnicity, and gender to better understand sport injury history for justice-involved persons. Additionally, this study will emphasize the importance of primary and secondary prevention efforts in sports. Future research about the unique risks to minority community members will be suggested.

### **P-103**

#### **SPORT INJURY ANXIETY IN CHEERLEADING**

*Robyn Trocchio, Texas Christian University*

Cheerleading has evolved from a popularity contest to an athletic activity that includes many explosive, technical, and physically demanding skills (Goodwin et al., 2004) and is one of the fastest-growing sports (Cassman, 2010; Jones & Khazzam, 2017). Cheerleading ranges from sideline support of another sporting event to year-round all-star competitive cheerleading. With the skill complexity increasing, one can speculate that sport injury anxiety would be present in cheerleading. Sport injury anxiety can be defined as "the tendency to respond with cognitive or somatic anxiety in sport situation where injury is seen as possible and/or likely" (Cassidy, 2006, p. 83). Seven different subfactors of sport injury anxiety are prominent in athletes including anxiety related to losing athleticism, being perceived as weak, experiencing pain, loss of social support, related to re-injury, letting down important others, and having an impaired self-image (Cassidy, 2006; Rex & Metzler, 2016). The purpose of the study was to examine differences in sport injury anxiety between gender, stunt position, and team type in cheerleaders. Participants (N=152) included coed and all-girl collegiate teams and all-star teams. Results indicated that female cheerleaders had higher levels of anxiety related to being perceived as weak, experiencing pain, and having an impaired self-image compared to male cheerleaders. Flyers had higher levels of anxiety related to having an impaired self-image compared to bases/backspots. Finally, all-girl collegiate members had higher levels of anxiety related to losing athleticism, being perceived as weak, and experiencing pain compared to coed collegiate members and all-star members. This study provided insight into sport injury anxiety in cheerleading, however, further research is needed. Results of this study have practical implication for invention efforts aimed at reducing sport injury anxiety in cheerleaders.

### **P-104**

#### **THE MINDFUL INJURED ATHLETE PROGRAM: MINDFULNESS BASED INTERVENTIONS FOR DIVISION III STUDENT-ATHLETES IN ATHLETIC TRAINING REHABILITATION**

*JoAnne Bullard, Rowan University*

The purpose of this research study was to understand the impact of utilizing mindfulness-based stress reduction (MBSR) techniques among injured Division III collegiate student-athletes would have on depression, anxiety, and stress levels, as well as their ability to cope while rehabilitating an injury during athletic training services. At the onset of injury, athletes experience denial, anger, feelings of loss and worry, and frustration (Tracey, 2003). Increasing the psychological well-being of an athlete has positively affected reduced rehabilitation time, reduced perceived stress, and increased self-acceptance (Podlog, Heil, & Schulte, 2014). Limited research has been conducted regarding the effect of MBSR among injured athletes, even though mindfulness techniques decrease the negativity associated with injury (Mohammed et al., 2018).

This innovative program introduced an applied approach for participants to utilize during their rehabilitation sessions in the athletic training room. Headspace, a mindfulness application, was implemented during rehabilitation sessions. Headspace reduced stress and irritability and improved positivity and well-being in participants that utilized the application for ten days (Economides et al., 2018; Howells et al., 2016). Participants in both the experimental and control groups of this program completed a demographic questionnaire, the Mindfulness Attention Awareness Scale (MAAS), the Athletic Coping Skills Inventory-28 (ACSI-28), and the Depression, Anxiety and Stress Scale- 21 Item (DASS-21) at the beginning and end of their rehabilitation. The experimental group utilized the Headspace app on their smartphone during icing and heating modalities throughout their rehabilitation program. Both groups completed the Psychological Readiness to Return to Sport Scale (PRRSS) at the end of their rehabilitation program. By implementing the Headspace app during rehabilitation sessions, this study explored the importance of addressing participants' mental well-being and physical well-being while encountering the stress of injury.

### **P-105**

#### **TREATING CHRONIC PAIN IN ATHLETES**

*Peter Lucchio, Hartford Hospital - Bone & Joint Institute*

With the introduction of the biopsychosocial model for chronic pain (e.g., Pain Science/Therapeutic Neuroscience), biopsychosocial factors have become integrated in rehabilitation settings versus traditional biomedical approaches (Louw, Diener, Butler, & Puentedura, 2011). Despite these advances and the consensus statement from the International Olympic Committee on pain management, there is little evidence in scientific literature regarding biopsychosocial interventions for chronic pain in elite athlete populations (Hainline et al. 2017) (Zideman, Derman, Hainline, Moseley, Orchard, Pluim, Siebert, & Turner, 2018). The goal of this lecture is twofold. The first aim of this lecture is to provide information to sport professionals with information

on pain neuroscience. Education on pain neuroscience may help providers support athletes in navigating chronic pain and potentially reduce pain catastrophizing/pain behaviors (e.g., experiential avoidance). The second aim of the lecture is to discuss cognitive-behavioral interventions for providers to consider in helping athletes in coping with chronic pain or “unlearning” persistent pain. Case examples regarding the efficacy of the biopsychosocial model in treating chronic pain in athletes will also be discussed.

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### Mental Health

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#### P-106

##### **A CONTROLLED CASE EVALUATION OF A FAMILY-BASED OPTIMIZATION INTERVENTION IMPLEMENTED THROUGH VIDEO-CONFERENCING TO ADDRESS ADHD AND OPPOSITIONAL DEFIANT DISORDER IN AN ADOLESCENT ATHLETE**

*Dereck Phrathep, University of Nevada Las Vegas;  
Igor Kowal, University of Nevada, Las Vegas;  
Amber Goto, University of Nevada, Las Vegas;  
Michelle Janeo, University of Nevada, Las Vegas;  
Angelos Tsalafo, University of Nevada, Las Vegas;  
Maya Cohen, University of Nevada, Las Vegas;  
Shannon Huslig, University of Nevada, Las Vegas;  
Irvin Granstrom, University of Nevada, Las Vegas;  
Brad Donohue, University Nevada Las Vegas*

Adolescent athletes with Attention Deficit Hyperactivity Disorder (ADHD) and Oppositional Defiant Disorder (ODD) experience unique challenges that impact their sport performance, such as making errors due to poor concentration and adverse relationships with referees due to poor anger management (Nazeer, Mansour, & Gross, 2014). Pharmacological treatments have shown to be successful in treating ADHD comorbid with ODD (Kutcher, 2011; Seixas, Weiss, & Muller, 2012). However, there are negative consequences for pharmacological treatments for adolescent athletes (e.g., banned by sports organizations) (Stewman, Liebman, & Sandella, 2018). Well-established behavioral interventions (Evans, Owens, & Bunford, 2014) for ADHD and ODD in non-athlete populations have included family-based, cognitive-behavioral approaches. However, none of these interventions have been evaluated in competitive adolescent athletes. The current case trial involved a controlled multiple baseline across behaviors (i.e., positive assertion, negative assertion) evaluation of The Optimum Performance Program in Sports (TOPPS; Donohue et al., 2018) in an adolescent athlete diagnosed with ADHD and ODD. Intervention was provided using video-conferencing technology due to COVID-19. The trial included a battery of psychological measures administered at baseline, 4-months post-baseline and 5-months post-baseline. Results indicated that negative and positive assertion skills improved, but only when targeted, and severity of ADHD and ODD symptom severity, and general mental health symptoms decreased from pre- to post-treatment and that these improvements were maintained at 1-month follow-up. Similar improvements were occurred for factors interfering with sport performance, relationships with coaches, teammates and family. Treatment integrity and consumer satisfaction were high.

#### P-107

##### **A FAMILY-BASED OPTIMIZATION INTERVENTION IMPLEMENTED THROUGH VIDEO-CONFERENCING TO ADDRESS MAJOR DEPRESSIVE DISORDER IN A LATINA ADOLESCENT ATHLETE DURING COVID-19**

*Dereck Phrathep, University of Nevada Las Vegas;  
Igor Kowal, University of Nevada, Las Vegas;  
Michelle Janeo, University of Nevada, Las Vegas;  
Amber Goto, University of Nevada, Las Vegas;  
Angelos Tsalafo, University of Nevada, Las Vegas;  
Shannon Huslig, University of Nevada, Las Vegas;  
Irvin Granstrom, University of Nevada, Las Vegas;  
Maya Cohen, University of Nevada, Las Vegas;  
Brad Donohue, University Nevada Las Vegas*

Major Depressive Disorder is a highly prevalent mental health concern impacting adolescent athletes in unique ways (McGuine et al., 2021), yet sport-specific interventions for adolescent athletes with this disorder have yet to be formally developed. The Optimum Performance Program in Sports (TOPPS) is a sport-specific evidence-supported intervention that has successfully treated depression in collegiate athletes (Donohue et al., 2018). However, evidence for this approach in youth athletes has yet to be established. Further, COVID-19 has shifted the delivery of traditional mental health services to video conferencing (Boelen, 2020), yet very few clinical trials have examined evidence-based intervention implementation in this format. This poster reports the results of a case study involving an adolescent girl who was formally assessed with Major Depressive Disorder. Study results indicated significant improvements from baseline to post-treatment in severity of general mental health symptoms, depression, factors interfering with sport performance, and relationships with family, coaches and teammates. Treatment protocol adherence was excellent, and she was very satisfied with treatment implementation.

#### P-108

##### **BEYOND THE LINES: EXPLORING THE IMPACT OF ADVERSE CHILDHOOD EXPERIENCES ON NCAA STUDENT-ATHLETE HEALTH**

*Braden Brown, Indiana University School of Medicine;  
Ty Aller, Utah State University;  
Logan Lyons, Utah State University;  
Rachel Brown, Student;  
Les Brown V, Barry University*

Every year, nearly 500,000 National Collegiate Athletic Association (NCAA) student-athletes are faced with unique stressors that increase their risk for experiencing various biological (injury), psychological (depression, anxiety, substance misuse), and social (relationship challenges) health concerns (Reardon & Factor, 2010; Wolanin et al., 2016). In addition to the present-day demands encountered by student-athletes, many may also be dealing with the lingering effects of adverse childhood experiences (ACEs) given the high prevalence rates of ACEs (e.g., abuse, neglect, household dysfunction) across various populations (Monat & Chandler, 2015). While there is compelling evidence linking ACEs to deleterious biopsychosocial (BPS) health outcomes in both young adult and adult populations, little is known about the impact of ACEs on the overall health of student-athletes. Drawing on the theoretical underpinnings of Engel's (1977)

BPS model and Toxic Stress Theory, this study explored the prevalence rates and impact of ACEs on BPS health outcomes in an NCAA student-athlete sample. A total of 478 male ( $n = 292$ ) and female ( $n = 186$ ) Division I, II, and III student-athletes representing 20 different sports teams from 56 geographically diverse colleges/universities participated in the study. Results indicated that nearly two-thirds (64.5%) of student-athletes experienced at least one ACE. Student-athletes who reported greater ACEs reported lower levels of social support and were more likely to experience higher levels of anxiety, depression, perceived stress, injury/health problems, and substance misuse. Additionally, results indicated that female, minority, and Division I student-athletes reported higher levels of depression, anxiety, and stress and lower overall quality of life compared to their white, male, other-Division peers. This study highlights a number of BPS health disparities among certain subgroups of student-athletes (e.g., females, athletes of color) and emphasizes the importance of administrators and practitioners to develop programming that is more inclusive of the diverse backgrounds and experiences of student-athletes.

### P-109

#### **CAN WE TALK? EXPLORING THE EFFECTS OF MENTAL HEALTH STIGMA, SUPPORT, AND OPENNESS ON NCAA STUDENT-ATHLETE MENTAL HEALTH**

*Braden Brown, Indiana University School of Medicine;*  
*Ty Aller, Utah State University;*  
*Logan Lyons, Utah State University;*  
*Rachel Brown, Student;*  
*Les Brown V, Barry University*

Psychosocial issues are the number one health and safety concern for National Collegiate Athletic Association (NCAA) student-athletes (NCAA, 2015). The prevalence and effects of these issues may differ by student and program demographics, making it important to determine for whom and which programs might most benefit from limited NCAA resources. To this end, we first explored the differences in student-athletes' perceived mental health support from others (teammates, coaches, family), openness in talking about mental health concerns with others, and mental health stigma by sex, race/ethnicity, and NCAA Division. Next, the study examined the influence of student-athletes' perceived mental health support, openness in talking about mental health concerns, and mental health stigma on mental health outcomes (depression, anxiety, stress). A total of 478 male ( $n = 292$ ) and female ( $n = 186$ ) Division I, II, and III student-athletes representing 20 different sports teams from 56 geographically diverse colleges/universities participated in the study. Results revealed that male student-athletes reported higher levels of mental health stigma than females. Student-athletes of color exhibited less openness to discuss mental health concerns with others, felt less support from others to seek help for mental health problems, and had higher levels of mental health stigma compared to white student-athletes. Division I student-athletes reported feeling less supported by others to seek help for mental health concerns and exhibited greater mental health stigma compared to their Divisions II and III counterparts. Results also indicated that student-athletes who were more open to talk about mental health concerns with others had better mental health outcomes, whereas student-athletes who exhibited greater mental health stigma experienced worse mental health outcomes. Findings from this study provide a clear statement for administrators and clinicians working with student-athletes that more needs to

be done to create supportive and affirming environments for student-athletes, particularly athletes of color.

### P-110

#### **COLLEGIATE STUDENT ATHLETE MENTAL HEALTH AND COUNSELING UTILIZATION DURING COVID-19**

*Lindsey Slavin, University of North Texas;*  
*Tess Palmateer, University of North Texas;*  
*Trent Petrie, University of North Texas;*  
*E. Whitney Moore, Wayne State University*

College student athletes experience mental health (MH) concerns (Ryan, Gayles, & Bell, 2018), which may be exacerbated during times of heightened stress such as from the recent COVID-19 pandemic and the resultant changes in the delivery of higher education and cancellation of collegiate sports. Thus, we examined a national sample of collegiate student athletes to determine the prevalence of depression, anxiety, and counseling at the beginning of the pandemic. Participants ( $N = 5983$ ; 66.5% women) were student athletes recruited from over 100 NCAA DI, II and III institutions; data were collected April/May 2020 after the NCAA had cancelled all sports. Student athletes completed the Patient Health Questionnaire-2 (PHQ-2; depression), Perceived Stress Scale (PSS; anxiety), measure of counseling attendance (PRE and POST cancellation of sports), and demographics as part of this larger study. Student athletes' prevalence rates for clinical level concerns were: depression (women = 24.6%; men = 16.3%) and anxiety (women = 13.3%; men = 4.6%). For counseling, student athletes reported having never attended (women = 66.7%; men = 85.4%), attended PRE-sport cancellation (women = 20%; men = 10.2%), attended POST (women = 2.7%; men = 1.6%), or attended PRE/POST (women = 10.5%; men = 2.8%). Male (Pillai's Trace = .039,  $F[6, 3326] = 11.0$ ,  $p < .0001$ , partial  $\eta^2 = .02$ ) and female (Pillai's Trace = .062,  $F[6, 7020] = 37.4$ ,  $p < .0001$ , partial  $\eta^2 = .03$ ) student athletes reported significantly different levels of depression and anxiety based on their counseling involvement. Generally, the student athletes who engaged in counseling POST or PRE/POST sport cancellation reported significantly higher levels of depression and anxiety. Five to 25% of student athletes reported experiencing clinical levels of depression or anxiety after the NCAA cancelled sports due to COVID-19. Even so, few sought counseling, but those who did were experiencing significantly more psychological distress.

### P-111

#### **CORRELATES AND HEALTH-RELATED OUTCOMES OF ANXIETY AND SELF-CONFIDENCE IN PHYSICAL EDUCATION PARTICIPANTS: A SYSTEMATIC REVIEW**

*Lori Flick, University of South Carolina;*  
*Thomas Abrams, Pinnacle Physical Therapy;*  
*An De Meester, University of South Carolina;*  
*Craig Pfeifer, University of Gloucestershire;*  
*Sofie Morbee, University of Ghent*

**Objectives:** Physical Education (PE) students' motivations for participation in health-enhancing activities (Cardinal et al., 2013), anxiety levels (Cox & Ulrich-French, 2010), and self-confidence (Cecchini et al., 2001) may be significantly impacted by their PE teachers and peers. Therefore, this paper systematically examined and summarized scientific evidence of quantitative and mixed method studies

examining the relationships and effects of anxiety and/or self-confidence in PE.

**Methods:** Of the 9,211 studies identified through searches of PsycInfo, Web of Science, Embase, and SportDiscus in October 2020, 93 met all inclusion criteria. To be included in the review, studies had to be peer-reviewed and include a quantitative measurement of anxiety (trait, social [physique], performance, state, cognitive, competitive, and/or somatic) and/or self-confidence in/about PE in typically developing k-12 students. A risk of bias assessment was conducted for all included studies.

**Results:** Preliminary analysis revealed that 52% of studies measure anxiety (with a majority focusing on social physique anxiety), 32% of studies measure confidence, and 16% of all studies include measurements of both constructs. Most studies were cross-sectional (49%), conducted in Europe (64%), and embedded within Achievement Goal Theory (Nicholls, 1984; 27%) or Self-Determination Theory (Deci & Ryan, 1985; 29%). Findings reveal teachers and peers can affect anxiety and confidence levels to improve PE experiences. Most studies had at least some risk of bias.

**Conclusions:** There is conclusive evidence to support both teachers and peers can positively and negatively affect students' anxiety and confidence in PE; and interventions focusing on teaching style can be effective in reducing student anxiety and improving confidence. More longitudinal and experimental studies in diverse samples are needed to better understand the relationship between psychological (e.g., motivation) and performance-related (e.g., assessment scores) outcomes, while accounting for other variables of interest (e.g., cultural differences).

### P-112

#### DEVELOPMENT OF A SHORT SCREENING TOOL TO IDENTIFY VULNERABLE ELITE ATHLETES AT THE END OF THEIR CAREER

*Erika Ruchti, EHSM;*  
*Daniel Birrer, EHSM;*  
*Morgan Gareth, EHSM*

**Introduction:** Transitions are a challenge in the career of every athlete. Between 4.7% and 39% of athletes experience depression, anxiety or emotional distress at career end (Mannes et al., 2018). Recent academic findings have suggested career end planning, voluntary career end, multiple personal identities, accessibility of social support, coping strategies, transition demands and emotional distress as predictors of career end quality (Kuettel, Boyle & Schmid, 2017).

Based on these research findings, a systematic interview for sport psychologists working in practice was developed (Ruchti & Birrer, 2020, internal report) to optimally support elite athletes after their career. The aim of this interview was to identify and support athletes who are most likely to react with adjustment problems to the demands of their career end.

**Methods:** The interview was conducted with seven retired elite athletes. The answers of the athletes will be paraphrased and a content analysis will be carried out. Based on current scientific findings and the analysis of the seven data sets of the interview, a short screening tool will be developed to identify vulnerable athletes at their career end.

**Results:** Preliminary results indicate that some of the factors proposed by the academic findings could also provide important insights in this study. Particularly voluntary career end, emotional distress, transition planning, accessibility of social support (resources) and multiple personal identities (athletic identity) could be mean factors of career end quality.

**Discussion/Conclusion:** Helping athletes to cope better with transitions (e.g. the career end) appears to be beneficial for mental health. The development of a short screening tool to identify vulnerable elite athletes at the career end represents a strengthening of mental health in the sense of primary prevention. The earlier vulnerable athletes can be identified, the earlier professional support can be installed.

### P-113

#### DRINKING PREVALENCE RATES IN DIVISION I ATHLETIC DEPARTMENT DURING THE COVID-19 PANDEMIC: IMPLICATIONS OF GENDER AND RACE

*Kaleb Cusack, University of North Texas;*  
*James Rushton, University of North Texas;*  
*Olivia Knizek, University of North Texas;*  
*Trent Petrie, University of North Texas*

Collegiate student-athletes have been identified as a high-risk group for problematic drinking (Martens et al., 2011); such drinking may be associated with disruptions in academic and athletic performances as well as disruptions in injury recovery (Murphy et al., 2012) and may be exacerbated during the COVID-19 pandemic. Among nonathlete adults, increased drinking has occurred (Barbosa et al., 2020), but college nonathletes reported decreases after campus closures (White et al., 2020). Thus, we examined student-athletes' drinking during COVID-19, and considered the effects of gender and race.

Participants were 266 NCAA Division I athletes (46.2% Men; 42.5% White). Athletes participated as part of their annual MH screening in Fall 2020; they completed the AUDIT-C (Bush et al., 1998) and provided their gender and race. Overall, 10.9% met criteria for hazardous drinking; 16.8% of white athletes, 9.3% athletes of color, 15% female athletes, and 13% male athletes were so identified. Results from a factorial ANOVA found no significant race X gender interaction nor gender main effect for total AUDIT-C scores; there was, however, a significant race main effect ( $F(1,262) = 32.21, p < .001, \eta^2 = .07$ ). White athletes ( $M = 1.24$ ) scored higher than athletes of color ( $M = 0.53$ ).

The prevalence of athletes who endorsed hazardous drinking (10.9%) was lower than has been reported previously (NCAA, 2017), suggesting that athletes' drinking may have diminished during the pandemic. Further, White athletes endorsed higher levels of use than athletes of color, which may increase their risk for mental health and performance concerns. The lack of anonymity due to the data collection as part of a screening tool for mental health concerns potentially impacted the endorsement of drinking behaviors. Future research should continue to track athletes' alcohol use to see how their relationship to drinking unfolds over time and with the ongoing stress of balancing academics, athletics and COVID.

**P-114**

**EVALUATION OF MENTAL HEALTH RESOURCES FOR AN INTERCOLLEGIATE ATHLETICS PROGRAM**

*Ashley Dwelle, California State University, Fresno;*  
*Dawn Lewis, California State University, Fresno;*  
*Stephanie Moore, California State University, Fresno;*  
*David Kinnunen, California State University, Fresno;*  
*Kelli Eberlein, California State University, Fresno*

According to 2008 and 2012 National College Health Assessment Annual surveys, 31% of male and 48% of female National Collegiate Athletic Association (NCAA) student-athletes reported anxiety or depressive symptoms (Hailine, Kroshus, & Wilfred, 2014). While it is widely understood student-athletes experience mental health struggles and that recommendations for student-athletes exist (NCAA, 2019), mental health programming specific to intercollegiate student-athletes has yet to be evaluated. Therefore, the purpose of this study was to assess the mental health provisions for student-athletes at a NCAA DI university. Student-athletes' awareness of what is available to them, the accessibility of the services available, and their utilization of the mental health services were investigated. Student-athletes (N = 77, males = 13, females = 64) from several sports who returned to their university were included in the study. Participants completed a demographics questionnaire and a mental health provision survey. The mental health provision survey was comprised of multiple choice, Likert-scale and open response items completed via Qualtrics online survey software. It was expected that student-athletes are aware of and used the mental health programming and resources available from the athletics department. Next, athletes would report that the mental health programming had a significant impact at destigmatizing mental health and illness concerns. Finally, they would report the athletics department programming has had a positive effect. Data analysis included descriptive statistics, Chi square analyses and an analysis of variance comparison for key demographic variables (e.g., sport, gender). Data showed that the majority of student-athletes are aware of and use the resources provide by the athletics department. However, they limitedly use the external mental wellness tools and online resources highlighted by the program. The impact of current health, social and political events on help-seeking behaviors, practical implications for sport psychologists and suggestions for future research will be discussed.

**P-115**

**EXAMINING THE EFFECT OF MENTAL HEALTH DISORDERS ON PERCEIVED STRESS AND RECOVERY AMONG NCAA STUDENT-ATHLETES**

*Stacy Gnacinski, Drake University;*  
*Barbara Meyer, University of Wisconsin-Milwaukee*

Consensus has been reached regarding the value of monitoring athletes' subjective responses to training load for performance enhancement and injury prevention (Bourdon et al., 2017). Additionally, the potential links between athletes' mental health symptoms, illness/injury susceptibility, and recovery have been noted in recent literature (Drew et al., 2017; Reardon et al., 2019). That said, no research has directly explored the link between diagnosed mental health disorders (MHD) and athletes' stress or recovery levels. The purpose of this study was to examine the effect of MHD

on NCAA student-athletes' perceived stress and recovery. Student-athletes (N = 494, Mage = 19.7 years, 68.4% female) completed an online version of RESTQ-Sport-36 (Kallus & Kellmann, 2016). Thirty participants reported a diagnosed MHD. Mann-Whitney U tests ( $\alpha = .05$ ) were used to explore differences in the RESTQ-Sport-36 subscales between student-athletes with and without MHD. Results indicated that student-athletes with MHD reported significantly higher scores in General Stress (Z = 3.217,  $p = .001$ ), Social Stress (Z = 2.638,  $p = .008$ ), Fatigue (Z = 2.338,  $p = .019$ ), Disturbed Breaks (Z = 2.160,  $p = .031$ ), and Emotional Exhaustion (Z = 2.261,  $p = .024$ ) than those without MHD. Student-athletes with MHD reported significantly lower scores in Social Recovery (Z = -2.670,  $p = .008$ ), General Wellbeing (Z = -2.497,  $p = .013$ ), Sleep Quality (Z = -3.282,  $p = .001$ ), Being in Shape (Z = -2.841,  $p = .004$ ), and Self-Efficacy (Z = -2.635,  $p = .008$ ) than those without MHD. No significant differences were observed for Injury or Personal Accomplishment. These findings collectively indicate that student-athletes with MHD consistently report higher levels of perceived stress and lower levels of perceived recovery than those without MHD. In practice, sport psychology professionals should consider the impact of MHD when managing athlete responses to training load.

**P-116**

**INTO THE UNKNOWN: MENTAL HEALTH OF COLLEGIATE ATHLETES IN A FROZEN COVID-19 SPORTS WORLD**

*Anastasia Blevins, Long Beach State University;*  
*Alice Hunter, Long Beach State University;*  
*Leilani Madrigal, Long Beach State University*

In attempt to minimize the spread of the COVID-19 pandemic, many governing institutions executed social distancing regulations, including the near total global shut down of sporting practice and competitions (Evans et al., 2020). Few studies have examined how athletes are responding to their frozen sport worlds in terms of their mental health and coping mechanisms. The purpose of this study is to assess the unique experiences, stressors, coping behaviors, and social support systems of collegiate athletes to gain a better understanding of their mental health due to COVID-19.

A total of 703 college students completed an online survey between July 27 and October 12, 2020 which included both questionnaires and open-ended questions assessing their perceived stress due to COVID-19, coping strategies, social support, and overall mental health. Comparisons were drawn between the athlete and non-athlete subpopulations of the sample. The 31 athletes (Mage=20.90) were mostly females (54.8%) and White/Caucasian (54.8%) while the 672 non-athletes (Mage=22.63) were also mostly females (76.3%) and Hispanic/Latino (40.3%).

Following t-test analysis for differences in mental health, athlete mental health is significantly better than non-athlete mental health ( $p=.001$ ). Similarly, athlete perceived COVID-related stress is significantly lower than non-athletes' ( $p=.001$ ). Although athletes are using both adaptive and maladaptive coping behaviors, athletes are using significantly less maladaptive coping behaviors compared to non-athletes ( $p=.049$ ). Finally, athletes' unique social systems might contribute to their better overall mental health.

Coaches, athletes, CMPCs, and other university staff can use these findings to help establish social support relationships and practice adaptive coping behaviors recommended to lower stress and better student athlete mental health. These

recommendations can be utilized to continue coping with COVID-19, but it can also be applied to sport-specific adverse life events like injury in the future.

### **P-117**

#### **MAPPING RESILIENCE: MECHANISMS AND PROFILING**

*Joseph Pettit, Bangor University;  
Ross Roberts, Bangor University;  
Stuart Beattie, Bangor University;  
Nichola Callow, Bangor University*

Substantial literature exists supporting the benefits of psychological resilience on a number of important life outcomes (Masten & Wright, 2010) including the COVID-19 pandemic (Yildirim & Arslan, 2020). However, current definitions of resilience are beset with inconsistencies and problems, such as only considering parts of the construct, which has led to the development of inadequate measures of resilience (Windle et al., 2011). To overcome these limitations, we developed a resilience model defining it as a process involving mechanisms of anticipating, planning for, managing, and bouncing-back from adversity (e.g., Alliger et al., 2015; Fletcher & Sarkar, 2016). We then used this model to develop and test a resilience scale that examined these four mechanisms amongst the contextual domains of physical, social, cognitive, emotional, and a general source of adversity.

Given that this model reflects a set of mechanisms, it is important to examine these together, as individuals may differ in their respective abilities. As such, following measurement development we examined different resilience profiles using Latent Profile Analysis (LPA).

Following validation of the scale using a Bayesian Structural Equation Modelling approach, we analysed the data from 555 participants (Mage=20.9, SD=8.2) with LPA. A 5-Class solution demonstrated a good fit, showing participants could reliably fit into one of five profiles of resilience. The profiles can be described as: 1. Average resilience, with similar levels of each mechanism (n=203), 2. Average resilience, with higher levels of manage and mend (n=145), 3. Lower resilience, with Anticipation/Minimize dominant (n=141), 4. Low resilience, Anticipation dominant (n=39), 5. High resilience (n=27). These findings have implications for the development of bespoke interventions that target these mechanisms, as well as understanding how different resilience profiles influence key life outcomes.

### **P-118**

#### **MENTAL FITNESS: THE LAST BASTION IN ELITE YOUTH SPORT**

*Oliver Twizell, University of Manchester*

Sport can bring out the best in human performance, with athletes often idolized for their technical skill and finesse. Athletes often represent the embodiment of 'living the dream', however often there is little understanding about their mental health. With growing media awareness of mental health, soccer is increasingly using psychologists within their professional team environments. This lecture explores how sport professionals in soccer academies perceive therapy might contribute to the constructive growth and development of their academy students.

There is currently a dearth of research articles exploring the role and purpose of psychological therapy in youth sports environments (Doherty, Hannigan, & Campbell, 2016). However, the existing literature suggests that mental health and wellbeing issues in elite sport are influenced by sporting organizations, family and coaches. Longstaff and Gervis (2016) suggest that the use of counselling skills is a critical component to developing practitioner-athlete rapport and providing support within the relationship.

Sport professionals were interviewed in order to address their opinions and attitudes in a soccer academy setting (Kvale & Brinkmann, 2009; Willig, 2013). Purposive sampling within the soccer industry was adopted in order to create an in-depth understanding of therapy within one sport (Etikan, Musa, & Alkassim, 2016). Twelve participants across a cross-section of professions within the soccer industry were selected. Reflexive Thematic Analysis was used to investigate the findings as a person-centered theoretical assumption guided my research (Braun & Clarke, 2019; Clarke, Braun, & Hayfield, 2015). The lecture will cover the perceived advantages and challenges of adopting therapy within sport academies. Preliminary findings suggest strong support but limited understanding of the psychologists' role within soccer academies and provides significant progress into the research field. Implications for practice are discussed, with a view to consider how sport academies might upskill information around psychological support, including therapy, and further development opportunities.

### **P-119**

#### **POSTER WITHDRAWN**

### **P-120**

#### **MENTAL HEALTH STIGMA AND SERVICE UTILIZATION IN DIVISION I COLLEGE ATHLETES**

*Jasmine Morigney, Eastern Michigan University;  
Rusty McIntyre, Associate Professor, Eastern Michigan University*

During college, young adults experience a number of significant changes and stressors such as leaving caregivers, undergoing financial responsibilities, and engaging in more rigorous academics. Additionally, by the age of 24, 75% of lifetime mental illness has begun (National Alliance on Mental Illness [NAMI], 2019). When considering sub-populations of college students, student-athletes are under very unique circumstances. These students have the responsibilities attributed to "traditional" students, while engaging in high-level training, team meetings, and games (Paskus & Bell, 2016). As such, mental health services are an important resource for these individuals to feel comfortable utilizing. This current project evaluated the frequency of service utilization and amount of stigma related to mental health services in NCAA Division I student-athletes (n = 200) as compared to non-student athletes (n = 537). Participants participated in a larger survey, the Healthy Minds Study, that evaluated various factors related to college student mental health. For this analysis, measures of service utilization included previous attendance to therapy and perceived need of services, and measures of stigma included perceived personal and public stigma towards those with mental health difficulties. Results indicated that NCAA Division I student-athletes reported significantly less

mental health service utilization and significantly more stigma related to mental health difficulties than non-student-athletes. These results provide some support that this lack of utilization may be related to stigma, even in those not yet experiencing distress. Additionally, these results indicate a gap in stigma reduction initiatives with student-athletes that may provide these students access to more resources and support in the face of these significant stressors.

### **P-121**

#### **PREDICTORS OF PERFECTIONISTIC TENDENCIES IN SPORT AMONG UNDERGRADUATE KINESIOLOGY STUDENTS**

*Christopher Boyd, AFSC/ Magellan Federal*

The purpose of this study was to examine current kinesiology students' athletic identity, identity foreclosure, perceived task value in sport, and perfectionism. Participants (N = 132; 69 male, 63 female) provided demographic information and completed the Athletic Identity Measurement Scale (Brewer et al., 1993), the foreclosure subscale of the Extended Objective Measure of Ego Identity Status (Bennion & Adams, 1986), Perceived Task Value in Sport (Stuart, 2003), Sport Multidimensional Perfectionism Scale-2 (Stoeber, Otto, & Stoll, 2006), and Multidimensional Inventory of Perfectionism in Sport (Dunn et al., 2002). The inventories were completed using an online survey that was distributed via email to current kinesiology students. Results of the Pearson moment correlations indicated that the higher the athletic identity, the higher the subjective task value, identity foreclosure, perfectionistic strivings, and perfectionistic concerns ( $p < .01$ ). Multiple regression analyses were performed to further examine the predictive power of athletic identity, subjective task value, and identity foreclosure for perfectionistic strivings and perfectionistic concerns. Results showed that athletic identity ( $p < .01$ ) and subjective task value ( $p < .05$ ) were significant predictors of perfectionistic strivings. Results also showed that athletic identity and identity foreclosure were significant predictors of perfectionistic concerns ( $p < .01$ ). Understanding the personal factors associated with perfectionistic tendencies in current and former athletes may influence coaches' and parents' interactions with young athletes. Finally, understanding the personal factors that influence perfectionistic tendencies may also help practitioners enhance individual perfectionistic strivings while controlling for perfectionistic concerns.

### **P-122**

#### **PSYCHOLOGICAL AND MENTAL HEALTH IMPACT OF COVID-19 PANDEMIC ON FRONTLINE HEALTH WORKERS IN NIGERIA**

*Celina Adewunmi, University of Lagos, Nigeria;  
Adejoke Jaiyeoba, ICHPER*

The Coronavirus disease 2019 (COVID-19) outbreak has had an overwhelming impact on healthcare systems globally, COVID-19 pandemic has also been discovered to have a psychological and mental health impact on frontline health workers from different literature accessed in this study.

The purpose of this study was to assess the impact of the COVID-19 pandemic on psychological and mental Wellbeing of frontline health workers attending to COVID-19 patients in different healthcare facilities where patients were being

diagnosed, referred and, treated across different states in Nigeria. This study utilized a validated questionnaire on psychological distress (GHQ-12), General Anxiety Disorders (GAD-7), and Mental wellbeing (WHO-5) on 160 participants in facilities where COVID-19 patients were being diagnosed, referred, and treated through an e-survey method. The study participants included Medical Doctors (10%), Nurses (22.5%), Pharmacists (15.6%), Laboratory Scientist/Technicians (12.5%), Health Information Officers (15.0%), Radiographers (4.4%), Other Health Workers (10.0%), while the non health workers represented 10.0%. primary outcomes were the comparison of the prevalence of Psychological distress, General Anxiety Disorder, and mental wellbeing among health workers before the COVID-19 pandemic and during the COVID-19 pandemic.

Using a descriptive statistics analyzed through SPSS version 20, the hypotheses were tested using two-way Analysis of Variance (ANOVA) and T-test at a P-value of less 0.05 level of significance, the GHQ-12 Assessment, GAD-7 Assessment, and WHO-5 Assessment results were, 0.000, 0.000 and 0.012 respectively, indicating COVID-19 disease having a significant impact on Psychological distress, General Anxiety Disorders and Mental Wellbeing of frontline health workers in Nigeria.

### **P-123**

#### **SEX DIFFERENCES IN STRESS RESPONSE TO AN OBJECTIFICATION ENVIRONMENT**

*Urska Dobersek, University of Southern Indiana;  
Richard Bennett, University of Southern Indiana;  
Erika Uebelhor, University of Southern Indiana;  
Sydney Altmeyer, University of Southern Indiana;  
Bridget Stallings, University of Memphis;  
Joshua Adkins, University of Southern Indiana*

Perceptions of oneself and others have significant impact on individuals' health and well-being. For example, self-objectification (SO), treating oneself as an object, has a myriad of negative psychological ramifications (e.g., shame, anxiety) [1], and in concert with physiological arousal (e.g., altered heart rate – HR, cortisol) can engender significant mental health problems (e.g., eating disorders, depression, sexual dysfunctions). However, there are counter-intuitive and paradoxical findings (e.g., decreased HR) [2] that warrant further investigation. Thus, the purpose of this study was to examine sex differences in stress response (i.e., cortisol production) to an objectified environment.

Our sample consisted of 80 undergraduate college students (nfemales = 40, nmales = 40, Mage = 18.79, SD = 0.96, BMI = 24.02) between 18 and 23 years of age from the U.S. They completed a demographic questionnaire and were randomly assigned to either the experimental group (i.e., wearing revealing exercise attire) or the control group (i.e., wearing baggy exercise attire). After the manipulation, they completed a state Self-Objectification Questionnaire [3] and provided a saliva sample. A 2(sex: males/females) x 2(groups: experimental/control) between-subjects Analysis of Variance demonstrated a main effect for groups where experimental group (M = 0.31, SD = 0.04) had significantly higher cortisol levels than control group (M = 0.29, SD = 0.04),  $F(1, 76) = 4.86, p = .03, \eta^2 = .06$ . The main effect for sex ( $p = .39$ ) and interaction between sex and groups ( $p = .28$ ) was not statistically significant.

Our findings are congruent with some of the existing research suggesting that social- or self-evaluations lead to increased cortisol levels [4], and also contradictory with some of the previous literature that found decreased physiological arousal (i.e., HR) due to the orienting response [5, 6]. At the practical level, social- and self-evaluations (e.g., wearing more revealing clothing) can impact one's performance.

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### P-124

#### **SOCIAL SUPPORT AND COVID-19: IMPACT OF SOCIAL SUPPORT ON UNIVERSITY STUDENT ATHLETES' MENTAL HEALTH DURING THE PANDEMIC**

*Sophie Labossière, Université de Sherbrooke;*  
*Véronique Gauthier, UQTR;*  
*Catherine Laurier, Université de Sherbrooke;*  
*Sophie Couture, Université de Sherbrooke;*  
*Veronique Boudreault, Université de Sherbrooke*

The COVID-19 pandemic is linked to an increase in mental health problems, but also to a decrease in social contact (Graupensperger et al., 2020). Indeed, for many university student athletes, their involvement in their sports team was their main source of social support (Cutler & Dwyer, 2020). Being deprived of sports during the pandemic deprived them of a large part of their social network, in addition to public health measures that limited their contact with their friends and family (Quebec National Institute of Public Health, 2020). Social support is also recognized as being protective against the development of mental health disorders in university student athletes (Crutcher et al., 2018). In addition, to maintain mental health during times of adversity, people frequently turn to their social support (Taylor, 2007).

The present study aims to observe the link between social support and various mental health disorders in university student athletes, during the pandemic context. To achieve this, the responses of 484 Quebec university student athletes

(36.9% men) to an online questionnaire on the impact of the COVID-19 pandemic on their mental health, completed in fall 2020, were analyzed. Comparative and multiple binary logistic regression analyses were performed.

Several participants presented significant signs of anxiety (N=24.9%, men=20.2%, women=27.3%), depression (N=38.5%, men=25.2%, women=42.8%), eating disorders (N=8.5%, men=5.2%, women=10.4%) and alcohol use disorders (N=21.2%, men=21.4%, women=21.1%). Differences by sex were not significant except for depression ( $\chi^2=5.04$ ,  $p=.03$ ), but this difference is weak ( $V=.12$ ). Finally, social support does not statistically significantly predict these various mental health disorders, with the exception of depression. When controlling for sex, having low social support is related to the presence of signs of significant depression. Thereby, it is important to support university student athletes' mental health and also to recommend that coaches promote moments of interaction between teammates despite the pandemic.

### P-125

#### **TESTING A SOCIOCULTURAL MODEL OF BODY IMAGE IN WOMEN ATHLETES WITH DISABILITIES**

*Brooke Lamphere, University of Denver;*  
*Trisha Raque-Bogdan, University of Denver*

The effects of social factors, both positive and negative, on body perceptions in women and athletes are well-documented (e.g., Ramme et al., 2016; Sousa, Corredeira, & Pereira, 2009; Reel et al., 2013). Yet, research on body image in women athletes with disabilities (AWD), and more specifically the effects of social factors on body image in AWD, remains limited (Smith & Perrier, 2014). The present study investigated the effects of perceived social pressures related to body, weight, and appearance in and outside of sport on body image in women AWD. Recruited in partnership with the United States Olympic and Paralympic Committee, 144 adult women athletes with both congenital and acquired physical disabilities (e.g., amputation, visual impairment), competing in disability sport at various levels of competition (i.e., recreational to elite or Paralympic) participated in the study. Hierarchical multiple regression (HRM) analyses investigated the contributions of social pressures and sport pressures to variance in negative and positive body image body respectively. Hypothesized mediation models were also tested using Hayes' bootstrapping method via PROCESS macro for SPSS (Hayes, 2013) to examine mediating effects of internalization and social comparison in the relationship between sport pressures and body image. Preliminary results indicated that social pressures explained a significant amount of variance in both negative and positive body image, and pressures within the sport setting explained a unique and significant portion of variance beyond that accounted for by social pressures. Further, results from mediation analyses identified differences in the relationships between social factors and body image for athletes with disabilities compared to those established in the original tripartite influence model (Thompson et al. 1999). Important theoretical implications of present findings, the utility of results in informing interventions targeting inclusivity and body positivity in disability sport, and relevance to professionals working with AWD will be discussed.



### P-126

#### THE IMPACT OF INJURY STATUS ON ATHLETE PSYCHOLOGICAL WELL-BEING DURING THE COVID-19 PANDEMIC

*Isabella Fiorenzo, Saint Louis University;  
Joanne Perry, Novant Health System;  
Zachary Merz, Cone Health;  
Michael Ross, Saint Louis University*

**Introduction:** The Coronavirus-19 pandemic has created a challenging environment for intercollegiate athletes (National Collegiate Athletics Association [NCAA], 2020). Unpredictable events like sport injuries are a disruptive circumstance for athletes to handle (Pearson & Petitpas, 1990). It is important to consider the impact of the COVID-19 pandemic on student-athletes' psychological well-being, especially athletes who are enduring the pandemic and recovering from an injury.

**Methods:** Following the onset of the COVID-19 pandemic, NCAA Division I student-athletes (N = 62) completed a battery of self-report assessments using the Qualtrics survey platform. As part of a larger study, athletes completed the Depression Anxiety Stress Scales (DASS-21; 21-item version; Henry & Crawford, 2005) and reported their injury status.

**Results:** Results indicated that on average, injured athletes endorsed higher levels of negative emotional states than uninjured athletes. This difference was significant,  $t(61) = 2.70$ ,  $p = .009$  (Injured Athletes:  $M = 52.33$ ,  $SE = 11.26$ ; Uninjured Athletes:  $M = 25.33$ ,  $SE = 3.03$ ). Injured athletes also endorsed higher levels of Depression,  $t(61) = 3.16$ ,  $p = .002$  (Injured Athletes:  $M = 22.33$ ,  $SE = 4.05$ ; Uninjured Athletes:  $M = 9.44$ ,  $SE = 1.253$ ), and higher levels of Anxiety,  $t(61) = 2.86$ ,  $p = .006$  (Injured Athletes:  $M = 11.33$ ,  $SE = 3.96$ ; Uninjured Athletes:  $M = 4.07$ ,  $SE = 0.72$ ). There were not significant differences between injured and uninjured athletes on the Stress subscale ( $p > .05$ ).

**Discussion:** Though all intercollegiate student-athletes are experiencing the negative effects of the COVID-19 pandemic, extra consideration should be directed toward injured student-athletes. Social factors, specifically social support, have been identified as important variables in predicting psychological well-being throughout the sport injury process. With the COVID-19 pandemic leading to more isolation and loneliness, these findings may be helpful for coaches and support staff to ensure that injured athletes are supported.

### P-127

#### THE MENTAL HEALTH CRISIS OF PANDEMIC PROPORTIONS: HOW COLLEGE STUDENTS ARE LIVING WITH COVID-19

*Leilani Madrigal, Long Beach State University;  
Anastasia Blevins, Long Beach State University*

Due to strategies aimed at controlling COVID-19, governments across the world implemented social distancing and stay-at-home measures, which has resulted in isolation and economic crisis (Golberstein, et al., 2019). To date, few studies have examined individuals' experiences of COVID-19 but these

have mostly been focused on front line workers and the medical field. The purpose of this study was to determine how COVID-19 has affected collegiate student mental health by assessing their perceived challenges and coping strategies. A total of 698 students completed an online survey between July 27 and October 12, 2020 which included open-ended questions on challenges they faced due to COVID-19. Students' average age was 22.46 years, with 75% identifying as female, and primarily from racial/ethnicity groups of Hispanic/Latino (39%), White/Caucasian (33%), and Asian (12%). After content analyzing the data, themes were found for challenges due to COVID-19 and coping strategies. Challenges included: (a) mental, emotional, physical challenges, (b) online learning, (c) confronting the "new normal", (d) concern for self and others, (e) positive experiences, and (f) societal challenges. Challenges embodied a variety of subthemes within. The most reported subthemes were struggles with negative emotions, crimes against humanities, and socialization concerns. Coping strategies were classified into (a) problem-focused coping, (b) emotion-focused coping, and (c) avoidant coping. Emotion-focused coping strategies were indicated by many; however, students engaged in all coping dimensions during the pandemic. Administrators, mental health care workers, and other university staff can use these themes as a framework to redistribute resources for students to better cope with adverse situations in order to promote academic, mental, and personal success. Listening to the needs and concerns of students and acting on these interests will provide a healthier and more compassionate campus environment necessary to accomplish these goals.

### P-128

#### WHAT EFFECT CAN INTEGRATING EXERCISE WITH THERAPY HAVE ON IMPROVING MALE MENTAL HEALTH?

*Oliver Twizell, University of Manchester*

The purpose of this lecture is to address the under-researched area of utilizing sport within psychology, with a specific focus on how to engage men struggling with mental health. Within the UK, men are less likely than women to seek support related to their mental ill-health however, more men are referred to acute mental health hospitals. This indicates that there is a large proportion of men who are affected by mental ill-health but are not voluntarily accessing support when symptoms are presenting. The limited research on how sport may be an appropriate vehicle to approach some men currently not engaging in therapy in its traditional form will be explored with suggestions offered on how to better engage these men. Following this exploration, I will look at further opportunities for psychology to integrate exercise within the therapy setting. This lecture will address the current limited literature on the effects exercise can have on mental well-being and present opportunities for integrating exercise and therapy to support men who are struggling with mental ill-health. Exercise within therapy is a vastly under-utilised tool and this lecture will explore the exciting opportunities for psychology to take a lead on this. This will be accomplished by employing reflective practice within a humanistic framework to encourage a broader, more genuine way of relating to men without the constraints of a medical model.

### Non-Sport Performance Applications

#### P-129

##### **A QUALITATIVE STUDY OF IMAGERY USE IN PROFESSIONAL BALLET DANCERS: WHERE, WHEN, WHY, WHAT, AND HOW**

So Hui Lee, *University of Edinburgh*;  
Alan MacPherson, *University of Edinburgh*;  
Seong Kwan Cho, *Texas A&M International University*

Imagery is a highly effective mental strategy that enables both athletes and dancers to bring about cognitive, affective, and behavioral outcomes (Cumming & Eaves, 2018; Murphy, Nordin, & Cumming, 2008). Although imagery in sport has been widely studied, the research findings and methods applied in sports cannot be entirely represented of imagery in dance due to its unique nature (Overby, 1990). Therefore, the current study qualitatively examined professional ballet dancers' imagery experiences more thoroughly based on the 4W1H (where, when, why, what, and how) interview guide. Nine South Korean professional ballet dancers (eight female and one male) with an average age of 24.22 (SD=1.87) years and 15.22 (SD=3.82) years of experience participated in the semi-structured interviews via Skype. The thematic analysis found the patterns of where, when, why, what, and how professional ballet dancers used imagery and revealed that dance imagery has unique characteristics that are not applied to sports. The themes that emerged in this study were mostly consistent with findings in the previous dance imagery research; however, there are significant findings. The dancers described that they used imagery in public transportation, and some of them thought imagery use would be ineffective. Notably, the results of this study did not include common themes in the previous dance imagery research such as feedback and body-image. The findings shed light on the importance of the existing knowledge and experience of imagery that may influence dancers' perceptions on imagery use and thus, suggest that more dance imagery research with various types of dance and experience levels is needed.

#### P-130

##### **HELPING ATHLETIC TRAINERS DEVELOP EMOTIONAL RESILIENCE: A UNIQUE OPPORTUNITY FOR SPORT PSYCHOLOGY CONSULTANTS**

Shaine Henert, *Northern Illinois University*;  
William Pitney, *Northern Illinois University*;  
Bethany Wood, *Life University Athletic Care*

High school athletic trainers (ATs) are often tasked with long (and atypical) work hours and multiple professional roles – e.g., strength and conditioning coach, sports medicine professional, student athletic trainer supervisor, personal counselor. Many experience high levels of occupational stress and burnout. Developing emotional resilience (ER), the ability to positively adjust to difficult situations can help ATs manage their stress and maintain good mental health. Because many sport psychology consultants (SPCs) work alongside ATs and are well-trained in this area, they are uniquely positioned to provide them with the professional support needed. This presentation provides research examining levels of and factors supporting ER in high school ATs and practical suggestions for SPCs. A mixed method study explored the level of ER in high school ATs and

identified factors influencing their ER. 160 high school ATs (63 females and 97 males; average age = 36.83 + 10.68; average years of experience = 13.28 + 9.46) completed the Connor Davidson Resilience Scale (CD-RISC) to measure ER. Although mean ER scores were good (79.84 + 11.38; > 82 is positive, > 92 is high), only 14.1% of the ATs reported high ER. Follow up interviews revealed the following as factors facilitating ER: social support, communication, self-care, acceptance of AT lifestyle, and learning from past experiences; and reducing ER: lack of social support, emotional responses (stress), and role overload. Initial evidence shows that few ATs report high levels of emotional resilience, yet many report occupational stress and burnout (particularly emotional exhaustion). SPCs can help ATs develop ER through psychological skills training – e.g., emotional awareness and control, effective communication, healthy coping strategies, self-reflections, re-framing, social support. This may allow ATs to maintain good mental health, achieve greater job satisfaction and performance, and enjoy long and successful careers.

#### P-131

##### **MEDICAL LEADERSHIP: ADVANCING THE HEALTHCARE INDUSTRY THROUGH MENTAL SKILLS TRAINING**

Jessica Woods, *ULTIER LLC*

Throughout the COVID-19 pandemic, many medical professionals reported various forms of emotional distress (Adams & Walls, 2020). In one survey, over 1,119 healthcare workers indicated feeling stressed out and stretched too thin: 93% experienced stress, 86% reported anxiety, 77% frustrated, 76% exhausted and burned out, and 75% stated they were overwhelmed (MHA, 2020). This lecture presents an overview of the mental performance education interventions provided to physicians from various specialties such as internal medicine, pediatrics, family medicine, otolaryngologist, and surgery. The physicians sought out better ways to handle their emotional distress and lead their medical teams effectively through COVID-19 (Chen et al., 2020). Physicians and other frontline health care professionals are vulnerable to negative mental health effects as they strive to balance the care for patients and medical staff with concerns about their own well-being (Aiyer et al, 2020; Reissman et al., 2006). Moreover, this presentation will help MPCs better understand the physician's psychological perspective, sociological aspects of their profession, barriers to accessing personal care and ways to implement effective mental skills interventions.

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### P-132

#### **SOCIAL MEDIA SPORTS PROFESSIONALS: THE RELATIONSHIP OF BURNOUT TO LIFE AND WORK SATISFACTION**

*Matt Creagan, Pacific University;*  
*Tamara Tasker, Pacific University;*  
*Shawn Davis, University of Nottingham*

This quantitative and qualitative research study was conducted to investigate the relationship that exists between social media sports professionals and the level of burnout they experience in their careers. This study examined social media professionals, working in professional sports leagues and Division I Athletics, and how they rate on the three components of the Maslach Burnout Inventory (Maslach, Jackson, & Leiter, 1996). Social media in an occupational setting is a relatively new career and is growing quickly as communication and journalism continues to evolve. Social media sports marketing, a growing profession in almost every collegiate and professional sports league, has not yet been studied regarding its health implication for workers. There has been research regarding burnout in industries examining other occupations, but no studies examining social media. There is an absence of research in the social media sports industry, but sports journalism has a long history, and it has been examined for its health implications (see Reinardy, 2006). The research questions explored include, overall, how do social media sports professionals' rate on the three components of the Maslach Burnout Inventory? What is the relationship between the MBI burnout subscales (Emotional Exhaustion, Depersonalization, and Personal Achievement) and demographic factors of gender, ethnicity, age, income, work status, years of practice, and hours worked? Will less experienced social media sports professionals report higher rates of burnout than more experienced social media sports professionals?

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#### **Olympic Sport, International, and Global Perspectives**

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### P-133

#### **'TRY TO MOVE THE STICK & REMEMBERING YOUR WHY' ? MOTIVATION & MOTIVATIONAL CLIMATE EXPERIENCES OF 2 DOUBLE OLYMPIC CHAMPIONS**

*Matthew Cullen, Aspire Academy;*  
*Paul Appleton, University of Birmingham;*  
*Joan Duda, University of Birmingham*

The purpose of this narrative case study aimed to : explore the motivation & motivational climate experiences of (a) 2 double Olympic Champions (b) examine social agent (coaches, training partners/group, family and NGBs) impact on athlete motivation and (c) is guided by Duda's (2013) hierarchical conceptualization and theoretically integrated model of empowering & disempowering motivational climates.

Deci and Flaste's (1996) define motivation as "why we do what we do". A good understanding of an athlete's motivation is critical to a coach designing an appropriate motivational climate to realize an athlete's physical talent (Mallet & Hanrahan, 2004) The motivational influence exerted by key social agents is often referred to as the motivational climate, a term most closely associated with achievement goal theory (AGT Ames, 1992, Nicholls, 1989) albeit self-determination theory also speaks to the importance of social environmental factors (SDT; Deci & Ryan, 1985, 2000).

Data were acquired using a semi-structured interview, one interview was conducted in person and one over Zoom and were subjected to an analysis of narrative. The athletes were asked to reflect on : Their motivational experiences in elite sport & how social agents impacted their motivation in positive and compromised manners.

Results revealed how key social agents (particularly, coaches & training/partners) impacted the quality of the athletes' motivation in contributing towards their athletic experience. Furthermore, results indicated the critical role of ongoing self/coach learning & an empowering climate created by multiple social agents plays in optimizing the elite athlete experience. This study offers insight into the role of the motivational climate(s) and ensuing motivational processes in two double Olympic Champions. Practical implications for social agents and practitioners who support or aspire to support Olympic Champions are provided.

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#### **Professional Development, Supervision, and Mentoring**

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### P-134

#### **GENDER DIFFERENCES IN CMPCS' EMPLOYMENT SETTINGS AND SPORT SPECIALIZATIONS**

*Taylor Mair, University of Wisconsin-Green Bay;*  
*Tsz Lun (Alan) Chu, University of Wisconsin-Green Bay;*  
*Ellea Bachmeier, University of Wisconsin- Green Bay*

Research has shown that sport activities are gendered at both implicit and explicit levels, impacting (non)participation in certain sports (Plaza et al., 2017). The current research explores whether gender differences are present in Certified Mental Performance Consultants' (CMPC) employment settings and sport specializations.

We extracted and analyzed the data of 293 CMPC profiles (157 males) that listed employment settings and sport specializations on the AASP website from December 2020 to February 2021. Sport specializations were categorized into three types—masculine, feminine, and gender-neutral—using a method based on previous studies classifying sport activities (e.g., Carr, 2017; Plaza et al., 2017). These specializations were then summed to form a total number of sports for each of the three types.

Chi-square analyses revealed a significantly larger proportion of male than female CMPCs working in professional sport settings (9.6% vs. 1.7%),  $\chi^2(1) = 17.17, p < .001$ . However, there were no significant differences between the proportions of male and female CMPCs working in college sport settings (9.9% vs. 8.7%),  $\chi^2(1) = 0.24, p = .62$ , or non-sport performance settings (9.2% vs. 11.1%),  $\chi^2(1) = 0.55, p = .46$ . Independent-samples t-tests showed that male CMPCs reported

specializing in significantly more masculine-classified sports ( $M = 3.04$  vs.  $2.20$ ),  $t(292) = 3.85$ ,  $p < .001$ ,  $d = 0.45$ , and less feminine-classified sports ( $M = 1.20$  vs.  $1.54$ ),  $t(292) = -2.33$ ,  $p = .02$ ,  $d = -0.27$ , as compared to female CMPCs. There were no significant differences between male and female CMPCs in the specialization of gender-neutral classified sports ( $M = 3.75$  vs.  $3.40$ ),  $t(291) = 1.45$ ,  $p = .15$ ,  $d = 0.17$ .

Comparisons of the CMPCs' employment settings and sport specializations suggest gender differences in the applied sport psychology workforce. Potential gender stereotypes and biases in the profession and strategies to address them will be discussed.

### P-135

#### **NARRATIVES OF SPORT PSYCHOLOGY GRADUATE STUDENTS' PRACTICUM EXPERIENCES FACILITATING YOUTH DEVELOPMENT PROGRAMMING**

*John McCarthy, Boston University;*  
*Val Altieri, Jr., Boston University;*  
*Robert Diehl, University of Colorado at Boulder;*  
*Olivia Wyatt, Boston University;*  
*Ty Robinson, Boston University;*  
*Meredith Whitley, Adelphi University;*  
*Laura Hayden, University of Massachusetts Boston*

A proliferation of youth programming exists outside of traditional physical education; however, few programs provide quality training and education for their facilitators (Whitley et al., 2017). One established model for promoting quality training and facilitator growth is through service learning courses (Banks, 2010; Salam et al., 2019; Weller et al., 2013). Of the few physical activity-based service learning courses, Whitley et al. (2017) found several positive learning outcomes related to the students' experiences like leadership development, improved interpersonal skills, increased knowledge of social justice issues, and enhanced self-understanding.

The current study aims to further add to the learning about training experiences by exploring masters students' experiences within an established university-based service learning program. The program under study aims to support high school students' social and emotional learning in a physical activity setting. Sport psychology master's students facilitate the program as a practicum experience. They engage in three distinct learning experiences while at the site: delivering sessions with students in the gym or weight room; debriefing their experiences with each other and program director; and engaging with the program director in a youth development practicum course and additional weekly clinical supervision where they continue to discuss and reflect, read supplemental books and articles, and write self-reflective journals. This study's findings are derived from five qualitative interviews from one cohort of graduate facilitators ( $n=5$ ) conducted after they completed their practicum. Interviews were analyzed using thematic narrative analysis (Smith, 2016). The findings focus on the Master's students' experiences and learning throughout the program. These narrative themes include: relationships grounded in support and understanding, freedom from stressors, flexibility/adaptability, confidence/competence, and reflection in supervision. These emerging themes begin to shed light onto how to craft service learning environments to better prepare facilitators to work with youth in athletic settings.

### P-136

#### **SURVEY OF PSYCHOLOGY PROFESSIONALS ON THEIR INVOLVEMENT IN SPORT AND PERFORMANCE PSYCHOLOGY SERVICES**

*Randi Jackson, University of North Texas;*  
*Trent Petrie, University of North Texas*

Psychologists have demonstrated interest in sport, human performance, and physical activity for decades, which propelled sport psychology forward. Presently, different educational background, training, and certifications help delineate what type of sport and performance psychological services a professional can ethically provide (Landers, 1995; AASP, 2011). Nonetheless, it is relatively unknown how many psychologists have training and expertise in sport psychology. The Applied Association of Sport Performance and the American Psychological Association's Division 47 were formed in the mid-1980s in order to integrate and synthesize professional activities; still, the movement from academia onto the field is at the crux of the discipline's professional identity development (Landers, 1995). This study examined professional practice issues in sport psychology such as qualifications, credentialing, graduate training, and scope of practice to address questions about who should be teaching and providing such services. We used frequencies, t-tests, and chi-square analyses to assess trends among licensed psychologists in the subdiscipline of sport psychology. Analyses demonstrated that 26.7% ( $n = 52$ ) reported providing services to individual athletes and 17.9% ( $n = 35$ ) to teams in which their work focused on directly improving sport performances. Additionally, 58.5% ( $n = 114$ ) reported providing mental health services to individual athletes and 10.3% ( $n = 20$ ) to sport teams. Results suggest services provided seem to emphasize mental health concerns. Regarding supervision, 18.5% ( $n = 36$ ) indicated they had received supervision related to improving athletes' sport performance and 35.9% ( $n = 70$ ) for provided mental health services. Another 17.5% ( $n = 34$ ) indicated having provided supervision to other professionals who were working with athletes to improve their sport performance and 40.0% ( $n = 78$ ) for those who were addressing athletes' mental health. There were no significant gender differences among responses. Future directions, as well as, issues related to training, professional involvement, and ethics in this growing field are discussed.

### P-137

#### **THE POWER OF PEERS: A STUDENT-LED PEER COACHING PROGRAM TO EXTEND PERFORMANCE PSYCHOLOGY INFLUENCE ACROSS CAMPUS**

*Erika Osherow, West Point;*  
*Jen Schumacher, United States Military Academy;*  
*Kathryn Longshore, United States Military Academy, West Point*

Building rapport, trust, and credibility as a mental performance consultant relies on the empathy and understanding of the daily tasks of those we consult with. Yet, as practitioners we are not the ones walking in the shoes of our athletes, performers, or students. To overcome this barrier and expand the reach of a performance psychology program at a military academy, a volunteer train-the-trainer model Peer Coaching Program was designed. Peer Coaches seek to implement and further the development of mental skills training among their peers during real-time challenges of military academy life. The intent of the student-led program is to provide leadership development

opportunities for Peer Coaches while expanding performance psychology resources to a wider range of the student body. Upper-class students with previous experience in mental skills training or performance psychology coursework are invited to apply. Peer Coaches attend biweekly supervision meetings and coach a maximum of 10 cadets or a total of five hours each week (a limit in place to protect the time of the cadet volunteers). Peer Coaches receive training on the AASP Code of Ethics, confidentiality expectations and limits, professional scope and referrals, informed consent procedures, and proper documentation for meetings, which are supervised by program faculty members. Benefits of the program are to decrease the stigma of mental performance training, establish empowering social relationships, and provide Peer Coaches with leadership experiences they will use beyond their academic careers (Wareing et al. 2018; Waston et al., 2009). Similar train-the-trainer models have demonstrated efficacy in the research (Minkler et al., 2020). Further, research suggests mentorship programs can lead to improved confidence and communication for mentors, in addition to providing skills to mentees (Allen, 2003). The authors will discuss the strengths and limitations of the Peer Coaching Program, as well as offer practical strategies for implementation.

### P-138

#### TRANSITIONING INTO A SPORT & EXERCISE PSYCHOLOGY GRADUATE PROGRAM DURING THE CORONAVIRUS PANDEMIC.

*Carlie Burson, Ball State University;*  
*Hannah Severs, Ball State University;*  
*Karan Bhatia, Ball State University*

Students often encounter common difficulties as they begin graduate study, such as feelings of doubt in their abilities or worry that they are unqualified (Craig, 2018), along with surprises and disruptions that they may try to explain (Perez, 2016). In response to some disruptions, students might draw upon their inner resources such as identity and past experiences (Weick, 1995) to help make sense of these unexpected disruptions. This is called the sensemaking theory (Perez, 2016). Although drawing on these inner resources can help, an achievement or a positive response to disruptions can lead students to feel as if they are an “imposter” or that they do not belong. In fact, approximately 70% of people will experience “imposter syndrome” at some point in their lives, with graduate students being particularly susceptible (Craig, 2018; Weir, 2013). Imposter syndrome occurs among high achievers who are often unable to accept their successes and attribute it to luck rather than their own ability (Weir, 2013). Considering the occurrence of imposter syndrome in graduate students, we discuss the transition of first-year sport and exercise psychology graduate students amidst the Coronavirus pandemic and how imposter syndrome has been heightened. By exploring the effects of the pandemic on transitioning into graduate school, we identify underlying challenges students may face, strengths that students may have developed throughout their experiences, and how the inner resources of sensemaking theory may have been applied or prioritized. This research will help us to better understand what students are experiencing as they transition into graduate study, thus, helping graduate advisors develop and implement programs and strategies to assist the transition.

## Professional Issues & Ethics

### P-139

#### A QUALITATIVE EXPLORATION OF NEOPHYTE SPORT PSYCHOLOGIST PRACTITIONERS SELF-CARE EXPERIENCES AND PERCEPTIONS

*Daniel Martin, N/A;*  
*Alessandro Quartiroli, University of Wisconsin - La Crosse (USA)/University of Portsmouth (UK);*  
*Chris Wagstaff, University of Portsmouth*

Self-care has been identified by scholars from psychology and mental health professions to be important for promoting personal and professional well-being, ethical practice and effective service delivery among psychology professionals (Barnett et al., 2007; Dorociak et al., 2017). Nevertheless, the value of self-care for sport psychology practitioners (SPPs) has received limited research attention, except for an investigation of senior SPPs' self-care (Quartiroli et al, 2019). With the aim of understanding SPP self-care earlier in individuals' professional development, in the current study we recruited 18 self-identified white neophyte SPPs from the United Kingdom (12 females and 6 males), aged between 24 and 52 years (Mage=31.94, SDage=7.81). We used purposeful and snowball sampling and participants took part in semi-structured interviews in which we explored their experiences of enacting self-care during their training. Five main themes were constructed following a reflexive thematic analysis of data: (a) What self-care means to neophyte SPPs (e.g., facilitating overall well-being and stability); (b) The cornerstones of self-care (e.g., mechanisms such as self-awareness that underpin self-care); (c) What facilitates neophytes self-care (e.g., ongoing support from a supervisor); (d) The self-care hurdles that neophytes face (e.g., managing multiple roles and competitive job markets), and; (e) The self-care actions that neophytes implement (e.g., self-care behaviors that relate to care of self, care by others and care for others). These findings contribute to the nascent body of literature exploring self-care within SPP populations and serve to illuminate neophyte SPPs' understanding of self-care and how they perceive their interactions with the profession to impact their ability to enact self-care. Concerns for the current lack of emphasis on self-care in SPP training pathways and employment settings are raised as well as key considerations for how greater awareness of self-care within neophyte cohorts can be fostered to better prepare future generations of SPPs.

### P-140

#### AN EXPLORATION OF SPORT PSYCHOLOGY PROFESSIONAL QUALITY OF LIFE IN NEOPHYTE PRACTITIONERS

*Daniel Martin, N/A; Chris Wagstaff, University of Portsmouth;*  
*Alessandro Quartiroli, University of Wisconsin - La Crosse (USA)/University of Portsmouth (UK)*

While scholars have explored the experiences of caregivers through the construct of professional quality of life (Stamm, 2010), this construct has been found to be insufficient for capturing the unique professional experiences of sport psychology practitioners (SPPs; Quartiroli & Etzel, 2012). Thus, scholars have recently developed a sport specific equivalent, sport psychologist professional quality of life (SP-PQL; Quartiroli et al., 2019). Despite these advances, this literature has not yet considered the conceptualizations and

experiences of neophyte SPPs, those in the nascent stage of their professional development, in relation to their SP-PQL. In this study, 14 self-identified white neophyte SPPs from the United Kingdom (9 females and 5 males), aged between 24 and 52 years (M<sub>age</sub>= 33.08, SD<sub>age</sub>=8.64), were recruited via purposeful and snowball sampling to take part in semi-structured interviews, the aim of which was to explore neophyte SPPs experiences and perceptions of SP-PQL. Reflexive thematic analysis of the data led to the creation of five main themes: (a) Individual conceptualisation of SP-PQL (e.g., balance between personal and professional selves); (b) The evolution of SP-PQL (e.g., increases in SP-PQL throughout career stages); (c) The perceived barriers to SP-PQL (e.g., demands of SPP training); (d) The aspects of the profession that nourish SP-PQL (e.g., supervisory support), and; (e) The strategies implemented to foster SP-PQL (e.g., better time management and boundary setting). These novel data offer insight to the experiences of neophyte SPPs in the UK with regards to SP-PQL during the initial stages of SPP training. Our interpretation of these data leads us to conclude that there exist shortcomings in sport psychology development pathways relative to the development of SP-PQL. It follows that there are considerations for SPP educators and those who regulate the profession to ensure greater awareness of SP-PQL and the challenges to the development and maintenance of it.

### P-141

#### **AN UNOBSTRUCTED LINE OF "SITE"? AN ANALYSIS OF SPORT PSYCHOLOGY SERVICE DESCRIPTIONS ACROSS NCAA INSTITUTION WEBSITES**

*William Way, West Virginia University;  
Jack Watson II, West Virginia University;  
Sam Zizzi, West Virginia University*

Well-designed websites could offer an easy and discrete way for student-athletes to access information about services that are available at their institutions (Hayden et al., 2013). Further, since websites can create strong impressions about services/providers, they should be created and maintained with intentionality (Liang & Shepherd, 2020). As research has yet to examine online descriptions of sport psychology (SP) services, this study analyzed athletics and counseling center websites from all 1,121 NCAA institutions for (1) the presence of any SP staff/trainees (clinical or applied) and (2) any description of SP services. Of 320 (28.6%) institutions that listed SP personnel, 111 (34.7%) provided service descriptions. When SP practitioners were listed, service descriptions were more common among Power 5 conference institutions (n = 49, 75.4%) relative to all other DI (n = 45, 31.3%), DII (n = 8, 17.0%), and DIII (n = 9, 14.1%) institutions. Overall, 51.4% of descriptions provided both contact information and office location for service providers (11.7% provided neither). Proportionally, directions for how to initiate services (beyond merely listing contact information) were less common (n = 86, 77.5%) among SP descriptions compared to descriptions of campus counseling services (n = 1,033, 92.2%). Despite its centrality to ethical practice (see AASP standards 18a, 18b), only 51.4% of SP descriptions addressed the confidentiality of services. Relatively few SP descriptions (n = 35, 31.5%) included a statement or resources aimed at stigma reduction. The analysis of websites revealed a wide variety of approaches used to list and describe sport psychology services. In addition to specific recommendations for practitioners in collegiate settings, best practice suggestions will be offered for website content that attractively packages SP services while simultaneously promoting informed service consumption.

### P-142

#### **GENDER DISCREPANCIES IN SPORT AND PERFORMANCE PSYCHOLOGY CAREER PLACEMENT AFTER GRADUATE SCHOOL COMPLETION**

*Meghan Halbrook, Randolph College;  
Taylor Craft, Randolph College*

Many psychology-related disciplines have more female graduate students than male graduate students. Contrarily, STEM programs house majority male students. This particular phenomenon has been highly researched (Applerouth, 2017; Landers, 2015) and results yield consistent concerns associated with early socialized perceptions that females underestimate their abilities in math (OECD, 2013) and science, leading to the conclusion that STEM disciplines are "male" domains. The same is true of sport, which is often perceived to be hypermasculine; promoting aggression and physical prowess. The dichotomy of sport and psychology coming together in Sport, Exercise, and Performance Psychology (SEPP) and the impact on graduate school enrollment and career placement has not been heavily explored (Roper, 2008).

The purpose of the current study was to examine whether there was a difference between males and females in the type of graduate program they chose to attend (teaching, research, consulting) and if male and female SEPP professionals differ in their experiences of faculty, peer, and family support in graduate school and SEPP occupational attainment or advancement.

Participants were recruited using the Directory of Graduate Programs in Applied Sport Psychology and a common SEPP Listserv with the purpose of gathering a maximum variation sample. The final sample consisted of responses from 42 students (31 Females, 11 Males), 23 faculty (15 Females, 8 Males), and 20 consultants (9 Females, 11 Males) from 22 states.

When considering gender differences and similarities, females had just as much previous sport experience as males, but were still dissuaded more frequently from entering SEPP-related graduate programs or SEPP-related careers, specifically consulting positions. As expected, being dissuaded lead to a lowered desire to become a Certified Mental Performance Consultant (CMPC). As the SEPP field continues to grow in popularity and application, more focus needs to be paid to the diversity of the field as a whole.

### P-143

#### **POSTER WITHDRAWN**

### P-144

#### **SPORT PSYCHOLOGY STUDENTS' AND PROFESSIONALS' PERCEPTIONS OF BOUNDARY CROSSING AND SEXUAL ATTRACTION IN TRAINING RELATIONSHIPS**

*Macey Arnold, University of North Texas;  
Tess Palmateer, University of North Texas;  
Trent Petrie, University of North Texas*

The relationship between sport psychology (SP) professionals and students (e.g., supervisor, research mentor) is the cornerstone of graduate training and is often intimate and

longstanding. As such, professional/personal boundaries may blur, leaving graduate students to navigate problematic, even unethical, situations (Parker-Jenkins, 2018). Thus, from both students' and professionals' perspectives, we explored the experiences and perceptions of sexual and nonsexual boundary crossings within the SP student-professional relationship. Participants (SP professionals = 152; SP graduate students = 165) completed The Survey of Applied Sport Psychologists (Moles et al., 2016) to explore their experiences of sexual attractions and non-sexual boundary crossings (NSBC) within the SP professional to student relationship.

Few SP students (8.5%) perceived that a SP professional had been sexually attracted to them; however, 29.9% of SP professionals acknowledged sexual attractions toward their students/supervisees. Both students and professionals reported engaging in sexual behaviors (e.g., kissing, dating, intercourse). Although they did not significantly differ in their emotional experiences (anxiety, harm) of the sexual attractions, more students (71.5%) than professionals (46.5%) sought support for the professionals' attraction. Students and professionals reported common experiences with NSBCs, including nonsexual touching (52.5%, and 56.2%, respectively), remaining at parties together (38% and 55.6%), and being social friends (60.0% and 34.6%). Fewer professionals indicated seeking supervision for their actual attraction (46.5%) than they would for a future attraction (83.7%).

SP students and professionals admitted to sexual attractions and sexual behaviors, and engaging in NSBCs, with each other. Both sought support for the professionals' attraction, but professionals were less likely to do so for the actual attraction than a hypothetical future one. Given the prevalence of NSBCs and sexual attractions between professionals and students, professionals must take great care to ensure they do not engage in behaviors that could harm their students/supervisees.

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### Research Design

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#### **P-145**

##### **A BIBLIOMETRIC ANALYSIS OF COACHING SCHOLARSHIP FROM 1970-2020: USING MIXED METHODS TO ENGAGE IN PARADIGMATIC DIALOGUE**

*Sara Campbell, University of Georgia;*  
*Obidiah Atkinson, The Ohio State University;*  
*Bryan McCullick, University of Georgia;*  
*Joseph Mills, University of Denver;*  
*Clayton Kuklick, University of Denver;*  
*Brian Gearity, University of Denver*

Sport psychology researchers are often socialized into a system of mirroring their advisors or conducting traditionally acceptable forms of research, and thus may uncritically replicate certain practices at the expense of the 'other' (Ryba & Wright, 2010). As a consequence, new and potentially insightful worldviews are marginalized, and divergent worldviews rarely come into contact with one another in a single study. To address this limitation in sport psychology literature, and coaching literature specifically, the purpose of this study was to use multiple paradigms to analyze bibliometric records of coaching scholarship (CS) produced between 1970 and 2020.

This integrated, mixed methods study was underpinned by the dialectic stance that necessitates more than one worldview into the same study and engages them in respectful dialogue (Greene, 2007). Using Web of Science, CS was identified (N=522 articles) and the following bibliometric data were extracted for each of the five decades: (a) number of publications per year, (b) country of origin, (c) institution, (d) journal, (e) author, and (f) most cited articles. Two research groups from different universities analyzed the bibliometric data concurrently and independently using their respective worldview (interpretivist and post-structuralist). Next, the two research groups came together to share their findings and discover areas of convergence, divergence, or dissonance. Findings from interpretivists highlight evolutionary trends in the production of CS, while findings from post-structuralists elucidate relations of power, understudied problems in coaching, and consequences of the dominant knowledge produced. Together, the two worldviews offer different, but useful insights, and provide a more complete understanding of CS than any one worldview could provide alone. Through this study, sport psychology practitioners working with coaches can learn to negotiate problems in everyday life where multiple perspectives would be helpful. The dialectic stance also promotes social justice by ensuring alternative viewpoints feel welcomed, respected and valued.

#### **P-146**

##### **DEVELOPMENT AND TRANSFER OF SELF-REGULATED LEARNING AMONG NOVICE LEARNERS: A SELF-REGULATION COACHING (SRC) MODEL**

*Jordan Goffena, George Mason University;*  
*Anastasia Kitsantas, George Mason University*

Grounded in social cognitive theory (Bandura, 1989, 1986), Self-Regulated Learning (SRL) is a strategic process that supports goal-directed and task-specific learning (Zimmerman, 2000, 1986). The purpose of the present study was to evaluate the role of Self-Regulation Coaching (SRC) and assess the development and transfer of SRL for novice learners. SRC was developed to guide novice-level learners to set strategy-oriented goals and cues, adopt various mental strategies, self-monitor performance, and self-reflect on their goal attainment and performance. Using a mixed method experimental design, participants (N = 29) were randomly assigned to an experimental group (i.e., SRC; n = 14) or control group (i.e., practice only; n = 15) while learning the three-ball cascade juggling task. The learning intervention consisted of 150 juggling attempts across six practice sessions and performance was evaluated during pre-, mid-, post-, and transfer tests. Though group differences in physical skill performance were not statistically significant, chi-square analyses found that the SRC group used significantly more physical skill and mental skill strategies than the control to aid their performance on the mid- and post-tests. Quantitative findings showed that the majority of the SRC group used outcome goals, strategically planned and monitored their performance using combinations of mental skill strategies (e.g., visualization, focus, rhythm, and relaxation), and judged their performance using outcome-oriented standards of feedback across the post-test and transfer test. Qualitative findings further highlighted that goals taught through SRC were important for learning and goal setting was the SRL subprocess most connected to transfer regardless of proficiency level. These findings provide initial empirical support that SRL can be developed irrespective of post intervention skill proficiency and SRL skills learned

through SRC can adaptively transfer across performance environments. Educational and practical implications for mental skills training and coaching using the SRC model will be discussed.

### **P-147**

#### **DEVELOPMENT OF A NEW MEASURE TO ASSESS GROWTH MINDSET IN ATHLETES**

*Virginia Iannone, Stevenson University;  
David R. McDuff, Clinical Professor, Department of Psychiatry,  
University of Maryland School of Medicine*

Growth mindset is thought to be positively correlated with athletic performance (Dweck, 2006), however there are no instruments that specifically measure growth mindset in athletes. To fill this need, the authors developed a growth mindset scale for use with sport populations.

The scale was created using the general characteristics of growth mindset as well as assessing specific areas of sport performance (e.g. conditioning, mental skills). The final instrument contains 13 items rated on a Likert-type scale ranging from 1 (Strongly Disagree) to 6 (Strongly Agree). Four items are reverse scored and higher scores are indicative of a stronger growth mindset.

The validation sample was part of a larger project and consisted of 146 collegiate athletes ranging in age from 18-25 with a mean age of 19.77 (SD=1.45). There was diversity in gender (53% male) but less so in race (82% white). They represented 20 different sports, and were primarily from NCAA Division III.

Analyses were conducted to determine both the internal consistency and the extent that scores were related to resilience, a construct thought to be closely linked to growth mindset. Analyses resulted in a Chronbach's Alpha of .809 indicating good internal consistency. Scores were positively correlated with the Brief Resilience Scale ( $r=.177, p<.05$ ) or in White vs BIPOC athletes ( $t=-.971, p>.05$ ).

Next steps in the process include psychometrics to further assess reliability and validity with a larger and more diverse sample. Although not yet fully validated, this instrument offers a promising opportunity to measure growth mindset specifically in sport populations. This has significant implications for clinical practice as it gives practitioners a tool to measure changes in growth mindset pre- and post-intervention.

### **P-148**

#### **DEVELOPMENT OF AN ASSESSMENT OF RECOVERY ACTIVITIES FOR ATHLETES**

*Carly Wahl, University of Wisconsin Milwaukee;  
Barbara Meyer, University of Wisconsin-Milwaukee*

The use of assessments for eliciting information from athletes is commonplace in sport psychology (Taylor, 2017). However, few resources are available to guide researchers through the process of developing novel assessments (Carpenter, 2018) and no resources exist in the sport psychology literature. Since the risks of administering a poorly developed or erroneous

assessment far outweigh the benefits of any information gained (DeVellis, 2017), it is essential that assessments are constructed using guidelines derived from measurement theory. As such, the purpose of this presentation is to describe the process used to create and validate items for an assessment of recovery activities for athletes. Initial assessment development was achieved through the following four objectives: (1) defining theoretical factors, (2) creating items within each factor, (3) evaluating content validity by expert reviewers, and (4) evaluating content validity by current athletes. In Objectives 1 and 2, the factors and items within each factor were generated as informed by sport recovery literature and previously validated recovery assessments. This process yielded 11 factors and 131 items. In Objective 3, expert reviewers (2 males, 1 female) used a 4-point scale to rate how accurately each item reflected the factor definitions provided (Lynn, 1986). Expert feedback led to the retention of 124 items. In Objective 4, current National Collegiate Athletic Association Division I and professional athletes (4 males, 4 females) from diverse sporting backgrounds used a think-aloud cognitive interview method (Peterson et al., 2017; Willis & Artino, 2013) to assess the comprehensibility and ease of recall of each item. A total of 71 athlete recovery activity items were retained at the conclusion of the validity process. This presentation will elaborate on the above process and provide a preliminary framework for scholars in sport psychology to develop evidence-based assessments.

### **P-149**

#### **EMOTION REGULATION IN SPORT: CONSIDERATIONS FOR ASSESSMENT**

*Allison Grace, Springfield College*

Sport and its competitive nature are inherently emotional experiences. The ability to successfully regulate emotions has been linked to positive performance outcomes (Beatty & Janelle, 2020; Lane, Beedie, Jones, Uphill, & Devonport, 2011). While researchers have explored the specific emotions elicited within the context of sport (Hanin, 2012; Lewis, Knight, & Mellalieu, 2017), less is known about how athletes regulate their emotions in sport. The lion's share of the research on emotion regulation is related to individuals' tendency to use specific strategies over others and the use of specific strategies and adaptive mental health outcomes and psychological well-being (Gross, 1999; McRae & Gross, 2020; Naragon-Gainey, McMahon, & Chacko, 2017). As such, existing measures of emotion regulation have been developed and validated within these more clinical samples (Gross, 1999; McRae & Gross, 2020; Naragon-Gainey, McMahon, & Chacko, 2017). Regarding sport, measures of how athletes regulate their emotions are less well established. The purpose of this poster presentation will be to provide an overview of selected emotion regulation assessments, if and how these have been adapted to measure emotion regulation strategies in sport, and offer suggestions for quantifying emotion regulation strategies in sport moving forward.



### P-150

#### THE ATHLETES' BRAIN IN THE ZONE: A META-ANALYSIS OF THE ROLE OF NEURAL EFFICIENCY, TRANSIENT HYPOFRONTALITY AND NEURAL PROFICIENCY STATES IN SELF-PACED SPORTS

*Edson Filho, Boston University;*  
*Urska Dobersek, University of Southern Indiana;*  
*Tammy-ann Husselman, University of Central Lancashire*

Over years of deliberate practice, athletes learn how to activate and de-activate the neural networks underpinning skilled performance in sports (Ericsson, 2020; Hatfield, 2018). To this extent, applied psychologists have explained optimal performance experiences (e.g., being in the zone; see Bertollo, Doppelmayr, & Robazza, 2020) in light of the neural efficiency (i.e., cortical idling), the transient hypofrontality (i.e., decreased activation in the frontal cortex), and the neural proficiency hypotheses (i.e., learned ability to increase and decrease activation across the cortex). Accordingly, to systematize literature on these putative neural mechanisms, we examined changes in brain rhythms (i.e., alpha, beta, and theta) in relation to optimal and sub-optimal performance in self-paced sports. Our search, informed by the PRISMA Reporting Guidelines, returned 267 potentially relevant articles. Eight of these articles met our inclusion criteria, representing eight different sports and 153 athletes. Our analysis revealed that (1) optimal performance is characterized by increased alpha ( $g = .62$ ,  $p = .02$ ) and theta ( $g = .74$ ,  $p = .002$ ) across the cortex; (2) during optimal performance the frontal lobe is more relaxed (higher alpha;  $g = 1.06$ ,  $p = .18$ ; lower theta;  $g = .38$ ,  $p = .08$ ), in comparison to the other brain lobes; and (3) experts' brains are more relaxed (higher alpha,  $g = .89$ ,  $p = .34$ ) and less busy (lower theta,  $g = .91$ ,  $p = .54$ ) than novices' brains for the same task. From a theoretical standpoint, our findings suggest that neural efficiency, neural proficiency, and transient hypofrontality are complementary neural processes underpinning optimal performance in self-paced sports. From an applied standpoint, neurofeedback training should be used to teach athletes how to suppress and amplify alpha and theta activity across the brain, particularly in the frontal lobe.

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### Social Justice, Equity, and Inclusion

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### P-151

#### ENHANCING DIVERSITY AND INCLUSION IN YOUTH SPORT THROUGH A CRITICAL PARTICIPATORY ACTION RESEARCH APPROACH

*Maria D'Ugo, University of Denver;*  
*Jillian Lowey, University of Denver;*  
*Sean Mapoles, University of Denver;*  
*Brian Gearity, University of Denver*

Youth sport coaches often enter the field underprepared, which can negatively impact youth athletes' experiences and outcomes, including dropout (Merkel, 2013). Negative outcomes in youth sport are related to financial barriers, over emphasis on winning, pressure to perform while injured, racism (e.g., systemic discrimination, microaggressions), abusive behaviors (e.g., hitting, kicking), and lack of fun (Merkel, 2013). Some of these problems can be ameliorated with evidence-informed practices on quality coaching, whereas others would

likely benefit from a greater use of culturally competent coaching and inclusive environments. Systemic and interpersonal racism contribute to negative consequences in youth sports, but the role of Whiteness, cultural competence, and anti-racist practices are understudied (Gearity et al., 2020). Through a Critical Participatory Action Research (CPAR) approach, with our community partner, a local high school athletic department, we seek to address this gap in the literature and social justice issue through an applied understanding and intervention on factors that contribute to participation and feelings of inclusion among interscholastic athletes. CPAR is a systematic research approach to help individuals reflect, learn, and improve their current practices for positive change (Kemmis et al. 2014). Since the fall of 2020, we have, and continue to, collect data through interviews with coaches, school administrators, and youth athletes, and extensive fieldnotes, including self-reflections, written by the researchers. Our results indicate that participation in youth sport, specifically lacrosse, is limited and effected by socioeconomic factors, lack of racial and ethnic representation within the sport, and lack of knowledge about the sport. Continuing with the tenets of CPAR, we will use these findings to create and implement educational materials with our partners, particularly the coaches and teams, with the goal of increasing participation and feelings of inclusion among the athletes. This research enhances our community partner while addressing the academic gap in the literature.

### P-152

#### EVALUATING MEXICAN PERCEPTIONS OF THE UNITED STATES AND AMERICANS FOLLOWING A SHORT-TERM SPORT FOR DEVELOPMENT AND PEACE INITIATIVE

*Adam Hansell, West Virginia University;*  
*Dana Voelker, West Virginia University;*  
*Sofía España-Perez, West Virginia University;*  
*Jack Watson II, West Virginia University;*  
*Cheyenne Luzynski, West Virginia University;*  
*Gonzalo Bravo, West Virginia University;*  
*Peter Giacobbi, West Virginia University;*  
*Alejandra Gonzalez-Gallegos, Universidad Autónoma de Nuevo León*

The United States and Mexico have had a turbulent diplomatic relationship with tensions resurfacing in recent years. Funded by the US Department of State, professionals from public universities in both countries partnered to develop and implement *Deporte y Cambio Social* – a 1-week sport for development and peace (SDP) initiative designed to promote women's leadership and empowerment among current and future coaches of girls and young women in Mexico. Grounded in sport for development theory and the social change model, we aimed to foster citizen diplomacy across the experience through the development of meaningful intercultural relationships that improved cultural perceptions and understanding. This study qualitatively explored citizen diplomacy outcomes, namely Mexicans' perceptions of the US and Americans, following their participation in *Deporte y Cambio Social*. Three semi-structured focus group interviews were conducted with 18 Mexican women ( $n = 10$ ) and men ( $n = 8$ ; Mage = 23) who completed the program in Mexico. Using a social constructivist framework, we engaged in reflexive thematic analysis to examine the data. Participants reported the interactive nature of the program helped them challenge negative beliefs about, and identify common struggles with, Americans. Citing that Americans in the program treated them

as equals, participants expressed optimism toward future intercultural partnerships. Participants also described the US with idealism, explaining that American resources, training, and attitudes were superior to those of Mexicans. Our findings highlight the role of SDP initiatives in promoting citizen diplomacy while cautioning researchers and practitioners to prevent the potential perpetuation of neocolonialism through various strategies clarified by our project, including concerted integration of strengths across cultures. To address the dearth of data on international SDP initiatives, we recommend continued evaluation of theory-driven programs relative to citizen diplomacy outcomes, specifically through holistic and creative qualitative approaches that capture a wide breadth of stakeholder experiences.

### P-153

#### LESSONS LEARNED ABOUT RECRUITMENT OF DIVERSE PARTICIPANTS IN A LIFE-SKILLS YOUTH SPORTS PROGRAM

*Jana Fogaca, Long Beach State University;  
Sthephany Escandell, University of Wisconsin-Milwaukee;  
Kallie Reckner*

There are various challenges in recruiting non-white research participants from diverse cultural backgrounds, including lack of trust and skepticism that research intentions do not benefit the community (Yancey et al., 2005). Previous studies provide suggestions on how to overcome barriers to collect data within minority populations (Escobar-Chaves et al., 2002). The aim of this study was to examine the effectiveness of using scholarly recommendations for recruitment of minority research participants in a life-skills through sports intervention program. This program targeted a low income, majority-minority community where children had limited opportunities for sport participation. The strategies used to recruit participants included developing the program inside the community (Dwyer & Buckle, 2009), no-cost easy accessibility (Haack et al., 2014), having a community partner introduce the research team to the target group community (Escobar-Chavez, 2002), providing surveys in Spanish and English (Aguirre et al., 2018), and considering the perspectives of the target group when developing research tools (Escobar-Chavez, 2002). Despite our efforts to reach a representative sample, our participants had a higher prevalence of white (70% vs. 44.5%) and lower prevalence of low income (83.3% paid full lunch vs. 40.6%) than the rest of the community. In comparison to our pilot study, which had a better representation of the community and required more structure to ensure organization, the results varied drastically. Therefore, future studies should focus on closing the ethnic/racial gaps within research by developing new strategies in recruitment, instead of simply accepting predominantly white samples as a limitation of a study. Furthermore, we urge that community-based participatory programs, which warrant higher time investment and may be unrealistic for probationary faculty, become more valued in tenure evaluations in the sport psychology profession.

### P-154

#### THE RELATIONSHIP BETWEEN LEVEL OF FAN IDENTITY AND ATTITUDES TOWARD ATHLETE ACTIVISM: A CORRELATIONAL ANALYSIS

*Carolena Charalambous, Georgia Southern University;  
Samantha Holder, Georgia Southern University;  
Stefanee Maurice, California Polytechnic State University;  
Brandonn Harris, Georgia Southern University;  
Megan Byrd, Georgia Southern University*

An abundance of examples exist in which athletes and sport programs have protested against political and social issues. Increased media exposure and the influence of social media has led to an amplitude of diverse reactions and responses. Some argue sport should remain as an entertainment business and not mix with politics (Agyemang, et al., 2010; Edwards 2016). Conversely, others believe athletes should be able to use their platform to advocate for social and political injustices (Agyemang, et al., 2010; Edwards 2016). One area that has received limited research attention is the influence of fanhood. Individuals with a higher identification as a fan may perceive the role of an athlete as an activist differently compared to an individual who does not identify as a sport fan or a casual spectator. The purpose of this study was to measure the relationship between level of fan identification and attitudes toward athlete activism. Participants ( $n = 467$ ) completed the Sport Fandom Scale (Wann, 2002) and the Attitudes Toward Athlete Activism Questionnaire (Sappington et al., 2019). Results of Pearson correlation analyses indicated no correlation between level of sport fandom and attitudes toward athlete activism ( $r(467) = -0.015, p = 0.742$ ). Even though no correlation was found, this is an important finding as the results imply the diverse reactions and attitudes toward athlete activism stems from both sport fans and non-sport fans. It is important for sport psychology professionals to help athletes navigate the pressures and consequences of their activism or lack of activism from people within and outside of the sport community. This poster will highlight how demographic variables influence the relationship between fanhood and attitudes toward activism, and provide tips for sport psychology professionals to support athletes who are navigating the polarizing viewpoints and consequences of athletes as activists.

### P-155

#### UNDERSTANDING COACHES' EXPERIENCES WITH ATHLETES LEARNING ENGLISH (ALES)

*Fritz Ettl Rodriguez, Butler University;  
Brooke Kandel-Cisco, Butler University*

As globalization and sport become increasingly synonymous, there is also a growing need to attend to diversity of culture and language within teams. In the United States, sports at all levels often mirror schools in the representation of races, ethnicities, creeds, and languages. The population of immigrants in the U.S. continues to rise with schools hosting 1.1 million new English Language Learners (United States Department of Education & National Center for Education Statistics, 2019) since 2000, yet little is known about immigrants' participation in organized—either school-based, community-based, or elite—sport. While practitioners and scholars in the field of Physical Education Teacher Education (PETE) have explored teaching

practices that address social, academic, and cultural needs of English Learners (Sato et al., 2018), there is no empirical research in the sport psychology and coaching literature that addresses coaches' experiences with and ability to respond to the language needs of Athletes who are Learning English (ALEs). Using a qualitative survey in this first-of-its-kind study, we examined the experiences of coaches who work with ALEs. Respondents included coaches (n=24 and counting) representing at least 17 different sports and 9 different coaching certifications. With the exception of one respondent who was trained as an English as a Second Language teacher, no respondents reported receiving preparation that explicitly addressed language-responsive coaching practices. However, in our preliminary analysis we found evidence that coaches' perceived university-based education, such as counseling courses, as well as professional judgment, informed their work with ALEs. Some of the strategies developed through these avenues included translation, demonstration, and use of visuals. Participants also documented challenges such as overreliance on interpreters, inaccurate translations of sport-specific lingo, and cultural misunderstandings. These findings inform our ongoing work to develop language-responsive coaching strategies that are inspired by English as a Second Language teaching approaches.

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### Tactical Populations

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#### P-156

##### **HARDINESS AND ACFT PERFORMANCE IN FIRST YEAR AROTC CADETS**

*Monaye Merritt, Auburn University;*  
*Danielle Wadsworth, Auburn University*

**Background:** Noncognitive attributes are posited to contribute additional value to Army officer selection, training, and performance than traditional screening methods alone (Rumsey, 2014). Higher hardiness is associated with buffering the ill-effects of stress, maintenance of health, and better performance in a broad range of military populations, however, remains untested in Army Reserve Officer Training Corps Cadets (AROTC).

**Purpose:** The current study evaluated the influence of hardiness on the Army Combat Fitness Test (ACFT) in first year AROTC cadets. The ACFT is a series of six events (3 RM Deadlift, Standing Power Throw, Hand Release Push-Up – Arm Extension, Sprint-Drag-Carry, Leg Tuck, and Two-Mile Run) designed to reflect stress of the combat environment.

**Method:** Thirty-five cadets aged 18 and 19 (66% male, 91% Caucasian) completed the Hardiness Resilience Gauge (Bartone, 2018) the second week of fall semester and completed the ACFT one month later. A linear regression examined the influence of hardiness and demographics on the ACFT total score.

**Results:** Regression analysis revealed two significant models, one with demographic variables ( $R^2 = .782$ ,  $p < .001$ ) and one with demographic variables and hardiness ( $R^2 = .790$ ,  $p < .001$ ). The change in  $R^2$  was insignificant ( $p = .485$ ). Biological sex was the only significant predictor across both models.

**Discussion:** This study does not support hardiness as a measure to predict ACFT scores with consideration to Cadets completing the ACFT for the first time. Further studies should investigate the relationship of hardiness to ACFT scores following familiarization and whether biological sex has a continued effect on ACFT score over time.

#### P-157

##### **INTEGRATING MENTAL SKILLS TRAINING WITH MINDFULNESS PRACTICES AND STRATEGIES: PILOT TESTING A MINDFULNESS-BASED HEALTH PROMOTION INTERVENTION FOR MILITARY VETERANS**

*Sarah Shue, Richard L. Roudebush VA Medical Center;*  
*Jayme Brosmer, Veterans Health Indiana*

The purpose of this mixed-methods pilot study was to test the RECLAIM (REconnecting to Civilian Life using Activities that Improve Mindfulness) intervention using a virtual platform for session delivery. RECLAIM is a mindfulness-based health promotion intervention designed to reduce post-9/11 veterans' risk of suicidal behaviors by facilitating resilience and coping and improving connectedness. Social and self-disconnectedness (e.g., loneliness, isolation, lack of purpose or goals; Elnitsky et al., 2017) are inherently part of the military life cycle; when individuals enter the service, they detach from previous civilian lives and identity, and adopt military norms, values, and language through basic training (Angel et al., 2018). However, as personnel exit military service, no concerted effort comparable to basic training helps veterans reacclimate and reconnect to civilian life.

RECLAIM is rooted in the self-determination theory (Ryan & Deci, 2000) and the interpersonal psychological theory (Van Orden et al., 2010) and incorporates mindfulness strategies and mental skills found in performance settings (e.g., imagery; effective emotion and anxiety management; concentration; Hammermeister et. al., 2010) to promote psychological well-being. Focusing on enhancing psychological well-being can improve veterans' sense of connectedness (social and self) by helping them establish positive relationships, autonomy, and personal growth and development.

In this study, analysis of self-reported outcome measures, qualitative interviews, and session observation notes facilitated refinement to the integration of mental skills training and mindfulness strategies and practices in the RECLAIM intervention. This presentation will highlight these refinements and demonstrate how mental skills training can be integrated into mindfulness practices and strategies to improve skill acquisition and engagement in mindfulness practices, which can also benefit sport and non-sport performances. Attendees will be oriented to RECLAIM through a brief overview, including theoretical foundations and preliminary work and virtual pilot testing findings (i.e., outcome assessments; thematic analysis) will be presented.

#### P-158

##### **POSTER WITHDRAWN**

### P-159

#### **PREDICTING VETERAN'S HEALTH BEHAVIORS AND PERCEIVED SELF CONCEPTS: MILITARY IDENTITY AND MOTIVATIONAL REGULATIONS**

*Daniel Chin, San Francisco State University;  
Susan Zieff, San Francisco State University;  
Mi-Sook Kim, San Francisco State University*

U.S. veterans experience higher obesity rates than the national average, with lower physical activity (PA), higher sedentary time (ST) and unhealthy eating behavior levels than the general population. The degree to which veterans retain their Military Identity (MI) may play an important role in their health behaviors. The purpose of this study was to examine the associations between MI, PA, eating behavior, and perceived self-concept among veterans. A national sample of veterans (N=131) completed an online survey measuring degree of MI, exercise and eating motivation regulations, typical PA levels (minutes/wk), ST (minutes/day), diet quality (frequency/serving sizes), eating patterns (frequency), physical self-concept (PSC) and self-esteem (ES). Veterans reported general agreement with all dimensions of MI, an active lifestyle, autonomous motives, chronic PA, low ST, healthful eating behaviors and positive self-perceptions. A series of multiple regression analyses revealed that MI dimensions of Family ( $\beta = -.24$ ), and Connection ( $\beta = .38$ ) both significantly contributed to self-determined exercise regulations, but did not predict their autonomous eating regulations. Veterans with more autonomous regulation were positively linked to recreational PA, and negatively to ST and an unhealthy diet quality ( $\beta = .63, -.26$ , and  $-.44$ , respectively). Chronic PA positively predicted the PSC quality ( $\beta = .37$ ) while ST and unhealthy eating behaviors negatively accounted for PSC quality ( $\beta = -.20, -.37$  and  $-.25$ , respectively). The findings provide evidence that veteran MI could facilitate, or detract from, exercise motives in this population, and convey that veterans may benefit from importing MI dimensions supportive of PA into a parallel veteran identity in which autonomous exercise motives may foster. Therefore, the results suggest policies guiding veteran transition and weight management programs, should incorporate the team aspects of military experience to build social connections conducive to an active lifestyle and healthy eating in this community.

### P-160

#### **THROUGH THE EYES OF AN EXPERT: THE USE OF EYE-TRACKING TECHNOLOGY TO BUILD MASTERY**

*Anna-Marie Jaeschke, F3EA; Breanne Hapken, F3EA*

The Army Special Operations (ARSOF) community operates on multiple principles, one of which is that "humans are more important than hardware". ARSOF Soldiers utilize specialized equipment to enhance and capitalize on this human potential. Eye tracking glasses are an example of this technology; lenses calibrate with a performers' pupils to show exactly where, for how long, and in what order a performer executes a task. The human capability to efficiently and effectively learn and execute an operational task is lifesaving on the battlefield. Tobii Eye tracking glasses capture recordings or static images provide a unique glimpse into this mental capacity. Mechanical hardware illuminates the human hardware (eye behavior) by highlighting nuances and differences between how an experienced Green Beret with multiple deployments views an operational task differently than a novice student in training.

Technology serves as a bridge between expert instructors and Special Forces trainees learning to identify potential hazards in their operational environment. Principles of purposeful practice serve as a crucial cognitive mechanism to facilitate this transfer of knowledge (Macnamara & Hambrick, 2020). The main difference between Ericsson's principles of purposeful and deliberate practice lies in the expertise of the feedback (Ericsson, 2019). Purposeful practice means engaging in mentally taxing training with a clear and measurable outcome, gold standard for performance, a focus on mechanics, and immediate feedback (Ericsson, 2008). Purposeful practice is made deliberate by having an expert Cadre (instructor) use gaze behavior to course correct attention during military training. Eye tracking technology coupled with mental skills practical exercises has demonstrated skill acquisition across training. Mental Performance Coaches explore how deliberate practice utilizing eye-tracking technology impacts the training of Special Forces Soldiers.

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#### Teaching

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### P-161

#### **AN EVIDENCE-BASED APPROACH TO ONLINE TEACHING: PRACTICAL APPLICATIONS TO ENHANCE STUDENT LEARNING IN SPORT PSYCHOLOGY**

*Todd Wilkinson, University of Wisconsin - River Falls;  
Melanie Ayres, University of Wisconsin - River Falls*

The past year saw a major shift in teaching from an in-person to an online format. Many instructors spent intense periods of time modifying their courses on the fly to be able to continue to educate students (Rad et al., 2021). While the distribution of a COVID vaccine is allowing some of these courses to transition back to in-person learning, it's likely the number of courses offered online will ultimately remain at a level greater than that seen before the pandemic. Importantly, this presentation provides an evidence-based approach to online teaching. In collaboration with a highly experienced instructor in online education and using as a model an Introduction to Sport Psychology course, this presentation offers practical suggestions from research-supported best practices in online teaching and learning that can be used to enhance existing courses or initial development. Specifically, the presentation provides fundamentals of online instruction, a discussion of current tools to enhance online learning (e.g., VoiceThread for lecture capture), as well as inclusive and sustainable teaching and learning practices (Kernahan & Lewandowski, 2021). Finally, suggestions are offered for transitioning an online course back to an in-person format, using what you have built online to enhance your original in-person course. Student evaluations of the methods promoted here-in have revealed positive findings with regards to engagement, content mastery, the promotion of practical applications and other course learning goals.

### P-162

#### **MORTAL KOMBAT, MILE RUNS, CARPETBALL, AND BICEP CURLS! TEACHING PSYCHOLOGICAL SKILLS USING STUDENT-SELECTED ACTIVITIES IN SPORT PSYCHOLOGY CLASS**

*Elizabeth Pacioles, Marshall University*

The purpose of this study was to examine the effectiveness of utilizing student-selected experiential activities in teaching psychological skills. Prior research provides support for using student choice to enhance motivation (Patall, Cooper, & Robinson, 2008), as well as incorporating physical activity in the college classroom to increase engagement (Ferrer & Laughlin, 2017). In the present study, 30 students enrolled in an elective undergraduate Sport Psychology course participated in a semester-long project comparing the implementation of four psychological skills during an activity of their choice. After a virtual class workshop on a psychological skill (no instruction baseline, breathing, self-talk, imagery, pre-performance routine), students implemented the newly learned skill during their chosen activity. Students recorded performance and reflected on their experience of implementing the psychological skill via open-ended questions and Likert scale ratings of flow, comfort, enjoyment, utilization, and likelihood of future use of the skill. Student-selected activities included sports (e.g., golf putting, free throwing shooting), exercise (e.g., running, weightlifting), or games (e.g., video games, carpetball, cornhole). On a post-project questionnaire, 76% endorsed the project as helpful in learning psychological skills, 88% recommended the class activity for future use, and 92% reported enjoying the activity. Qualitative analysis of student comments included themes of benefits of physical movement, time away from the computer, and enjoyment of hands-on participation in their chosen activity. Regression analysis indicated that "absorption in the activity" and "comfort" were significant predictors of future utilization across all psychological skills. Students reported lower ratings of flow during use of self-talk compared to other psychological skills, and subsequently rated self-talk as least likely to be used in the future. The results of this study have implications not only for teaching psychological skills to students, but for promoting the use of these skills among athletes by identifying factors related to their future utilization.

### P-163

#### **THE 5E PEDAGOGICAL METHOD OF INSTRUCTION: APPLICATIONS FOR THE SPORT PSYCHOLOGY CLASSROOM**

*Jordan Goffena, George Mason University*

Educators that teach sport and exercise psychology (SEP) could benefit greatly from the methods that are utilized in the field of science education. Though learning theories such as constructivism and pedagogies such as scientific inquiry are foundational approaches one would learn in a science education program, another method hidden in that curriculum shows great potential to inform SEP educators and practitioners: The 5E Instructional Model. The 5E model (Bybee & Landes, 1990) is a cognitive constructivist learning cycle characterized by providing learners the opportunity to engage, explore, explain, elaborate, and evaluate their learning experiences, therefore allowing learners to organize, redefine, examine, reexamine, and adapt their conceptual thinking through self-reflection

and collaborative learning (Bybee, 1997). The purpose of this presentation is to describe the 5E approach and highlight the applicability of the pedagogical method for constructing lessons in the SEP classroom. An overview of the five phases will be provided and direct examples of SEP content will be discussed. Specifically, a step-by-step process for developing a lesson and creating student-centered activities through the 5E method will be described within the context of introducing self-efficacy and self-confidence to SEP undergraduate students. Evidence of the practicality of the 5E method will be provided relative to constructing mental skill training assignments, and broad scale application for mental skills training will be advanced.

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### Youth Sport

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### P-164

#### **A QUALITATIVE ASSESSMENT OF THE IMPACT OF AN ACHIEVEMENT GOAL THEORY-BASED MENTAL SKILLS TRAINING SESSION ON YOUTH ATHLETE RESPONSES TO PERFORMANCE STRESS**

*Candace Hogue, Penn State University;  
Leah Maggs, Penn State Harrisburg;  
Kristen Guarneschelli, Penn State Harrisburg;  
Tiffaney Simmers, Penn State Harrisburg*

The purpose of this qualitative investigation was to examine the impact of an achievement goal theory-based mental skills training (MST) session on high school athletes' (N = 72 athletes, Mage = 16.08, sd = 1.17) ability to handle performance stress. Prior to stress exposure, athletes in both a control and experimental group took part in a 15-20 min presentation that included either a lecture on the history of sport psychology or a MST session that promoted a task orientation and creating a caring, task-involving climate, respectively. After taking part in a 30-min instructional juggling session with an ego-involving climate (i.e., the stressor), athletes were asked: 1) Did the presentation help you handle performance pressure/stress during the instructional juggling session? If so, in what way? 2) When you were faced with performance pressure/stress, how did you respond? Qualitative analysis based on grounded theory (Glaser & Strauss, 1967; Strauss & Corbin, 1990) identified themes for each group. The MST group reported more advantageous responses, although both groups reported experiencing stress and having a negative experience. The MST group reported that the session helped them handle performance pressure and shared how they will apply what they learned when playing. Themes that emerged for both groups included low self-efficacy regarding their ability to learn to juggle, choking under pressure during the juggling session, and high negative affect, although the intensity of the psychosocial stress responses of the control group were greater (e.g., humiliation). Themes unique to the MST group included high effort and perseverance, a task orientated approach toward achievement (i.e., focus on improvement and skill mastery), effective use of mental skills (e.g., emotional regulation and ability to perform under pressure), and support of teammates. The results suggest even a single, 20-minute achievement goal theory-based MST session can help young athletes manage performance stress.

### P-165

#### **AN EARLY EXPLORATORY INVESTIGATION OF RELATIONSHIPS BETWEEN BASIC NEED SATISFACTION, FRUSTRATION, MOTIVATION, BURNOUT, AND FUN AMONG ACADEMY YOUTH SOCCER PLAYERS**

*Jody Langdon, Georgia Southern University;  
Johanna Van Arkel, Georgia Southern University;  
Amanda Visek, The George Washington University*

Self-determination theory (Deci & Ryan, 2020) has been used to explain motivation and burnout in youth sport. Visek and colleagues' (2017) new instrument that assesses dimensions of fun (Sport Participation Assessment of Fun; SPAF) may help to further explain relationships observed. The purpose of this presentation is to explore preliminary findings regarding: (a) associations between athlete basic need satisfaction, motivation, fun, and burnout, and (b) internal reliability of the SPAF.

Forty-seven soccer players (40 male, 7 female; Mage = 15.19, SD = 1.73) from an academy program in the southeastern United States completed surveys measuring basic need satisfaction and frustration, motivation, fun, and burnout during the fall 2020 season. Due to COVID-19, safety protocols required surveys to be placed online via Qualtrics, resulting in a low return rate. Relationships of the completed surveys were evaluated using Pearson's correlations. Internal reliability was measured using Cronbach's alpha.

Positive relationships were indicated between need satisfaction and fun, in addition to negative relationships between need satisfaction and a reduced sense of achievement. Negative relationships were observed between need frustration and fun. Autonomous forms of motivation were positively related to fun, whereas externally regulated forms of motivation were positively related to all three subscales of burnout. Fun was negatively correlated with the three subscales of burnout. All subscales of the SPAF were internally consistent among this sample ( $\alpha > .75$ ), whereas game time support approached internal consistency ( $\alpha = .62$ ).

Existing literature, in combination with results from this preliminary analysis, suggests satisfaction of basic needs and autonomous forms of motivation are associated with motivation, which may impact fun and potentially reduce burnout. The SPAF was found to be a reliable tool among this population. Implications of the study findings and plans for further investigation with larger sample sizes, including additional reliability testing of the SPAF, will be discussed.

### P-166

#### **EMPOWERED TO EXERCISE: CARING AND TASK-INVOLVING CLIMATE INTERVENTION WITH AN ALL-GIRLS SPORT CAMP**

*Karynn Glover, Wayne State University;  
E. Whitney Moore, Wayne State University*

During adolescence, girls decline in physical activity is significantly higher than boys (Pate et al., 2002). Given this, researchers have employed an achievement goal theory and caring framework to examine the effect of a leader created caring and task-involving climate on outcomes of girls'

sport participation (Glover & Fry, 2018; Sarrazin et al., 2001; Weiss et al., 2020). Thus, the purpose of this study was to examine the impact of motivational climate perceptions on empowerment to exercise in an all-girls summer sport camp. The camp leaders had a training session on creating a caring and task-involving climate prior to camp. At the end of the week-long camp, campers ( $N = 32$ ) completed a survey indicating their empowerment to exercise and perceptions of the motivational climate created by their leaders. Campers' empowerment to exercise varied across camp group (ICC=4.87%), supporting multilevel modeling. The individual campers' perceptions of the caring climate ( $\beta = .58, p = .0001$ ) and task-involving climate ( $\beta = .25, p = .0003$ ) positively predicted empowerment, while the ego-involving climate ( $\beta = -.14, p = .01$ ) negatively predicted empowerment. The caring climate parameter at the individual level resulted in a significant random slope ( $\sigma^2 = .07, p < .001$ ), indicating a significant variance in slopes across groups. In addition, the group average of the campers' perceptions of the caring climate ( $\beta = .77, p = .0001$ ) positively predicted empowerment. The strongest predictors of the campers' empowerment to exercise was their groups' average caring climate perceptions and their individual caring climate perceptions followed by their individual task-involving climate perceptions. Thus, maximizing every girl's caring climate perception was critical to fostering their empowerment. Sport leaders should strive to intentionally create relationships and get to know each individual as well as promote an environment where each person feels as if their effort and improvement are valued.

### P-167

#### **EXPLORING THE ANXIETY-PERFORMANCE RELATIONSHIP IN FIGURE SKATING SKILL TESTS**

*Diane Benish, West Virginia University;  
Jody Langdon, Georgia Southern University;  
Megan Byrd, Georgia Southern University;  
Brandonn Harris, Georgia Southern University*

While the anxiety-performance relationship has received more attention in previous decades (Woodman & Hardy, 2001) a more recent model (Jones et al., 2019) has posed the inclusion of a regulatory dimension alongside the well-known constructs of cognitive and physiological anxiety. This new dimension, referred to as perceived control, represents an individuals' coping capacity in response to perceived threat (Cheng et al., 2009). Theoretically, this incorporates the potential for pre-performance anxiety to be adaptive and not always detrimental to performance. Presently, this model has demonstrated predictive validity with performance (Cheng et al., 2011; Jones et al., 2019) but has not been sufficiently utilized with more objective forms of performance data. Preliminary evidence suggests pre-performance anxiety can have a negative impact on figure skating skill test performance (Colgan et al., 2000) and is a novel context for the anxiety-performance relationship to be explored. Therefore, the current investigation sought to explore the relationship between youth figure skaters' reported levels of pre-performance anxiety and skating test scores awarded by official test judges. The sample included 47 (44 female, 3 male) adolescent figure skaters between the ages of 13-17 who were participating in a United States Figure Skating sanctioned test session. Surprisingly, analyses revealed that cognitive anxiety, physiological anxiety, and perceived control were not significantly related to skaters' awarded test scores. Secondary analyses indicated years of testing experience,

test attempt number and months training for a test were also not significantly related to skaters' test scores. However, follow-up analyses revealed figure skaters with higher reported levels of worry (cognitive anxiety) were correlated with lower levels of perceived control (skater's perceived ability to cope). Recommendations for mental performance consultants to develop adolescent figure skaters' ability to cope with various performance stressors via psychological skills training will be addressed.

### P-168

#### **GENERATING INSIGHTS OF CULTURAL COMPETENCY WITHIN A NATIONALLY-RUN TRAUMA-SENSITIVE SPORT PROGRAM FOR CANADIAN NEWCOMER CHILDREN**

*Majidullah Shaikh, University of Ottawa;*  
*Tanya Forneris, The University of British Columbia*

Children from Newcomer populations (i.e., immigrants, refugees) face high rates of traumatic exposure (e.g., abuse, neglect, family violence, persecution, war, displacement, poverty). There is a need for interventions to help re-orient these children on pathways of resilience. Using trauma-sensitive sport programming can be an effective means to support healing, through designing safe spaces, fostering supportive adult-child relationships, and offering structured opportunities to engage in competitive physical activities and skill-building. However, much of the limited research on trauma-sensitive sport has been done with Western populations; greater research is needed on how to accommodate the unique needs and inclusion of Canadian Newcomer populations in sport – a diverse and underrepresented cohort. The purpose of this study was to co-generate insights of cultural competency with stakeholders (i.e., managers, front-line staff) of a national community organization offering trauma-sensitive sport programming to Canadian newcomer children. An action research case study methodology was used, in which 11 stakeholders (9 women, 2 men; Mage = 28.64 ± 7.98), participated in ongoing bi-weekly meetings (n = 10) facilitated by a multi-disciplinary team of researchers, administrators, and consultants. In these meetings, stakeholders were asked to share their experiences in recruiting, retaining, and engaging Canadian Newcomers in trauma-sensitive sport, and co-develop solutions for enhancing Newcomer inclusion in sport. Data were collected through field notes and audio-recordings, and interpreted through a qualitative descriptive analysis. Insights for facilitating culturally inclusive programs for Canadian Newcomers were generated across five categories: (a) consistency in staff to maintain relationship-building, (b) using accessible language in marketing and outreach, (c) integrating Newcomers' language, traditions, heritage in the experience, (d) seeking commonalities and honouring differences using sport and games, (e) engaging caregivers during informal time (breaking bread). The results of this study will be used to develop a resource guide for working with Newcomer populations in this program.

### P-169

#### **PENNSYLVANIA PUBLIC SCHOOL SPORTS PARTICIPATION AND EXPENDITURES: A COMPARISON OF URBAN AND RURAL DISTRICTS**

*Brian Foster, Lock Haven University;*  
*James Mattern, Lock Haven University*

More than 265,000 boys and girls participated in Pennsylvania public school sports in the 2016-2017 academic year. There is significant evidence that youth sport participation leads to multiple benefits. Bailey et al. (2013) have posited that youth physical activity facilitates positive physical, emotional, intellectual, individual, and social growth. Unfortunately for youth living in rural locations, statistics indicate that rural school districts offer fewer sport programs and extracurricular activities than urban school districts throughout the United States. Furthermore, socioeconomic status is significantly positively correlated with youth sport participation (Eime et al. 2015; Johnston et al., 2007). This is a concern for rural areas, where the median household income is 4% lower than urban areas, and the poverty rate is nearly 3% higher (U.S. Census Bureau, 2011-2015). As a result, youth sport participation rates in rural America fall short of those in urban America (Hamilton, 2019). Using publicly available data, the current study compared urban and rural districts in Pennsylvania from 2014-2015 to 2016-2017 to achieve three objectives: 1) identify urban and rural school sport enrollment trends across 20 sports, 2) examine expenditure and funding discrepancies per student-athlete in urban and rural districts, and 3) identify correlations with sport participation and eight psychosocial and academic performance variables. Results indicated that school sport participation in rural districts in Pennsylvania is growing at a lesser rate than in urban districts. Rural districts are having to spend more on expenses while receiving less funding than urban districts per student-athlete. Finally, there are multiple psychosocial and academic benefits of school sport participation, notably behavioral benefits such as fewer school suspensions. Recommendations will be offered to help rural districts overcome inherent disadvantages in administering school sports in comparison to urban districts.

### P-170

#### **THE EFFECTS OF EXERCISE ON HIGH SCHOOL CROSS COUNTRY RUNNERS' LONG-TERM MEMORY**

*Elliot Adler, Appalachian State University;*  
*Kimberly Fasczewski, Appalachian State University;*  
*Wesley Smith, Appalachian State University;*  
*Jennifer Thornton-Brooks, Appalachian State University;*  
*Nolasco Stevens, Appalachian State University;*  
*M. Anthony Cangas, Appalachian State University;*  
*Abigail Bush, Appalachian State University;*  
*Paige Bramblett, Appalachian State University*

Research has explored the effects of aerobic exercise on cognitive abilities including working memory, immediate recall, and long-term memory in young and middle-aged adults, however, there is little research on the effects of aerobic exercise on long-term memory in adolescents. Endurance running is an increasingly popular aerobic-based sport, making it an ideal avenue for an examination of memory in adolescent runners. Consequently, this study investigated the effects of cross-country training on the long-term memory of high school runners. Researchers used the Rey-Auditory Verbal Learning Test (RAVLT) to assess the runners' long-term word-list recall,

and the Borg Scale Rating of Perceived Exertion (RPE), to confirm exercise intensity was consistent across trials. A total of 17 runners, (male,  $n = 6$ ; female,  $n = 11$ ) participated over the course of 3 visits. Participants were first given a familiarization trial, then randomly assigned to an exercise or rest condition on their second visit, with the alternate condition during their third visit. Due to COVID-19 data collection restrictions, all data collection was performed outdoors during the late fall and weather was extremely varied for the three collection days. Results indicated no differences in recall among participants in the familiarization, rest, and exercise conditions ( $F(2,32) = 1.303$ ,  $p = .286$ ), and no differences by sex in performance ( $F(2,30) = 1.227$ ,  $p = .632$ ). Results did indicate a difference in RPE based on the day the participants exercised ( $t(14) = -2.72$ ,  $p = .017$ ), possibly due to a  $\sim 30$ -degree (Fahrenheit) difference in outside air temperature. For this study, exercise was not a contributing factor in long-term memory recall, although this could be attributed to the varied weather and the resulting differences in RPE scores. Future research should consider the time of year, collection procedures, and weather conditions when attempting to obtain meaningful results.

### P-171

#### THE ROLES OF ATHLETE-PARENT AND ATHLETE-SIBLING DYADS IN HIGH SCHOOL ATHLETES' PERCEIVED PARENTING CLIMATES

*Brett Garst, University of Wisconsin-Green Bay;  
Tsz Lun (Alan) Chu, University of Wisconsin-Green Bay;  
Tao Zhang, University of North Texas*

Although research suggests that parents and older siblings play a role in youth athletes' sport participation (Osai & Whiteman, 2017), little research has examined athlete-parent and athlete-sibling dyads' motivational influences on athletes. This study examined the roles of same-sex (i.e., son-father, daughter-mother, brother-brother, sister-sister) and mixed-sex (i.e., son-mother, daughter-father, brother-sister) parents' and siblings' sport participation in perceived parenting climates.

Participants were 383 athletes (212 males, 171 females;  $Mage = 15.51$ ) recruited from four high schools in the southwestern and midwestern U.S. They completed validated survey measures of parenting climates (task-involving, ego-involving) and whether their parents and siblings participated in no sports, the same sport, or a different sport than the athlete did. Two  $3 \times 3$  MANOVAs were conducted to examine the effects of same-sex and mixed-sex dyads' sport participation on perceived parenting climates.

There were significant multivariate effects for mixed-sex athlete-parent dyads [Wilks'  $\lambda = .950$ ,  $F(4,692) = 4.54$ ,  $p = .001$ ,  $\eta^2 = .026$ ] and athlete-sibling dyads [Wilks'  $\lambda = .854$ ,  $F(4,310) = 6.35$ ,  $p < .001$ ,  $\eta^2 = .076$ ]. Follow-up univariate analyses and Bonferroni post-hoc tests revealed (a) greater ego-involving climates and lesser task-involving climates when the mixed-sex parent participated in no sports ( $M = 2.68$  and  $3.89$ , respectively) compared to playing a different sport than the athlete ( $M = 2.39$  and  $4.07$ , respectively); and (b) greater ego-involving climates when the mixed-sex siblings participated in no sports ( $M = 2.76$ ) or a different sport ( $M = 2.62$ ) compared to playing the same sport ( $M = 1.92$ ). No main effects for same-sex dyads or interaction effects were found.

Mixed-sex parents' and siblings' sport participation appears to be important for creating more task-involving parenting climates. Practitioners should consider these family factors when working with youth athletes on motivation.

### P-172

#### WHY ARE YOUTH LEAVING SPORT? AN EXAMINATION OF THE INFLUENCES AFFECTING YOUTH SPORT EXPERIENCES AND WITHDRAWAL PATTERNS

*Anthony Battaglia, University of Toronto;  
Gretchen Kerr, University of Toronto;  
Katherine Tamminen, University of Toronto*

This study sought to explore sport stakeholders' perspectives of the influences on youths' sport experiences and withdrawal patterns. To date, research on youth athletes' withdrawal experiences is limited by descriptive-quantitative methodological approaches (Crane & Temple, 2015) and withdrawal models that are not grounded in sport stakeholders' experiences (Gould, 1987; Lindner et al., 1991). Moreover, the inter-relationships between common reasons for athlete withdrawal, such as lack of competence, coach-conflicts, and all-year round training, have not been fully explored (Balish et al., 2015; Vella et al., 2014). This study used a constructivist grounded theory methodology to explore these gaps (Charmaz, 2014). Semi-structured interviews were conducted with 32 participants: 15 athletes (eight males and seven females, 11-19 years of age), 10 parents (five fathers and five mothers, 40-55 years of age), and 7 youth sport coaches (four males and three females, 28-58 years of age). Theoretical sampling, open and focused coding procedures, memo writing, and diagramming were used during the data analysis. A grounded theory informed by athletes, parents, and coaches about the influences on the nature and quality of youths' sport experiences and withdrawal patterns was developed. Participants' responses revealed that youth sport experiences and withdrawal patterns were informed by their subjective interpretations of personal (e.g., competence), social (e.g., coach-athlete relationships), and organizational (e.g., costs) influences; further, these influences overlap and are dynamic. Youth withdrawal patterns included within-sport transfer, sport-specific termination, and organized sport termination. Age and gender were also interpreted as having an impact on personal, social, and organizational influences and reported withdrawal patterns. This study advances current sport literature by offering a theory that highlights the inter-relationships between influences affecting youth athletes' sport experiences and withdrawal patterns grounded in stakeholders' perspectives. Recommendations for future research and practice are suggested.



### **SYMPOSIA**

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#### **SYM-01**

##### **ADAPTING AN EVIDENCE-SUPPORTED OPTIMIZATION PROGRAM FOR MENTAL HEALTH AND SPORT PERFORMANCE TO ADDRESS COVID-19, YOUTH DEVELOPMENT, AND DISPROPORTIONATE UNDERUTILIZATION OF HEALTHCARE BY ETHNIC/RACIAL MINORITY ATHLETES**

*Brad Donohue, University Nevada Las Vegas;  
Gavin Breslin, Ulster University;  
Dereck Phrathep, University of Nevada Las Vegas;  
Igor Kowal, University of Nevada, Las Vegas;  
Karolyne Stucki, University of Nevada, Las Vegas*

In this symposia, Stage Model evaluation methods supported by the National Institutes of Health will be reviewed to demonstrate empirical adaptation of an innovative sport-specific psychological intervention for mental health and sport performance optimization in collegiate athletes to manage COVID-19, youth development, and disproportionate underutilization of healthcare in ethnic/racial minority youth. The first presentation will review intervention protocol feedback provided by an international group of professionals familiar with sport performance and mental health intervention in the target population after their participation in a workshop. Feedback from a group of African American mental health service professionals who implemented the intervention protocol with African American youth will also be reviewed. Collectively, professionals found the intervention components were easy to administer and likely to be safe, enjoyable, engaging, efficacious for youth mental health and sport performance. The presenter will review how the protocols were revised based on feedback from the professionals. The 2nd presenter will review an initial case trial involving an Asian-American youth athlete who evidenced Separation Anxiety Disorder, the third presenter will review a case study involving a Latina youth athlete who was diagnosed with Major Depressive Disorder, and the 4th presenter will review a multiple baseline case study involving a White youth athlete who was diagnosed with ADHD and Oppositional Defiant Disorder. All participants no longer met diagnostic criteria after intervention and all participants significantly improved mental health symptom severity and sport-specific relationships, and participants significantly decreased factors interfering with their sport performance. All presenters will discuss systemic efforts to address youth development, culture, COVID-19 and diagnostic symptomology.

#### **SYM-01A**

##### **INITIAL NIH STAGE MODEL ADAPTATION OF THE COLLEGIATE ATHLETES' VERSION OF THE OPTIMUM PERFORMANCE PROGRAM IN SPORTS WITH COLLEGIATE ATHLETES TO ADDRESS COVID-19, YOUTH DEVELOPMENT, AND DISPROPORTIONATE UNDERUTILIZATION OF HEALTHCARE BY ETHNIC/RACIAL MINOR**

*Brad Donohue, University Nevada Las Vegas*

The need to empirically develop effective mental health interventions to address COVID-19, youth development, and underutilization of healthcare by youth athletes who are ethnic/

racial minority or experience economic hardships is reviewed. NIH Stage Model evaluation methods are reviewed within the context of an initial feasibility study to adapt an innovative sport-specific psychological intervention for use in youth from ethnic/racial minority and low-income neighborhoods. An international group of professionals familiar with sport performance and mental health intervention serving the target population experientially examined the adapted intervention protocols in workshops and provided feedback. Survey results indicated the professionals found the intervention components were easy to administer and likely to be safe, enjoyable, engaging, efficacious for youth mental health and sport performance. The protocols were revised based on feedback from these professionals, and African American mental health providers were subsequently trained to implement the intervention protocols with African American youth. Feedback from the mental health providers was obtained, and the protocols were again revised based on their recommendations. The presenter will review the intervention protocols, including the professionals' recommended cultural adaptations.

#### **SYM-01B**

##### **CASE EXAMINATION OF THE OPTIMUM PERFORMANCE PROGRAM FOR SPORTS IN AN ASIAN AMERICAN YOUTH ATHLETE DIAGNOSED WITH SOCIAL ANXIETY DISORDER**

*Karolyne Stucki, University Nevada Las Vegas*

The presenter will report the results of a case examination involving an Asian American female athlete who was diagnosed with Social Anxiety Disorder. At baseline the participant demonstrated elevations in psychiatric symptom severity, factors interfering with her sport performance in training and competition, and sport-specific relationship problems with coaches, teammates and family. She participated in 4 months of The Optimum Performance Program in Sports, and was re-assessed 4-months post-baseline and 1-month follow-up. Results indicated the provider was able to implement intervention protocol with integrity (all intervention components > .70 adherence), and all outcome measures were significantly improved up to 1-month follow-up.

#### **SYM-01C**

##### **A CONTROLLED CASE EVALUATION OF A FAMILY-BASED OPTIMIZATION INTERVENTION IMPLEMENTED THROUGH VIDEO-CONFERRING TO ADDRESS ADHD AND OPPOSITIONAL DEFIANT DISORDER IN AN ADOLESCENT ATHLETE**

*Igor Kowal, University Nevada Las Vegas*

Adolescent athletes with Attention Deficit Hyperactivity Disorder (ADHD) and Oppositional Defiant Disorder (ODD) experience unique challenges that impact their sport performance, such as making errors due to poor concentration and adverse relationships with referees due to poor anger management. Pharmacological treatments have shown to be successful in treating ADHD comorbid with ODD. However, there are negative consequences for pharmacological treatments for adolescent athletes (e.g., banned by sports organizations). Well-established behavioral interventions for ADHD and ODD in non-athlete populations have included family-based, cognitive-behavioral approaches. However, none of these interventions have been evaluated in competitive adolescent

athletes. The current case trial involved a controlled multiple baseline across behaviors (i.e., positive assertion, negative assertion) evaluation of The Optimum Performance Program in Sports (TOPPS) in an adolescent athlete diagnosed with ADHD and ODD. Intervention was provided using video-conferencing technology due to COVID-19. The trial included a battery of psychological measures administered at baseline, 4-months post-baseline and 5-months post-baseline. Results indicated that negative and positive assertion skills improved, but only when targeted, and severity of ADHD and ODD symptom severity, and general mental health symptoms decreased from pre- to post-treatment and that these improvements were maintained at 1-month follow-up. Similar improvements were occurred for factors interfering with sport performance, relationships with coaches, teammates and family. Treatment integrity and consumer satisfaction were high.

### **SYM-01D**

#### **A FAMILY-BASED OPTIMIZATION INTERVENTION IMPLEMENTED THROUGH VIDEO-CONFERENCING TO ADDRESS MAJOR DEPRESSIVE DISORDER IN A LATINA ADOLESCENT ATHLETE DURING COVID-19**

*Dereck Phrathep, University Nevada Las Vegas*

Major Depressive Disorder is a highly prevalent mental health concern impacting adolescent athletes in unique ways, yet sport-specific interventions for adolescent athletes with this disorder have yet to be formally developed. The Optimum Performance Program in Sports (TOPPS) is a sport-specific evidence-supported intervention that has successfully treated depression in collegiate athletes. However, evidence for this approach in youth athletes has yet to be established. Further, COVID-19 has shifted the delivery of traditional mental health services to video conferencing, yet very few clinical trials have examined evidence-based intervention implementation in this format. This poster reports the results of a case study involving an adolescent girl who was formally assessed with Major Depressive Disorder. Study results indicated significant improvements from baseline to post-treatment in severity of general mental health symptoms, depression, factors interfering with sport performance, and relationships with family, coaches and teammates. Treatment protocol adherence was excellent, and she was very satisfied with treatment implementation.

### **SYM-02**

#### **ANNA KARENINA AT THE OLYMPIC GAMES – A CROSS-CULTURAL AND INTERNATIONAL PERSPECTIVE ON PREPARING OLYMPIC TEAM SPORTS IN THE AGE OF COVID-19**

*Peter Haberl, USOC;  
Andrea Becker, California State University, Sacramento;  
Tom Oevreboe, Norwegian School of Sport Sciences/  
Norwegian Olympic Training Center;  
Jimena González Menendez, CONADE;  
Takuya Endo, Japan Sport Council*

In “Anna Karenina” Tolstoy states while all happy families are alike, each unhappy family is unhappy in its own way. Are all “happy” and successful Olympic Team Sports alike as well and all unhappy teams unhappy in their own way? Perhaps the Anna Karenina principle, which states that a deficiency in any one of a number of factors can doom an endeavor

to failure also applies to Olympic Team Sports. After all, performance can easily be derailed at the Olympic Games (Gould et al., 1999; Gould et al., 2002) and COVID-19 and the postponement of the 2020 Tokyo Olympic Games has presented an extra challenge in how team sports prepare for the big show. This symposium, sponsored by the International Olympic Providers SIG, focuses on the role sport psychology consultants from five different countries and with five different cultural backgrounds play in hedging against such deficiencies by contributing to effective team cultures at the Olympic Games while coping with the COVID-19 pandemic. Team culture has been described as an essential ingredient for team success (Coyle 2018), yet can also be a ‘lethal bacteria’ (Dethmer & Warner Klemp, 2014). In preparing athletes and teams for the pressure of the Olympic Games, Hodge & Hermansson (2009) consider team culture a counter measure and they emphasize the cultural awareness of the consultant in building an effective team culture. Consultants from Japan, Norway, Mexico, the United States and Austria will share their experiences in preparing teams for the Olympic journey with a particular lens on how their own cultural background and the cultural context of the team they worked with interacted with each other. The consultants and the cultural context they work in span the range from early and late in their career, male and female, and working with same sex and opposite sex sports.

### **SYM-02A**

#### **DEVELOPING AND MAINTAINING AN OLYMPIC TEAM CULTURE: THE ROLE OF THE HEAD COACH AND SPORT PSYCHOLOGY CONSULTANT**

*Andrea Becker, California State University, Sacramento*

A large majority of sport psychology research and applied work focuses on psychological skills training, performance enhancement strategies, and team cohesion (e.g., Fletcher & Wagstaff, 2009). A comparatively understudied concept that is vastly recognized to play a critical role in the development and maintenance of prolonged performance success is team culture (Cruickshank & Collins, 2012; Cruickshank, Collins, & Martin, 2013; Fletcher & Arnold, 2011; Schroeder, 2010). Due to its complexities, the definition of team culture is not well established; however, the most widely accepted definition within the sport psychology literature refers to culture as “a dynamic process characterized by shared values, beliefs, expectations and practices across the members and generations of a defined group” (Cruickshank & Collins, 2012, p. 340). While many agree that head coaches are largely responsible for creating and shaping a team’s culture, less is known about the role of the consultant (Lee, Shaw, & Chesterfield, 2009; McDougall, 2017; Schroeder 2010). In addition, team culture research primarily focuses on the various factors that contribute to culture change versus developing a deeper understanding of the culture itself (Cruickshank & Collins, 2012; Cruickshank & Collins, 2013; Cruickshank, Collins, & Martin, 2013, 2015; Schroeder, 2010). The purpose of this presentation is to provide a more detailed description of the USA Men’s Volleyball Team culture including the head coach’s perceptions of the culture itself, the processes that contributed to the development of this culture, and the consultant’s role in that process. The presentation will also include how the team’s culture was impacted by the postponement of the 2020 Olympic Games as well as how they pivoted their communication and planning for the 2021 Olympic Games while facing the ongoing uncertainties of the COVID-19 pandemic.

### **SYM-02B**

#### **DEVELOPING A HIGH PERFORMANCE CULTURE IN TEAM HANDBALL**

*Tom Oevreboe, Norwegian School of Sport Sciences/  
Norwegian Olympic Training Center*

Austrian born writer, business management guru and scholar, Peter Drucker (1909 - 2005), supposedly has stated that «culture eats strategy for breakfast.» Even though this quote focus on the importance of culture within a business context, maybe it can be valid in an elite sport setting as well? Fletcher and Arnold (2011) argue that sport psychologists could learn from other academic disciplines, i.e., occupational psychology and HR-management. By transferring knowledge from these areas to the elite sport context one could, according to Fletcher and Arnold (2011) «contribute to a more complete understanding of the psychosocial preparation of Olympic athletes», and they emphasize the importance of, i.e., developing a clear vision and creating a high-performance culture. Henriksen (2015) supports these ideas and argues that organizational culture is an emerging topic in sport psychology.

The purpose of this presentation is to review how the Norwegian female handball team, who won the gold medal in the Beijing and London Olympics, the bronze medal in Rio, and recently became the European Champions (Dec. 2020) has worked with developing a high-performance culture by focusing on values and committed actions within the theoretical framework of ACT (Bond, Hayes & Barnes-Holmes, 2006). Further, it will be explained how the team has tried to build psychological safety (Edmondson, 1999) in a highly competitive setting. In addition, the presentation will give some inputs on how the team worked with all the challenges related to COVID-19 before and during the European Championship in Denmark 2020 and how the focused on coping with COVID-19 in their preparation to the Olympics from a cultural perspective. The presenter, who himself has a background from clinical and organizational psychology, will also examine how knowledge from these domains transfer to a high-performance elite sport culture, and he will clarify some specific features of the Norwegian elite sport development program.

### **SYM-02C**

#### **“I DON’T CARE HOW YOU FEEL” – AND OTHER TALES OF CULTURAL (IN)COMPETENCE AT THE OLYMPIC GAMES IN THE AGE OF COVID-19 AND A PUSH FOR SOCIAL JUSTICE**

*Peter Haberl, USOPC*

In the Boys of Winter, Coffey (2005) quotes the Soviet Union’s Sergey Makarov on the culture and the cultural differences between 1980 US Men’s hockey team and the Soviet Union Red Army team: “Their eyes were burning. They were a team.” Culture matters when it comes to becoming a team at the Olympic Games (Hodge & Hermansson, 2009). Given that the medium is the message (Ravizza 1995), how can I, as a privileged white, middle-aged, late-stage-career consultant, contribute to a successful team sport culture? How do I manage myself as a foreign borne consultant (Poczwadowski et al. 1998) with a focus on mindfulness (Aoyagi & Poczwadowski, 2011) to effectively connect with a much younger, and increasingly more diverse Olympic athlete and coach population, particularly in the face of such challenges

as the COVID-19 pandemic that makes person-to-person and contact with teams very different, and during a national and international outcry for racial justice in a deeply divided USA? In the Olympic environment, a mindfulness-based approach may seem counterintuitive as every athlete and team wants to feel confident and cohesive going into the Games (e.g. Gould et al. 1999). How I deliver my message to teams and how I present myself is context driven. I will reflect on two very different performance scenarios: One, working with a not so racially diverse Olympic Team for over a decade going for its third consecutive gold medal, and two, working with a very racially diverse team and new coach going for a first ever medal in Tokyo all while navigating the restrictions posed on consulting during the pandemic and the fraught waters of becoming a cohesive team in politically divided country.

### **SYM-02D**

#### **ESTABLISHING TEAM CULTURE IN A MULTICULTURAL ENVIRONMENT**

*Takuya Endo, Japan Sport Council*

Today, it is more likely than ever for a sport psychology professional to work with a team consisting of members (coaches, team staff, and athletes) of different cultural backgrounds. On top of that, with each team member having their own value, enculturation, and acculturation level, sport psychology professionals need a deep and wide knowledge of culturally diverse groups. They need to seek education, consultation, and training to develop their competence in working with such groups (Corey, 2001) and to understand a multicultural world view and avoid stereotyping (Kontos & Breland-Noble, 2002). Although it is important to develop a culture of sustainable excellence (cf. Yukelson & Rose, 2014), meeting the needs of athletes of various racial or ethnic backgrounds is challenging (Martens et al., 2000). Although much research has been done, it is essential to further develop the insight of how to correspond to the multicultural environment as sport psychology professionals. The purpose of this presentation is to highlight ways to establish team culture in a multicultural environment. Specifically, the intention here is to focus on the consultant’s cultural background and the experience of working with an Olympic team with a head coach and assistant coach of different nationalities. The presentation will also discuss the preparations for the Olympic Games as the host country.

### **SYM-02E**

#### **IN A SCENARIO WHERE PERFORMANCE EXCELLENCE MATTERS THE MOST, THERE IS ALWAYS ROOM LEFT FOR VALUES**

*Jimena González Menendez, CONADE*

In a multicultural setting where each team member including the staff has a different background, the only commonality between all, is the culture of sport formed by values and a shared goal. Most research in Spanish specialized in team sports is based on psychometry and mental skills while the enforcement of values is hardly mentioned. Building a successful rapport and professional relationship includes becoming a culturally competent consultant. According to Sue & Sue (2012), as consultants we must aim to become aware of our own assumptions, values and biases, as well as taking the time to understand the worldview of our

culturally diverse clients. Once we create our interventions based on the previous characteristics, cultural competence can be attained. However, it is an active and ongoing process that will let us develop as professionals (Sue & Sue, 2012). On the same line, helping coaches in having a better understanding of the group's backgrounds and dynamics, allows them to develop skills and become more assertive while coaching. Group dynamics refers to the analysis of the ways in which group members interact, and the development of a variety of roles that occur within a group (Leith, 2003). As a woman in a country where machismo better known as men's sexual power over women (Paniagua, 2005), is socially inherited, a great advantage was taken by the stereotype that Psychology is mainly studied and practiced by women. For this type of population, but not limited to, a behavioral approach is preferred since it tends to be more directive, allowing the player to understand what the problem is and what he needs to do to solve it (Paniagua, 2005). This presentation provides a Mexican perspective on building an effective values-based team culture on the road to the 2021 Olympic Games.

### **SYM-03**

#### **EMOTIONAL RECOVERY OF ATHLETES FOLLOWING SEVERE SPORTS INJURY: THRESHOLDS, MINDSET AND IDENTITY**

*John Coumbe-Lilley, University of Illinois at Chicago;  
Kelsey Ruffing, Adler University;  
Amber Shipherd, Texas A&M University - Kingsville / Next  
Level Mind Consulting*

This engaging symposium aims to share original research based on complementary research methods to understand the consequences of sports injury on athletes' emotional recovery experience and variables that impact the injury experience. The first presenter will present a realistic oscillating model (Bisconti, 2004) crossing emotional thresholds from the onset of injury to a self-referenced emotional recovery endpoint. The presentation will challenge the idea that injured athletes' come back stronger, demonstrate perceived unreliability of sports medicine and coaching staff, show a range of mental health and illness responses, and provide solutions athletes perceived would have helped them recover faster emotionally. The second presenter will show findings from a qualitative research study that examined the consequences of identity breakdown from a severe sports injury on elite women athletes. Significant themes were loss of identity, athlete identity breakdown related to grief, and post-injury identity reform. The third presenter will show findings from two quantitative studies that examined the role of stress mindset in the previous injury and athletes' cognitive and emotional response following an injury. This second study explored the relationship between stress mindset and sport injury-related growth. The presenter will discuss how these results can be used by practitioners working with athletes following an injury. Findings from these studies suggested the need to 1) provide proper clinical sport psychology support, 2) develop education materials and delivery for athletes, sport medicine professionals, and coaches as a strategy to facilitate the deleterious emotional experiences recovering athletes have 3) conduct future research studies to show how to counsel recovering athletes, and 4) consider the implications for an athlete returning to sport following a loss of performance capability.

### **SYM-03A**

#### **EMOTIONAL THRESHOLDS, THEIR CONSEQUENCES AND IMPLICATIONS FOR PRACTICE**

*John Coumbe-Lilley, University of Illinois at Chicago;  
Brittany Benson, University of Illinois at Chicago*

This study explored athletes' emotional recovery experiences following a severe sports injury keeping them out of their sport for six months or longer. A realistic thematic analytical approach was used to interpret the findings of 23 semi-structured interviews of athletes who competed at high school, college, and professional levels of competition. Thematic analysis validated by a self-rating scale demonstrated athletes cross a series of emotional thresholds during their injury rehabilitation process. Results showed athletes crossed between two and six emotional thresholds before positive emotion was consistently experienced. Athletes reported being unequipped to cope with negative emotional intensity, the longevity of recovery, and enduring depression during long-term rehabilitation. Positive emotional recovery was found to be expected no sooner than nine months and up to 2.5 years following a sports injury. 21 out of 23 athletes described sport medicine providers, counselors, and sports coaches as unreliable and unable to provide support and interventions to increase coping, emotional stability, and hope for a return to play. Athletes recommended strategies and interventions they would have preferred had been provided to ease recovery. These findings show a realistic model for understanding severely injured athletes' emotional recovery and interventions to improve athletes' emotional well-being during long-term rehabilitation.

### **SYM-03B**

#### **CAREER ENDING INJURIES, EMOTIONAL RECOVERY AND IDENTITY: A QUALITATIVE FOCUS ON FEMALE ATHLETE ACL TEARS**

*Kelsey Ruffing, Adler University;  
John Coumbe-Lilley, University of Illinois at Chicago;  
Neil Bockian, Adler University*

There is a gap in the literature demonstrating how serious sports injury impacts the identity of serious female athletes who have transitioned out of their sport due to their serious sports injury. The purpose of this qualitative research study was to uncover any themes or factors that underlie the process of female athletes' identity loss/re-birth and emotional experiences after experiencing anterior cruciate ligament (ACL) injury. Archival data were used during this study to showcase female athletes who experienced ACL injury with a recovery time of at least six months. This qualitative narrative inquiry-based research study reported on the felt experience of female athletes in regard to ACL injury, identity, and emotional recovery. Data for this study (N=9) was drawn from a subset of data (N=23) collected by the first presenter examining the grief experiences following sports injury taking >6 months out of the sport. Data analysis was conducted using realistic thematic content analysis. The themes expressed by these 9 cases center around the loss of identity, the role of athlete identity in relation to grief, severe sports injury, and post-injury recovery. Findings suggest the need to 1) provide proper clinical sport psychology support, 2) develop education materials and delivery for athletes, sport medicine professionals, and coaches as a strategy to ameliorate the intensity of negative emotional experiences

athletes have, and 3) conduct future research studies are needed to show how to counsel recovering athletes.

### **SYM-03C**

#### **AN EXAMINATION OF STRESS MINDSET AND ATHLETIC INJURY IN COLLEGE STUDENT-ATHLETES**

*Amber Shipherd, Texas A&M University - Kingsville / Next Level Mind Consulting;*  
*Sarah Gomez, Texas A&M University - Kingsville;*  
*Creighton Avery, Texas A&M University - Kingsville*

One's beliefs about the nature of stress (e.g., stress mindset) play a large role in the extent to which one experiences the harmful or beneficial outcomes of stress (Crum et al., 2013). Stress and views on stress play a role in athletic injury risk as high amounts of stress in college student-athletes increases their risk of incurring an injury (Ivarsson et al., 2017). An athlete with particular risk factors, including a previous injury, is more likely to appraise a situation as stressful, resulting in physiological or attentional changes that increases their risk of injury (Andersen & Williams, 1988). Therefore, Study 1 examined the relationship between stress mindset and previous injury in college student-athletes. Eighty-seven participants completed demographic information, previous injury history, and the Stress Mindset Measure (SMM). No significant relationship was found between stress mindset and total number of sport injuries ( $r_s(84) = -.008, p = .939$ ), between stress mindset and injuries over the past year ( $r_s(82) = -.053, p = .632$ ), or for stress mindset and injury days missed ( $r_s(81) = .002, p = .983$ ). Although the relationship between stress mindset and previous injury was nonsignificant, previous research has found that not all athletes view their injury experience as negative, some athletes experience stress-related growth following an injury (Booth et al., 2018). Therefore, Study 2 explored the relationship between stress mindset and sport injury related growth, measured by the Stress-Related Growth Scale, in 106 college student-athletes who experienced an injury during the past year. Results of the Spearman rank-order correlation revealed a significant positive relationship between SMM and mature thinking ( $r_s(104) = .590, p < .001$ ), SMM and affective growth ( $r_s(104) = .577, p < .001$ ), and SMM and religious growth ( $r_s(104) = .331, p = .001$ ). Implications for practitioners will be discussed.

### **SYM-04**

#### **INTERNATIONAL PERSPECTIVES CALL FOR GREATER ATTENTION TO VIOLENCE INTERVENTIONS**

*Jimena González Menendez, CONADE;*  
*Mitch Abrams, Learned Excellence for Athletes*

Despite the fact that sport is portrayed as an ethical environment, the evidence from sporting events clearly shows that mere participation in sport does not generate morality and, in fact, can be a context for the opposite (Shogan, 2007).

As sport psychology professionals, becoming a bystander when it comes to consulting an athlete facing non-accidental violence should no longer be an option. Fisher & Anders (2020) suggest that sport psychology professionals must respond to the following questions:

(a) How do we practice aligning values and moral commitments across our professional lives?

(b) To what extent are we privileging athlete performance and performance enhancement ahead of athlete well-being?

(c) As practitioners, how might we disrupt methods, methodologies, and theories that reproduce patriarchal power and hierarchies in sport and align with our work with moral commitments?

Social historians indicate that the rate of violence in sport does not automatically decrease over time. Violence in sport is the consequence of relationships and abuses of power, which can occur at any age or level, however, the risk of experiencing psychological, physical, and sexual violence rises as the athlete progresses up the talent ladder and performance pathway (Mountjoy et al., 2016).

This presentation aims to provide perspectives from two sport psychology consultants. The first will offer an international perspective with observations about how violence is addressed in Mexico. The second will offer plans illustrating how to address sport violence on multiple levels. By raising awareness among professionals, we can prevent the normalization of violence in sport and ethical implications such as complicity. Though it has been found that if one person stands up, more are likely to do so; if no one helps, people are left wondering what to do (Fischer et al., 2011). This submission is sponsored by the Anger & Violence SIG.

### **SYM-04A**

#### **WHEN IT COMES TO OLYMPIC VICTORY, DO THE ENDS JUSTIFY THE MEANS?**

*Jimena González Menendez, CONADE*

There is no guarantee that people will become more ethical just by being involved in a sport environment (Shogan, 2007). As the Olympic cycle culminates in Tokio, Japan this summer, there is always room for self-reflection as sport psychology consultants when it comes to ethical implications regarding ends and means of the athletes' performance. As Fisher and Anders (2020) state, we must reflect on our own performance as consultants and see if we are privileging athletic performance and performance enhancement ahead of athletes' well-being.

Cox (2012) posits that the "win at all costs" attitude is inconsistent with the goals and aspirations of the ideal sports psychologist. As consultants we witness the athletes' vicissitudes along their athletic career, including non-accidental violence. In order to not find ourselves in a cul-de-sac regarding this matter, identification of risk factors and information about types and mechanisms of non-accidental violence are necessary.

Our role is not limited to performance enhancement. The true sport psychologist also sees sport as a means to human enrichment (Cox, 2012).

Coming from a country, Mexico, where violence in sport has not been documented, the consultant will share her experience with high performance athletes dealing with non-accidental violence during the Olympic cycle. Resources are available and the role of the sport psychology consultant is crucial in these cases. Olympic victory does not outshine an Olympic cycle where violence was committed.

### **SYM-04B**

#### **COMPREHENSIVE, CULTURALLY SENSITIVE APPROACHES MUST DRIVE SPORT PSYCHOLOGISTS IN REDUCING VIOLENCE**

*Mitch Abrams, Learned Excellence for Athletes*

Unfortunately, there is little evidence to offer confidence that issues of abuse and assault and sport are being adequately addressed, let alone ameliorated, from the athlete's experience. As seen in the experiences of the first presenter, violence in sport has no national boundaries and if we hope to maximize the benefits that can be offered in sporting ventures, we need to be deliberate in plans to prevent violence and incorporate approaches that can address the criminogenic factors present in perpetrators.

Despite studies that continue to tout bystander interventions as the staple of sexual violence prevention (Exner-Cortens & Cummins, 2021), a lack of appreciation for the barriers that exist for the bystander to intervene calls for more comprehensive approaches that minimize over-reliance on such methods. Therefore, the legalities of consent, substance & alcohol education and the impact of male athlete culture on potential offending behavior, must be given stronger consideration (Abrams & Bartlett, 2019). It is also worth mentioning the cultural issues that may contribute to objectification of women and how diversity issues need to be considered in the implementation of prevention programs.

Further, without adequate forensic assessment of athletes suspected of violent transgressions, treatment cannot be expected to target the factors that can reduce recidivism. Therefore, this presentation will culminate with a call to integrate sport and forensic psychology to explore the interface of the fields, and develop mechanisms to prevent further victims.

### **SYM-05**

#### **MEDIA CHALLENGES AND OPPORTUNITIES IN SPORTS DURING COVID-19 (MEDIA SIG SPONSORED)**

*Joan Steidinger, Dr. Joan Steidinger/ San Jose State University;*

*Eddie O'Connor, Dr. Eddie O'Connor, PLLC;*

*Michele Kerulis, Northwestern University;*

*Russ Flaten, University of Western States;*

*Harold Shinitzky, Private Practice*

The challenges posed by COVID-19 have given rise to innovation in media and sports. Once the serious effects of the pandemic became clear, people at all levels of sport were forced to adapt their methods of communication and participation particularly through social media. This has provided a venue for increased public relations for all levels of athletes (Stirling et al, 2020). This important topic will address current concerns in the diverse sporting community about keeping youth involved in sports to using technology to deal with sports cancellations.

During COVID-19, social media became key for sports discussions. Sportscasters were posed to provide ongoing connection for players with fans, television and social media. This became an essential tool for this connection to continue (Steele, 2020). This symposium will discuss the effects of

COVID-19 on sports media, especially regarding black, indigenous, people-of-color (BIPOC) and female athletes. Techniques such as speaking up to address a lack of equity and inclusion in the media will be discussed.

Each presentation will be conducted with an eye to diversity in the media. The first presenter will discuss the impact and most effective use of social media in the athletic community. The second presenter will look behind the curtain on identification and treatment of COVID-19 in NCAA student-athletes. Following that, an overview of the needs of student-athletes in terms of mental health will be covered. Finally, the symposium will review how a particular psyching team dealt the cancellation of a major race through social media. This symposium will include a discussant commenting on key areas in the media that are affected by COVID-19.

### **SYM-05A**

#### **USING SOCIAL MEDIA TO ENCOURAGE YOUR ATHLETIC COMMUNITY**

*Eddie O'Connor, Dr. Eddie O'Connor, PLLC*

Symptoms of anxiety and depressive disorders increased significantly with the onset of the pandemic (Czeisler, et al., 2020). Increased rates of social media use suggest it may be a coping mechanism to combat feelings of isolation related to long-term social distancing (Valdez, et al., 2020). However, as higher levels of social media use during the pandemic are also associated with worse mental health (Zhao & Zhou, 2020), social media may further exacerbate negative feelings in the long-term for many individuals, especially the BIPOC population. CMPCs have an opportunity to educate and encourage athletes in the same virtual space they are living in. This presentation will provide examples of YouTube content created to combat distress in the athletic community. Guidelines for appropriate and inappropriate or unethical content will be suggested, including: 1) focusing on what your followers are experiencing rather than what you want to tell them; 2) concentrating on the message impact, not the number of views; and 3) avoiding topics and issues outside our areas of competence that can lead to misinformation and increase distress.

### **SYM-05B**

#### **LEVERAGING TECHNOLOGY AS A PANDEMIC RESPONSE: PSYCHING RUNNERS UP FOR VIRTUAL EVENTS**

*Michele Kerulis, Northwestern University*

The running community has faced numerous challenges and has proven itself to be a strong, committed, and caring community. With the rolling announcements of race cancellations, runners and event coordinators experienced disappointment and plummeting motivation.

CMPCs are called upon to shine light in the darkness and share the power of applied sport psychology to help people navigate life's roadblocks, particularly in the BIPOC community. In 2020, the Chicago Psyching Team paired with the Bank of America Chicago Marathon Virtual Experience to help runners remain focused on their goals as they completed their virtual events. This moment in time gave a unique opportunity to modernize a public health movement that

originated in 1985 (Meijen et al., 2017), encourage people to exercise, and reignite their passion for health and wellness by sharing brief and effective interventions with a wide audience.

The Chicago's Psyching Team addressed the unique community needs of athletes when the endurance sport industry witnessed more than 4,200 event cancellations nationwide (Victory, 2020). The use of studio-recorded videos, a panel discussion, social media posts, and a free workbook culminated into a wealth of resources for worldwide runners. The Chicago Psyching Team will share ways you can ethically use media to interact with your community and build lasting community partnerships.

### **SYM-06**

#### **PROFESSIONALIZING MENTORSHIP: GATEKEEPING THE MENTOR**

*Teresa Fletcher, Adler University;*  
*Barbara Meyer, University of Wisconsin-Milwaukee;*  
*Terilyn Shigeno, Adler University;*  
*E. Earlynn Lauer, Western Illinois University;*  
*Danielle DeLisio, Infinity Mental Performance*

This symposium is sponsored by the Supervision Special Interest Group (SIG). Over the past five years, the Association for Applied Sport Psychology (AASP) has worked to further professionalize the practice of sport and performance psychology by recognizing, supporting, and promoting evidence-based practice. That said, a theoretical framework has not been consistently used to inform the practice of mentorship generally, nor the practice of mentorship during a single session, throughout multiple sessions, or as students become proficient and progress into practitioners. Although the counseling and psychology supervision literature is one source of evidence, a sport and performance psychology mentorship model is necessary to provide domain-specific mentorship.

This symposium addresses the need for an evidence-based approach to mentorship in sport and performance psychology. In the first section, we review the ethical and gatekeeping responsibilities associated with Certified Mental Performance Consultant mentorship. In the next section, we introduce the Fluid Mentorship Model (FMM; Fletcher & Shigeno, 2020) as an exemplar for mentoring in the field of sport and performance psychology. Finally, we demonstrate how the FMM can be used to mentor cohorts of graduate students and practitioners, respectively.

### **SYM-06A**

#### **FORMALIZING MENTORSHIP: FOUNDATIONAL UNDERPINNINGS**

*Barbara Meyer, University of Wisconsin-Milwaukee*

Over the past 5 years, the Association for Applied Sport Psychology (AASP) has worked to further professionalize the practice of sport and performance psychology. Through the creation of the Certified Mental Performance Consultant (CMPC) program (endorsed by the National Commission for Certifying Agencies) as well as the CMPC Mentor Guidelines and Best Practice Recommendations (Leysyk et al., 2020), AASP has advanced their mission by revising and upholding

professional standards for the competent and ethical practice of sport and performance psychology. While minimum requirements have been established for didactic coursework, mentored experiences, and the qualifications for who can serve as an approved mentor, gaps exist in the foundational grounding of how professionals are trained in the practice and provision of mentorship.

Informed by evidence-based practice models (Strauss et al., 2019) and consistent with allied professions such as counseling and psychology, the purpose of the current presentation is to highlight the ethical and gatekeeping responsibilities associated with CMPC mentorship. This purpose will be achieved by: (a) distinguishing between mentorship and supervision; (b) identifying and describing models of mentorship; (c) discussing developmental considerations in mentorship relative to both the mentee and the mentor; and (d) supporting ongoing evidence-based training and development for mentors.

### **SYM-06B**

#### **STRUCTURING MENTORSHIP: THE FLUID MENTORSHIP MODEL**

*Teresa Fletcher, Adler University*

The need for evidence-based practice is recognized and supported within the field of sport and performance psychology. However, there is not an established theoretical framework that informs mentorship practice within a single session, throughout multiple sessions, or as students become proficient and progress into practitioners. Although the counseling and supervision literature can serve as one source to inform mentorship, a sport and performance psychology mentorship model would be useful for practice and research. A substantive review of the counseling supervision literature was used to identify overlapping concepts between supervision and mentorship, such as mentee/supervisee development and mentorship/supervision as processes. These shared concepts provided a starting point for the Fluid Mentorship Model (FMM; Fletcher & Shigeno, 2020).

We can assume that mentees will have different mentorship needs as they progress through training and gain experience (Bernard & Goodyear, 2019). As a result, mentorship aligns with the developmental mentorship models found within the counseling supervision literature. These models were designed to meet the needs of the mentee, relative to where they are with regard to their professional development, based on some agreed upon standard of performance (Bernard & Goodyear, 2019). While the developmental mentorship models help situate the mentee relative to their development, process models were created to help guide the mentorship process itself (Stoltenberg & McNeil, 2010). Both of these models tend to be situation specific, meaning that the mentor's roles and the foci of the session(s) and feedback provided to the mentee, can and should change. The FMM was adapted from both the Discrimination Model (Bernard, 1997) as well as the Integrated Developmental Model (Stoltenberg & McNeil, 2010) to provide a more comprehensive, paradigmatic model specific to Certified Mental Performance Consultant mentorship. This presentation will define the roles, responsibilities, and foci within mentorship sessions as a framework for session planning.

### **SYM-06C**

#### **IMPLEMENTING MENTORSHIP: GRADUATE STUDENT DEVELOPMENT**

*Terilyn Shigeno, Adler University;  
E. Earlynn Lauer, Western Illinois University;  
Danielle DeLisio, Infinity Mental Performance*

As graduate students in sport psychology matriculate through their programs, there are often opportunities for them to gain mentored consulting experience. For some graduate students, this mentored experience is structured to follow a developmental process in which students move from novice to advanced practitioners. Recently, Fletcher and Shigeno (2020) created the Fluid Mentorship Model (FMM) to provide CMPCs an evidence-based model to use with individuals with whom they mentor. Drawing from mentorship approaches within counselor education (Bernard, 1997), mentors who use this model adopt three distinct roles (i.e., teacher, counselor, consultant) with mentees. The fluidity of the FMM allows mentors to address a variety of mentee needs that fall within the three mentorship roles (e.g., teaching mentees how to start a consulting relationship with individuals/teams, monitoring students' interpersonal skills to ensure they are demonstrating cultural humility and ethical behavior, providing feedback on session planning and design).

In this presentation, three CMPCs who mentor sport psychology graduate students will discuss their experiences using the FMM and provide practical applications for how other mentors might utilize this model with mentees. Specifically, the presenters will provide an overview of how they structure the mentorship process—including holding structured mentorship meetings over the course of a calendar year—and address the differing needs of novice, intermediate, and advanced level students. The presenters will also share how they have utilized the FMM in both individual and small group settings. Finally, presenters will address how they have implemented feedback from students' applied experiences into the mentorship process as well as the graduate program curriculum as a whole.

### **SYM-06D**

#### **IMPLEMENTING MENTORSHIP: PROFESSIONAL DEVELOPMENT**

*Teresa Fletcher, Adler University;  
Barbara Meyer, University of Wisconsin-Milwaukee*

Mental performance consultants can benefit from mentorship long after the requirements for certification have been met. Further, as Certified Mental Performance Consultants (CMPCs) gain experience, the mentor-mentee relationship can evolve and change over time. Practitioners may consult with colleagues or peers individually, or in groups, for specific purposes or situations (e.g., to share ideas for strategic interventions and activities, to consult with mental health concerns and possible referrals, to gain insight from professionals with sport-specific expertise) and work toward building a network for mentors as a resource for diverse knowledge, expertise, and perspectives.

Mentees can choose mentors for a specific purpose or to fulfill a certain deficit or need. In this presentation, we will address the differing needs of practitioners (post-graduate school) by

acknowledging the various ways in which practitioners can engage in mentorship even after it is no longer a requirement. Because of this later stage of development, mentorship can be more of a collaborative effort where the role of the mentor or foci can be requested or agreed upon prior to or during the mentorship process (i.e., the Fluid Mentorship Model may become even more adaptable). When CMPCs have identified their particular need, they are able to capitalize on the diverse experiences and trainings of their mentor(s). CMPCs may look both within or outside of the field (e.g., athletic training, mental health) for peer mentorship to learn, gain insight, or obtain outside perspectives. Presentation attendees will learn how to apply the FMM to experienced practitioners.

### **SYM-07**

#### **SESSION WITHDRAWN**

### **SYM-08**

#### **THE COVID-19 PANDEMIC AND EXERCISE: BENEFITS, BARRIERS, AND EXERCISE ADHERENCE STRATEGIES AND RECOMMENDATIONS FOR HEALTH, MOTIVATION, AND PERFORMANCE**

*Sheila Alicea, St. Edward's University;  
Amanda Perkins-Ball, Rice University;  
Jean-Charles Lebeau, Ball State University*

The COVID-19 pandemic has led to many changes and created additional barriers to exercise. Universal public health guidelines recommend individuals maintain physical distance and limit close contact with people living outside of their households (CDC, 2021). Further, state and local governments have limited the size of indoor and outdoor gatherings, including operating capacities of businesses, such as gyms/fitness centers (CDC, 2021). Children and adults engage in less physical activity time and more sleep and sedentary time than before the pandemic (Moore et al., 2020; Zheng et al., 2020). However, starting/maintaining an exercise program is one way physical and mental health can be improved or maintained during these challenging times. The pandemic has resulted in several emerging exercise trends, including the increased popularity of smart home gyms, virtual fitness classes, wearable devices, and outdoor fitness (ACSM, 2021).

The purpose of this Exercise Psychology and Wellness SIG-sponsored symposium is to discuss exercise adherence strategies during the COVID-19 pandemic. The first presentation will provide an overview of exercise benefits and barriers to starting/maintaining an exercise program specifically related to the pandemic, and introduce emerging trends related to the changes in the way we exercise. The second presentation will discuss exercise adherence barriers and pandemic-specific obstacles that may negatively impact exercise behavior more in-depth (including the impact on communities of color), and explore creative strategies for maintaining/improving exercise adherence during the pandemic. The third presentation will describe a research study that included one specific type of virtual group exercise sessions and explored the influence of visual display of exercise data, social comparison, and goal orientation on exercise performance. The symposium will also include specific recommendations attendees can implement in their professional roles (e.g., consultants helping exercisers/



athletes with exercise adherence, faculty teaching exercise adherence) and attendees will be invited to participate in the discussion.

### **SYM-08A**

#### **AN INTRODUCTION TO THE COVID-19 PANDEMIC AND EXERCISE: BENEFITS, BARRIERS, AND EMERGING TRENDS**

*Sheila Alicea, St. Edward's University*

The purpose of this presentation is to discuss the benefits of exercise specifically as it relates to symptoms of COVID-19 and the effects of quarantine, introduce barriers to starting or maintaining an exercise program during the COVID-19 pandemic, and discuss how the pandemic has led to changes in the way we exercise due to specific barriers and restrictions. Extended home stays can disrupt routines and increase sedentary behaviors, and quarantine is often associated with mental health issues such as anxiety, depression, and stress (Brooks et al., 2020; Chen et al., 2020). However, exercise provides a plethora of positive physiological and psychological benefit, and maintaining recommended exercise levels during the pandemic may help boost immunity (and specifically immune system responses against viral respiratory infections), lessen the adverse effects of inactivity and social isolation on the immune system, and improve mental health and psychological well-being (Martin et al., 2009; Matias, Dominski, & Marks, 2020; Simpson & Katsanis, 2020). In response to COVID-19, many gyms and fitness centers in the United States have closed temporarily or have limited access due to restrictions and precautions in place (e.g., social distancing, face coverings). Therefore, many exercisers have turned to alternative means to exercise for reasons such as convenience and safety, including the use of home fitness products, virtual workouts/fitness classes, fitness apps, wearable devices, and outdoor fitness. Specific examples of alternative forms of exercise will be discussed, along with recommendations for how to make informed decisions on choosing effective products and workouts.

### **SYM-08B**

#### **WE CAN GO THE DISTANCE TOGETHER: EXERCISE ADHERENCE STRATEGIES DURING THE COVID-19 PANDEMIC**

*Amanda Perkins-Ball, Rice University*

The purpose of this presentation is to explore how traversing the COVID-19 pandemic may exacerbate common barriers to regular exercise (e.g., lack of motivation, lack of energy) and will include a discussion of pandemic-specific obstacles that may negatively impact exercise behavior (e.g., social isolation, pandemic fatigue, insomnia) (Ammar et al., 2020; Di Corrado et al., 2020; Kaur et al., 2020). Creative strategies for maintaining/improving exercise adherence during the COVID-19 pandemic will be explored, highlighting social support, green exercise, and intrinsic approaches. Finally, the disproportionate impact of the COVID-19 pandemic on communities of color, specific challenges they may face due to the pandemic (e.g., income insecurity, discrimination, lack of access; CDC, 2021), and strategies practitioners can use to support and advocate for these individuals will be discussed.

### **SYM-08C**

#### **KEEPING THE INTENSITY UP WHILE EXERCISING VIRTUALLY: EXPLORING THE INFLUENCE OF VISUAL DISPLAY OF EXERCISE DATA, SOCIAL COMPARISON, AND GOAL ORIENTATION**

*Jean-Charles Lebeau, Ball State University;  
Allison Blake, Ball State University;  
Lindsey Blom, Ball State University;  
Lina Burkhart, Ball State University*

The purpose of this presentation is to describe a research study that included one emergent trend and explored the influence of visual display of exercise data, social comparison, and goal orientation on exercise performance. Theoretical frameworks including Social Comparison Theory (Gerber, 2018) and Achievement Goal Theory (Senko et al., 2011) have been instrumental in understanding exercise motivation, but it is unclear how visual exercise data influences performance in a virtual exercise setting. The goal of this study was to examine the effect of displayed exercise data on Peloton bike users' performance during virtual group exercise sessions. Peloton bikers ( $n = 26$ ) completed three 30-minute group cycling sessions in a counterbalanced order: (1) own and co-exercisers' performance data displayed on screen (i.e., heart rate [HR], calories burned, and distance cycled), (2) own performance data only, and (3) no data display. Participants' exercise performance (i.e., HR, calories burned, and distanced cycled) was recorded for each condition, and the relationships among exercise performance, social comparison (SC), and ego goal orientation (EO) were investigated. Analyses revealed that the visual display of data during exercise led to an increase in mean HR, calories burned, and distance cycled. Compared to other groups, the group data condition produced the highest exercise performance ( $ps < .04$ ). Significant positive correlations emerged between SC and calories burned ( $r = .52$ ), calories burned and distance ( $r = .75$ ), and SC and distance ( $r = .45$ ). Significant negative correlations emerged between EO and HR ( $r = -.45$ ), and between task and ego orientations ( $r = -.47$ ). EO accounted for 19% of the variance in HR, while SC orientation explained 20% of the variance in distance and 27% of calories burned. Implications regarding exercise motivation and adherence in virtual exercise settings will be presented to the audience.

### **SYM-09**

#### **THE TECH-SAVVY CONSULTANT: LEVERAGING TECHNOLOGY FOR SUCCESSFUL SPORT PSYCHOLOGY CONSULTING**

*Tim Herzog, Reaching Ahead Counseling and Mental Performance;  
Kristi Pikiewicz, Mackintosh Academy;  
Jim Taylor, Dr. Jim Taylor;  
Derrek Falor, Thrive: Excellence in Sport Performance*

Since the advent of the internet more than two decades ago, technology has steadily changed the ways professionals in our field can develop a successful consulting practice. Because the use of technology isn't fully explored in graduate programs, it is left to consultants themselves to learn about and master the many technology tools that are now an essential part of running a consulting business. Drawing on the presenters' own extensive use of technology in their consulting practices, this symposium will examine the

following aspects of how consultants can maximally leverage technology: website design, construction, and management, customer relations management software, e-newsletters, blogging, video conferencing, webinars, athlete/coach/team management, scheduling, and financial management tools. The symposium will provide answers to the following questions: 1) Why the use of technology is essential for a successful consulting practice; 2) What different needs of a consulting practice can be satisfied with the appropriate technology; 3) What technology options are available to meet those needs; 4) The costs involved in procuring and using the technology; 5) A menu of different options for choosing a specific brand of the technology; 6) How to decide which option is best for consultants' specific needs and goals; and 7) How consultants can put the technology use, whether by hiring an IT expert or gaining the knowledge and skills to use the technology themselves. Attendees will leave the symposium with a new understanding of the importance of technology in a consulting practice and what is involved in leveraging it for its fullest benefit. At the end of the symposium, attendees will receive detailed summary notes of the central topics that were discussed.

### **SYM-09A**

#### **WEB PRESENCE**

*Kristi Piekiewicz, Mackintosh Academy*

A competent and compelling web presence is a necessity for a consulting practice in applied sport psychology and mental training, allowing clients to discover, evaluate, and engage consultants' services. This presentation focuses on practical information and tools that consultants can use to implement effective public-facing online media including the following: 1) Best practices and specific recommendations for website design and management; 2) Purposes and best uses of social media for outreach, networking, and communication; 3) On- and off-site blogging opportunities to demonstrate expertise and build name recognition; and 4) Newsletters and the management of contact databases for periodic outreach. Attendees will learn about the design and implementation of features of a full-featured web presence as well as preview specific web-presence platforms.

### **SYM-09B**

#### **BUSINESS PRACTICES**

*Jim Taylor, Dr. Jim Taylor*

A consulting practice in sport psychology or mental training is first and foremost a business. As such, it must be treated, in many ways, like any small business. This presenter will focus on fundamental technology necessary to build and maintain a consulting practice. Key aspects of this process include: 1) financial management tools to input and track revenue and expenses; 2) an invoicing and payment platform that allows clients to pay for services; 3) customer relations management software that tracks prospective, current, and past clients; and 4) an online scheduling platform that efficiently manages consultants' calendar. Other technologies that allow consultants to expand their products and services beyond direct client contact will also be discussed. These platforms include video conferencing, webinars, and online courses.

### **SYM-09C**

#### **COMMUNICATIONS**

*Derrek Falor, Thrive: Excellence in Sport Performance*

Creating and maintaining a consulting practice is best accomplished with frequent and effective communication between consultants, athletes, coaches, and teams. Unless consultants are employed directly and can be physically present on a regular basis, it is vital to implement functional and applied mental training connection points, via technology, with athletes over the course of each week. Effective methods for implementing technology in a consulting practice include: 1) Post-practice debriefs to evaluate daily output and progress; 2) Post-competition debriefs to evaluate/assess competition strategy, and readiness ; 3) Daily assessment to mental preparation, quality of training, and general health parameters; 4) Weekly goal-setting to establish athlete accountability; 5) Weekly athlete practice and competition summaries to lock in effective athlete behaviors; and 6) Virtual check-ins with coaching staffs to encourage all team members to be operating with agreed upon techniques/strategies. These technology applications will allow consultants to expand their reach and effectiveness with athletes over the course of their work together.

### **SYM-10**

#### **UH OH! THE CHECK ENGINE LIGHT IS ON: A MULTIDISCIPLINARY APPROACH TO MAINTAINING THE TACTICAL ATHLETE ENGINE**

*Maryrose Blank; Laurel McKenzie, EXOS;  
Lauren Thomas, KBR; John Sim, KBR*

As the field of performance psychology continues to expand across unique populations, the military and tactical communities routinely invests in hiring sport and performance psychology professionals. Organizations have created Human Performance Programs that house a multidisciplinary team of subject matter experts ranging from physical therapists to strength and conditioning coaches and sports dietitians ("About POTT," 2019). Millions of dollars are spent every year to fund these programs, with the expectation that there is a quantifiable return on investment (ROI).

The purpose of the symposia is to review an integrated training program designed to increase health, sustainability, and performance. Leveraging a multi-disciplinary approach, a team of cognitive performance coaches, performance dietitians, physical therapists, and strength and conditioning professionals provided a periodized approach to training holistic fitness within a tactical training environment (Balague, 2000; Blank, et al., 2014; Judge, et al., 2010). Each mesocycle revealed promising trends, correlations, and ROI outcomes that were briefed to leaders using data analytics to generate a dashboard of readiness information.

Preliminary results suggested correlations between performance pillars that are previously replicated in other studies (Tiesala, 2014; Young & Benton, 2018; & Doherty et al., 2019). A minimal effective dose for some training areas was found based on analytics that showed enhancement in those areas within a certain training frequency.

The coach's panel will discuss two key areas of the pilot program:

1. Framework and implementation: An overview is provided of the remote training program with descriptions on cognitive skills training, wearable technology, and adapting the program around operational obstacles.
2. Preliminary findings and lessons learned: Using a readiness dashboard of cognitive and physiological data, leadership and operators were provided systematic updates on their holistic fitness and sustainability. This performance data provided leaders with mission critical information about their formation. A recommended way forward is to understand the transfer of cognitive skill development to operator battlefield performance (Harris et al., 2020; Renshaw et al., 2019).

### **SYM-10A**

#### **FRAMEWORK AND IMPLEMENTATION**

*Maryrose Blank, Laurel McKenzie, EXOS*

The program was born from a notable gap in structured cognitive training that produced quantitative results. Oftentimes, effectiveness is measured by program utilization; with the theory that high utilization will yield positive performance changes. This program was intended to provide leadership with objective data on the health and performance of their operators through structured training. Components included cognitive skills training, heart rate variability (HRV), sleep, physical readiness, and nutrition.

Following subjective and objective assessments, each participant met with the multidisciplinary team and received individualized programming based on their areas of improvement. Upon completion of the cycle, participants were re-tested to track changes.

Cognitive coaches provided a 9 week program targeting skills ranging from visual processing speed to various elements of memory and attention. Wearable technology for daily HRV tracking and sleep monitoring were also implemented. Additionally, training on Neurotracker was provided for those not traveling during the cycle (Harris et al., 2020).

Nutrition consultants provided individualized dietary plans via Notemeal, a performance nutrition platform. Meal plans were tailored based on body composition (taken with Inbody 770) and a performance nutrition blood work panel to correct for micronutrient deficiencies that may affect physical or cognitive performance.

Physical fitness objectives were addressed through consultations with a strength and conditioning specialist, to determine personal goals, projected training schedules, and access to resources during the program. Customized programs were designed via BridgeAthletic, a smartphone-compatible training app.

The program was designed to be user friendly with travel and autonomy as critical components. With 95% of the program remote, participants had the opportunity to train around their schedules with immediate access through their mobile

device. This was imperative with many participants deployed, or unavailable for traditional in-person training. This strategy, with remote check-ins, gave participants the benefit of Performance Consultants "in their pockets" which greatly improved adherence and program completion.

### **SYM-10B**

#### **PRELIMINARY FINDINGS AND LESSONS LEARNED**

*Maryrose Blank, Laurel McKenzie, EXOS*

In the form of a readiness dashboard, information was provided to leadership within the organization on the health and fitness of their unit members. Leaders and participants were able to see where improvements were made across the training cycle, and where service members may require additional programming. Preliminary findings indicated that the program helped participants improve on several measures with statistically significant positive changes in HRV, image recognition, and Neurotracker scores. The data also suggested that there was a correlation between time spent with a cognitive performance coach and improvement on HRV. Results showed an upward trend in HRV when a participant spent between 100 and 300 minutes with a cognitive coach during the training cycle.

Lessons learned were largely centered around limitations in data collection and analysis, creating safe aggregation of biometrics, and managing realistic expectations about how an integrated, multi-disciplinary approach could be value-added to an operational military unit. Further, being an adaptable resource to a client base that operates in an unpredictable environment impacted the quality of pre/post data analysis. Understanding these limitations, provided coaches realistic expectations of what would be attainable during each training cycle.

As the human performance team continues to improve the program, a future objective is to operationalize the skill sets that are trained within the cycle. The intent is to take training beyond the classroom, office, and gym settings, and into the operational environment. While near transfer effect is being observed by improved performance on assessments of cognitive skill development, nutritional, and physical improvement, it remains unclear if far transfer effects are taking place within the training and deployment environments (Harris et al., 2020; Renshaw et al., 2019).

### WORKSHOPS

#### WKSP-01

##### **ACROSS THE BLUE LINE: UNDERSTANDING THE PERFORMANCE MIND-SET OF THE LAW ENFORCEMENT OFFICER (LEO) THROUGH THE LENS OF SPORT PSYCHOLOGY**

*John Heil, Psychological Health Roanoke;  
Robert Owens, University of Western States*

**Learning Objectives:** (1) Gain insight into the decision making and action taking challenges faced by the LEO, (2) Understand a general framework for applying sport psychology in consulting with LEOs, and (3) Learn specifically how to integrate sport psychology into work with LEOs following critical incidents.

**Teaching methods:** Didactics, group discussion of LEO scenarios, with reactor review relative to current perceptions of stress and bias in policing (Hoffman, Essien, & Norton, 2020).

The mission of the Association for Applied Sport Psychology is to enhance performance with a wide range of professionals including tactical occupations such as firefighters and LEOs. Relative to traditional athletic populations, LEOs face unique challenges, including decisions regarding deadly force. The purpose of this workshop is to consider the performance environments and culture that shapes the mindset and the skill set of the modern LEO (Rahr & Rice, 2015; Miller, 2020). In this workshop, applied sport psychology practitioners will gain insight into the contrasting two-dimensional role of LEO as “Guardian,” with related cognitive schema and action skill sets. Notably, this skill set includes the use of rapport, the use of force – and the ability to transition effectively from one skill to the other. Participants will learn the underlying principles surrounding Critical Incident Stress Management (McNally & Solomon, 1999), and Critical Incident Stress Debriefing (CISD) (Mitchell & Everly, 1996), and the application of sport psychology principles to critical incident consulting (Heil, 1998; Heil, 2019). This includes integrating sport performance concepts into debriefing to optimize incident-based learning, in parallel with and as a complement to the established CISD approach, which focuses on mitigating the effects of traumatic stress.

Sponsored by the Military SIG.

Participants will be provided with sport psychology-based print and video resources regarding the psychology of policing, critical incidents, and performance psychology-based approaches to training and intervention.

#### WKSP-02

##### **APPLYING ATHLETIC VALUES AND EXECUTIVE COACHING TO TEAM AND CULTURE ALIGNMENT WITH NCAA ATHLETICS**

*Jordan Collins, Saint Louis University;  
Isabella Fiorenzo, Saint Louis University;  
Michael Ross, Saint Louis University*

Athletes and sports teams perform best when led effectively, have established value-based goals and share common attributes with teammates. While performance is undoubtedly

a multifaceted phenomenon, the organizational culture appears to have a significant impact on competition outcomes (Gould et al., 1999). Additionally, for athletes to achieve peak performance, they must demonstrate value-driven behavior, shaped by their personal athletic values and experiences through sport participation (Gardner & Moore, 2007). The executive coaching model (Feldman & Lankau, 2009) includes the phases of data gathering, feedback, coaching sessions, and evaluation. The current workshop is the third installment of the series of past AASP workshops focused on tailoring the executive coaching model developed by Fletcher and Wagstaff (2009) and the integration of evidence-based sport assessment measures. This workshop will present how these strategies can be applied in athletic settings for sport enhancement. The aim of this workshop is to highlight that all members of the sport organization have an impact on its functioning and effectiveness through the integration of values in creating an effective sport organization. This workshop provides ways in which sport consultants can assess leadership within sport organizations and tailor a value-based consulting approach for team and culture alignment. Learning objectives and workshop content includes (1) provide education on the process of an integrated sport assessment and executive coaching, (2) introduce the structure and content of a tailored, 360° assessment-based, executive coaching model as a means for delivery of sport psychology services, (3) demonstrate the utility of a hierarchical list of 30 intrinsic and extrinsic athletic values for organizational and individual assessment, and 4) provide examples of workshops to align sport organizational culture. Presenters will also discuss implementation to various teams and individual sports.

#### WKSP-03

##### **BECOMING A STUDENT OF YOUR ATHLETES: HOW CONSULTANTS CAN HELP COACHES CREATE A STRONG SENSE OF BELONGING WITHIN THEIR TEAMS**

*Val Altieri, Jr., Boston University;  
John McCarthy, Boston University;  
Frances Cardenas, Philadelphia Phillies;  
Cristian Guzman, New York Mets;  
Olivia Wyatt, Boston University;  
Samantha Gilmore, New York Mets*

Coaches are tasked with creating team environments that promote both striving for excellence and fostering a strong sense of belonging in its members (Fisher et al., 2019; SHAPE America, 2019). It is expected that coaches should be experts in the technical and tactical aspects of their sport. However, in our increasingly diverse and polarized political world, coaches also need to be adept at understanding each member of their teams. It requires ongoing work for coaches to actively develop such broad understandings of how to work skillfully across culture, language, socio-economic status, identity and other areas that can divide us (Hacker & Mann, 2017; Schinke & McGannon, 2014). But how do coaches create environments to ensure the dignity of each person when teams are nested within a society that is troubled by issues of inequity, injustice, and dehumanization (Culp, 2021)? Coaches are increasingly recognizing that they need assistance to meet these challenges.

Fortunately, the skills of the Mental Performance Coach (MPC) can help coaches learn to build stronger relationships with their players with an approach drawn from the medical field where “the physician relinquishes the role of expert to the patient, becoming the student of the patient (Tervalon & Murray-

García, 1998, p.121).” In the same way the sport coach can relinquish the role of expert to the athlete, becoming a student of the athlete.

The workshop will guide MPCs through activities that can help coaches become a student of their athletes. The learning objectives are as follows. First, participants will be able to identify the potential benefits and barriers of a relationship-oriented approach in their context. Second, participants will explore a cyclical reflective process toward relationship building to share with coaches. Third, participants will reflect on relationship building activities for coaches. Fourth, participants will create a plan for working in their specific performance context.

### **WKSP-04**

#### **BREAKING THROUGH LIMITING BELIEFS WITH ATHLETES**

*Duncan Simpson, IMG Academy;*  
*Ashwin Patel, Humber College;*  
*Greg Young, IMG Academy*

The purpose of Rational-Emotive Behavior Therapy (REBT; Ellis, 1957) is to promote rational and logical responses to life events (Turner, 2016). REBT is a predominant technique associated with Cognitive Behavior Therapy (CBT) yet, the use of REBT is rarely documented in sport psychology literature (Turner & Barker, 2013; Turner 2016), despite the important influence athletes' beliefs may have on performance (e.g., Burton & Raedeke, 2008; Cockerill, 2002; Turner, 2016; Turner & Barker, 2012). REBT proposes that irrational beliefs are rigid, while extreme beliefs related to adversity can lead to dysfunctional (unhealthy) emotions (e.g., anxiety, unhealthy anger, depression, Turner & Barker, 2012). In contrast, flexible and non-extreme beliefs are considered rational, leading to functional (healthy) emotions (e.g., concern, healthy anger, sadness; Dryden, 2009). Therefore, it is important for mental performance coaches (MPC's) to help athletes replace irrational beliefs with rational ones to promote functional emotions. This, in turn, can positively impact athlete wellbeing and performance. This workshop will provide guidance and use experiential activities to demonstrate how MPC's can empower their athletes to favor rational beliefs while reducing the frequency and impact of irrational beliefs. Specific learning objectives include (1) understanding REBT as an approach to mental performance consulting, (2) sharing examples of irrational beliefs, and (3) exploring the A (adversity – event), B (irrational beliefs), C (emotional & behavioral consequences), D (Disputation), and E (effective rationale belief) framework (Turner & Barker, 2012) to replace irrational beliefs. The workshop will include examples of case studies from the MPC's experience, as well as allow attendees to learn and practice the ABCDE therapeutic process. Attendees will also leave with handouts summarizing the core content and keys to implementing REBT into their practices with athletes.

### **WKSP-05**

#### **CHALLENGING ETHICS TOPICS FOR CONSULTANTS IN TRAINING AND CMPC SUPERVISORS: A COLLABORATIVE APPROACH FOR EXAMINING ETHICAL CASE STUDIES**

*Conrad Woolsey, Total Wellness & Elite Performance Consulting;*  
*Vincent Lodato, National Sports Performance Institute;*  
*Russ Flaten, University of Western States;*  
*Wendell Otto, University of Western States;*  
*Rachel Webb, University of Arizona;*  
*Robert Owens, University of Western States;*  
*Jaime Sawchuk, University of Western States;*  
*Walter McCutcheon, University of Western States;*  
*Bridget Smith, James Madison University;*  
*D'Anthony Smith, Unleash! Player Performance;*  
*Stephen Walker, Director: DrStephenWalker.com;*  
*Podium Performance Academy / Podium Sports Journal*

Training and supervision are at the core of applied sport and performance practice (Aoyagi, Poczwardowski, & Shapiro, 2016; Cremades & Tashman, 2016). This workshop discusses challenging scenarios consultants and supervisors face and processes for ethical decision-making so when issues do arise, individuals feel well prepared to professionally and effectively address them. Participants will work through both routine and complicated issues in applied sport psychology including potential mental health concerns ranging from pre-competitive stress, emotional liability, reaction to injury, and substance use/abuse to clinical anxiety and depression. Attendees will learn how to: 1) navigate the initial informed consent process as an unlicensed CMPC, 2) establish intake processes (Bartley, O'Neil, Portenga, & Aoyagi, 2017) and how to select appropriate assessments, 3) decide if/when referrals should be made, and 4) establish an effective referral network before concerns arise. Additional topics for discussion include (multicultural) competency, confidentiality, boundaries, diversity, technology, compassion fatigue, self-regulation and self-care (Bryant, Byrd, Watson, & Etzel, 2017).

Using a collaborative approach, experienced CMPC supervisors and attendees will work in small groups in person and virtually. The small groups will: a) discuss each case, b) identify processes for assessing and structuring interventions, and c) provide a summary to the audience including their solutions and approaches. After surveying the groups, the panel of CMPC mentors will discuss solutions and approaches for each case. The goal is to help consultants in training, supervisors, and faculty in other graduate programs with standard procedures for working cases, while also deepening understandings of ethical issues and dilemmas.

We will bring our experiences as consultants and faculty supervisors to share understandings and applications. We will encourage the audience to listen to the questions asked, and not necessarily the answers we give. The audience will include many CMPC supervisors and consultants. We anticipate a rich learning experience for all!

### WKSP-06

#### COLLABORATIVE LEARNING: A CASE STUDY WORKSHOP FOR STUDENTS

*Chelsea Wooding, North Park University;*  
*Ashley Coker-Cranney, Whole Brain Solutions, LLC /*  
*MindRight Performance Consulting, LLC;*  
*Stephany Coakley, Temple University Athletics;*  
*Cecilia Craft, Phillies*

Myriad studies indicate the benefits of case study exploration to facilitate deep learning. Gregg (1953) highlighted the development of decision-making and analytical skills through the use of case studies, echoing Merry's (1954) focus on deductive learning. Case studies offer an opportunity to grapple with real-life scenarios, while working with others through communication and developing complex thinking skills (Herreid, 1994), a process which can help transition students from knowledge to higher-order learning via comprehension, application, and evaluation (Bloom, 1956). Peer mentorship also creates connections and access to adaptive integration of constructive feedback (e.g., Chester et al., 2013; Dennison, 2010; Marsh et al., 2017).

In 2019-2020, student members represented approximately 44% of AASP's membership. This fifth iteration of the Case Study Workshop is designed to continue providing learning and networking opportunities to this large contingent of the AASP membership in a supportive and challenging environment. In previous years, the Case Study Workshop received positive feedback wherein students expressed appreciation for the opportunity to connect with professionals and fellow students, and learn from the insights of various practitioners.

To realize workshop goals of encouraging professional connections and deep learning, one case will be examined at two time points to illustrate the complex, dynamic nature of mental performance consulting. At each time point, attendees will be assigned to small groups to facilitate initial idea development and peer networking. Topics for the peer groups will include: case conceptualization; intervention development, assessment, and evaluation; ethical/legal considerations; and cultural diversity and inclusion. Two professionals, each with over a decade of consulting experience, will facilitate large group conversations. Finally, two additional practitioners from diverse backgrounds will share their insights and how they would work with the client.

### WKSP-07

#### DEVELOPING COACHING CAPABILITIES VIA THE FRAMEWORK OF AUTHENTIC LEADERSHIP

*John Gaddy, Magellan Federal;*  
*Stephen Gonzalez, Dartmouth College*

Mental performance consultants are well-equipped to provide cognitive enhancement skills for competitive athletes by leveraging consultants' professional education and personal experiences. Less clear for many consultants are ways to address team challenges in behaviors of the coaches and staff. A coach sets societal norms for an organization that both directly and indirectly impact the performance of individuals and teams (Moreland, Coxe, & Yang, 2017). Noting this influential role of coaching behaviors, mental performance consultants can leverage leadership concepts and philosophies to optimize not only individual performance,

but team performance as a whole. One specific and contemporary style of leadership, with a general framework conducive to developing productive coaching behaviors, is authentic leadership (Bandura & Kavussanu, 2018). Authentic Leadership includes the competencies of 1) self-awareness, 2) internalized moral perspective, 3) balanced processing, and 4) relational transparency (Walumbwa et al., 2008). While Authentic Leadership has emerged as a leading contemporary leadership approach, little information exists in how to implement and develop authentic leadership in the context of high performance arenas. The purpose of this workshop is to educate participants on the theory of Authentic Leadership and how to help coaches and other leaders develop an Authentic Leadership style. Specifically, this workshop will apply experiential learning strategies to explore the four competencies of Authentic Leadership, provide observations and experiences of how to successfully apply Authentic Leadership, and a summative discussion on best practices for addressing the importance of coaches' self-awareness, the impact of moral-based decisions, and best practices for increasing transparency across organizational echelons. Participants will leave with a general understanding of the benefits of Authentic Leadership and how to implement it with leaders in the organizations and teams they consult within.

### WKSP-08

#### DEVELOPING INTERPROFESSIONAL CARE TEAMS FOR INJURY PREVENTION AND REHABILITATION

*Alexander Bianco, University of Tennessee;*  
*Taylor Casey, University of North Texas;*  
*Keely Hayden, University of North Texas;*  
*Rebecca Zakrajsek, University of Tennessee;*  
*Scott Martin, University of North Texas*

Athletes tend to experience fewer injuries and better injury rehabilitation outcomes when a holistic biopsychosocial approach is used by an interprofessional care team (iTeam; Martin et al., 2020). An interprofessional health care approach involves specialists from various fields who are able and willing to share their knowledge and skills to form a synergistic team (Arvinen-Barrow & Clement, 2019; Samuelson et al., 2012). Therefore, the purpose of this workshop is to demonstrate how iTeams can work together to prevent injury and improve athletes' injury rehabilitation outcomes. Presenters will discuss factors that contribute to the development of effective iTeams and positive injury prevention and rehabilitation outcomes, while providing participants an opportunity to discuss challenges associated with maintaining confidentiality and being an effective iTeam member.

Attendees will be presented with four case studies that involve athletes pre-injury and at each of the three phases of rehabilitation: reaction to injury, reaction to rehabilitation, and reaction to return to play (see Kamphoff et al., 2013). For each case study, attendees will be assigned to roleplay one of the professionals of an iTeam (e.g., athletic trainer, certified mental performance consultant, mental health specialist, head coach, physician, physical therapist). A biopsychosocial intake checklist will be used to guide discussions of the roles and responsibilities of iTeam members in each case. Attendees will discuss how to: (1) facilitate an iTeam approach, (2) determine the various professionals and techniques needed to prevent injuries and manage each stage of injury rehabilitation, (3) effectively communicate and integrate personal and professional skills to form a cohesive and synergistic team, and (4) manage ethical issues related to collaborating with

others. A workshop booklet that contains information about the iTeam approach in addition to the benefits, barriers, and factors that influence effective collaboration will be provided.

### **WKSP-09**

#### **DISPELLING MILITARY MYTHS: PREPARING TO BE A PRACTITIONER**

*Brittany Prijatel, Magellan Federal;  
Ashley Baskerville, Magellan Federal;  
Ashley Herrell, Magellan Federal;  
Jason Kampinga, Magellan Federal;  
Sean Swallen, Magellan Health;  
Susannah Knust, Walter Reed Army Institute of Research*

Currently, the U.S. military is the number one employer of sport psychology graduates. The Army alone has over 200 contracted jobs across 32 installations around the globe. Working as a human performance subject matter expert provides contractors the ability to gain numerous training opportunities in Positive Psychology, Sport Psychology, Social Psychology, and Industrial/Organizational Psychology. However, for trainers without a military background, there is a steep learning curve associated when entering into the culture and day-to-day operations of military units. Hayes and Brown (2004) discuss the importance of gaining domain-specific knowledge by both formal and informal means, utilizing strategies built upon respect and demonstrated ability to speak the language in order to help improve effectiveness. Oftentimes, newly hired Performance Experts (PEs) who have an athletic background will start the job with false beliefs about the Army based on inaccurate media representations. These beliefs compromise the cultural competence of a PE and decrease practitioner effectiveness. As a result, PEs can quickly lose credibility with Soldiers; which inhibits PEs' ability to contribute to the unit. Having awareness, knowledge, and skills of military culture would offer a process of re-evaluation and adjustment of these beliefs.

During this workshop, five seasoned military practitioners will be presenting scenarios from their experiences working with the military. Attendees will work through scenarios, while practitioners highlight specific characteristics and qualities leveraged to deal with the situation in real time. Additionally, practitioners will work to dispel myths that individuals may attribute toward working with the military population as they relate to the scenarios (i.e., the military is not relatable to athletics). The overarching goal of this workshop is to compare and contrast operating in a military setting to athletics, and enhance the cultural competence of individuals who are considering working with the military in hopes of decreasing the learning curve.

### **WKSP-10**

#### **EMBRACING BODY DIVERSITY: CREATING MINDFUL EXERCISE ENVIRONMENTS FOR ALL SHAPES, SIZES, AND ABILITIES**

*Sara Powell, Missouri State University;  
Kimberly Fasczewski, Appalachian State University;  
Caitlyn Hauff, University of South Alabama*

The benefits of regular exercise for physical and mental health are well established, however more than two-thirds of U.S. adults fall below the recommended guidelines for physical

activity (CDC, 2019). One explanation for this lack of physical activity relates to decreased feelings of self-efficacy and heightened discomfort in exercise settings among persons with obesity, those who are overweight, (Morgan et al., 2014) or those with a chronic disease resulting in physical limitations (Klaren et al., 2013). Mindfulness has also been found to increase self-compassion, comfort level in exercise settings, and overall well-being (Seligman et al., 2005). Additionally, increasing cultural competency among exercise professionals through education and experiences is also important for creating an inclusive and welcoming exercise environment (Pauline et al, 2006). Therefore, the focus of this workshop is to provide intervention strategies for creating positive, mindful exercise environments with diverse populations of clients including individuals with overweight and obesity and those living with chronic diseases, such as multiple sclerosis and Parkinson's disease. During this interactive workshop, the presenters will demonstrate intervention strategies that emphasize mindfulness, self-confidence, and positive body image. Meditation and self-reflection are useful tools for promoting self-compassion and mindfulness within exercise settings. Added benefits of mindful exercise are decreased stress, increased self-esteem, and improved self-awareness. An additional focus of this workshop will be to provide exercise professionals with guidelines regarding the use of inclusive language and how to utilize social media as a tool to build self-efficacy. Participants can expect to gain knowledge about the needs of these specific populations, tools for implementing psychological skills in exercise settings, and skills to be an advocate to promote positive and inclusive exercise environments for individuals from these unique populations.

### **WKSP-11**

#### **EMPOWERING BODY, MIND & PERFORMANCE-RELATED CONFIDENCE IN YOUTH SPORTS**

*Jenny Conviser, Ascend Consultation in Health Care;  
Kathy Feinstein, KAF Counseling & Consulting, Inc;  
Caitlyn Hauff, University of South Alabama;  
Michele Kerulis, Northwestern University;  
Hayley Perelman, Yale University School of Medicine*

Significant bias (unfair treatment) and discrimination (unjust treatment) regarding body weight and shape is a problem and a social justice issue (Kinavey & Cool, 2017). State and federal laws in the United States provide protection, but body size remains the most common reason for youth bullying (Luedicke et al., 2015). Communicating negative body-related messages, either intentionally or unintentionally, are microaggressions harming all children and especially marginalized individuals and groups (Sue et al., 2019).

Youth athletes may be a particularly vulnerable population to such microaggressions with profound and lasting influence. This may lead to body dissatisfaction, decreased physical activity, anxiety, depression, and health-related complications (e.g., hypertension, diabetes, and hyperlipidemia, etc.) (State of Childhood Obesity, 2020). Being teased or treated differently may erode inherent joy of physical activity (Storch et al., 2006), disrupt motivation for physical activity (Sutin et al., 2016), and contributes to premature withdrawal from sport and physical activities (Godfield et al., 2010). Over the past 30 years, rates of physical activity have declined so dramatically that few youth now engage in the amount of physical activity necessary to sustain good health (State of Childhood Obesity, 2020).

Lifetime participation in movement must increase in order for physical activity to play a more effective role in sustaining a healthy lifestyle. Industry leaders and communities must implement strategies and programs that reduce body-related bias and stigma, build body and performance-related confidence, and enhance motivation for movement.

In this workshop, attendees will learn strategies to improve: 1) awareness of the hazards of body-related stigma and bias concealed in microaggressions, 2) awareness of health-related consequences of weight/body-related stigma and bias, 3) youth sport, performance, and body-related confidence, and 4) build environments conducive to sport/performance enjoyment and success. Attendees will discuss relevant case examples highlighting respectful and sensitive language.

### **WKSP-12**

#### **ENGAGING IN ADVOCACY: A CALL FROM AASP'S INAUGURAL ADVOCACY COMMITTEE**

*Tanya Prewitt-White, Dr. Tanya Raquel;  
Derek Zike, UW Milwaukee;  
Ted Butryn, San Jose State University*

Over the last 30 years, sport psychology scholars have addressed issues related to social justice, generally, and more specifically issues of diversity and inclusion in the field. However, as Gill (2020) notes, sport psychology has failed to mirror the more extensive and intentional efforts by other areas of psychology in its efforts to centralize issues of multiculturalism, power relations, and calls for social justice and advocacy. Scholars working in the area of Cultural Sport Psychology have critically examined issues of power and privilege in the field, and called on the field to work towards social justice in a variety of ways. With respect to AASP, despite significant efforts made by the Diversity Committee over the past decades, the organization itself has yet to fully engage with these critical issues. Former chairs of the AASP Diversity Committee have suggested development of a diversity strategic action plan for AASP may go beyond the capabilities of a singular diversity committee (Fisher & Roper, 2015). In 2020, during a global pandemic and in the midst of a surge in various forms of athlete activism, AASP launched the Advocacy Committee to address issues of social justice, and develop actionable strategies for combating systemic racism, sexism, homonegativity, ableism and other forms of oppression in sport psychology and larger society. The purpose of this workshop is to detail the mission of the Advocacy Committee, and highlight precisely what we mean by advocacy. Next, we examine best practices for advocacy skill building, and provide the AASP membership suggestions for being change agents in their research and practice. We conclude with a call for AASP members to develop cultural humility and advocate for diversity, inclusion, and social justice in their communities and sport environments.

### **WKSP-13**

#### **HELPING THE HELPER: HOW TO TAKE CARE OF YOURSELF WHILE CARING FOR OTHERS**

*Hannah Conner, USOPC Mental Health Registry, Chase Wellness LLC*

Those who interact with the suffering, pain, and struggle of others are considered to be within the helping professions (Van

Dermoot Lipsky, 2010). This includes those in the field of Sport Psychology and Mental Performance. By being in this field, there's potential of developing compassion fatigue, which is the emotional residue of working with individuals who have been exposed to traumatic or stressful events (Beretier, 2017). This differs from traditional burnout as burnout is cumulative emotional effects from institutional stress and workload and is not trauma labor inclusive (The American Institute of Stress, 2017). Compassion fatigue can have several different consequences that include, but are not limited to; loss of empathy for others, avoiding working with specific athletes, decreased quality of care, and athlete safety and well-being (Beretier, 2017). Additionally, those in the field may be resistant to acknowledging and addressing compassion fatigue due to self-diagnosing and self-treating, denial, being trained to think that athlete's well-being is more important than our own, and high levels of grit (Van Dermoot Lipsky, 2010 & Beretier, 2017). This workshop is designed to equip professionals within the field with the insight, tools, resources and education needed in order to maintain their own wellness while working within the field of mental health. Attendees will safely learn about the early stages of vicarious trauma, the warning signs of compassion fatigue, and ways to take care of their emotional health while addressing that of others. The attendees will have time to explore different forms of self-care and compassion fatigue prevention with guidelines from the moderator, who has experience providing this type of skill building with other health care providers in varying professions. The attendees will receive different resources for support and learn to decrease self-judgement when it comes to emotional residue associated with being a helping professional.

### **WKSP-14**

#### **IT CAN HAPPEN TO GUYS TOO: CULTURAL CONSIDERATIONS AND BEST PRACTICES FOR SAFEGUARDING MALE ATHLETES WITHIN APPLIED SPORT PSYCHOLOGY (ASP) PRACTICE**

*Robert Owens, University of Western States;  
Mitch Abrams, Learned Excellence for Athletes;  
Emily Tyler, Springfield College; Theodore Monnich, UNCG*

Sport is a microcosm of society in that it reflects cultural values and morals. Sport is also a macrocosm of society because it creates its own values that at times go against or supersedes pre-established cultural norms. For example, violence in sport is something that is largely tolerated by members of a society that it would not be tolerated in other settings (Young, 2019). Traditional sport-culture norms and gender-based biases that are prevalent in a sport environment, both explicitly and implicitly, contribute to a culture where sexual violence is tolerated (Breger et al., 2019). The #MeToo Movement has illuminated sexual misconduct as a phenomena that is oftentimes manifested as hazing rituals, bullying, and the covert acts of coaches, administrators, and medical staff (Abrams & Bartlett, 2019). Despite the progress of #MeToo, the more recent #UsToo Movement in sport has shown that narratives of sexual exploitation of male athletes go unrecognized (Edmondson & Tracy, 2018). Moreover, male athletes in aesthetic sports like gymnastics, wrestling, swimming, and figure skating, like their female counterparts, are susceptible to mental abuses like body shaming (Atkinson, 2009; McMahan, McGannon, & Palmer, 2021). As members of a high performance support team or as athlete advocates, sport psychology practitioners can play a prominent role in safeguarding athletes from sexual and mental abuse (Kerr



& Stirling, 2019). Participants will acquire theoretical and practical tools for safeguarding athletes from the standpoints of introspection, competence, and cultural humility (Krane & Waldron, 2020). This workshop is co-sponsored by the Anger & Violence SIG and the Men and Masculinities SIG.

### **WKSP-15**

#### **MAKING WEIGHT: RISKS & REWARDS - 2021**

*Jenny Conviser, Ascend Consultation in Health Care;*  
*Chris Algieri, Performance Nutrition Coach, Stony Brook University, New York;*  
*Sharon Chirban, Amplify Wellness & Performance, LLC;*  
*Caitlyn Hauff, University of South Alabama;*  
*Michele Kerulis, Northwestern University;*  
*Riley Nickols, The Victory Program at McCallum Place;*  
*Christine Selby, Husson University*

The belief that an ideal physique is necessary for optimal performance is common in sports or performance arts having aesthetic requirements, anti-gravity components or weight classes. When this belief is combined with intense competitive winning interests, urges to dangerously change eating, exercise, and one's body, may occur. (Voelker & Reel, 2020). Unfortunately, rapid weight loss, defined as the reduction of 2–10 % body weight or more over 2 to 3 days (Artioli, G. et al., 2016), is dangerous. It is estimated that one in five boxers lose 10% of their body weight prior to the match (HBO, 4/19/18, The Fight Game). Exacerbating risk, are weight loss methods like starvation and severe fluid restriction (Artioli, G., 2016). Athletes in Mixed Martial Arts (MMA) report highest rates of dangerous practices like sauna use and restricting water intake and the second highest use of rubber/plastic suits (Barley, O. R., et al., 2018). For some, the cost was death: Billy Saylor, Campbell University, died from cardiac arrest at age 19. Joseph LaRosa, UW-La Crosse, died of heat stroke after riding a stationary bike in a rubber suit. Jeff Reese, a Junior at Michigan, died of kidney failure. Additionally, there are an inordinate number of BIPOC fighters who died prematurely from cutting weight; MMA Fighter Rondel Clark, 26, Kick Boxer Dennis Munson, 24, and Leandro Souza, MMA Fighter, 26 (RondelClarkFoundation.org, 2017). The goal of this panel discussion is improved awareness and prevention of risks associated with weight related, beliefs, practices, and policies. Featured presenters include a World Boxing Champion, and a Certified Sport Nutritionist. Other panelists are CMPC certified leaders in their respective fields; professional, clinical, national governing agencies, and academic. Participants will discuss weight related challenges and solutions in protecting health and optimizing performance within sport and performance cultures.

### **WKSP-16**

#### **ON-COURT COACHING: INTEGRATING MENTAL SKILLS INTO A BASKETBALL ENVIRONMENT**

*Lindsey Hamilton, IMG Academy;*  
*Michael Urban, IMG Academy*

Basketball is a dynamic, fast-paced sport that requires quick decision-making and complex motor skills to perform. Mental training programs have been demonstrated to be useful in developing an optimal mindset that positively impacts complex motor skill execution in general (Gould, Dieffenbach, & Moffett, 2002) and enhance basketball performance in particular (Savoy, 1993). While training mental skills has primarily occurred in workshop settings away from the practice environment (e.g., Rothlin & Birrer, 2019), training skills in an environment that represents the demands of competition has been shown to be an effective way to enhance skill transfer to the performance setting (Pinder, Davids, Renshaw, & Araujo, 2011). By integrating mental training into the on-court practice environment, MPCs can better facilitate mental skill development in a context that mirrors the demands of the game.

Using a representative learning design framework (Pinder et al., 2011), the purpose of this workshop is to share the process of integrating applied mental skills in a basketball environment. Specific objectives of the session include (1) integrating mental skill training into the basketball environment, (2) sharing examples of on-court exercises to enhance the psychological representativeness of training, and (3) discussing lessons learned in facilitating this intervention in collaboration with coaches. The workshop will include examples of on-court basketball exercises from the mental performance consultants' experience, as well as provide attendees the opportunity to learn new ways to design mental training programs through a representative learning design lens and apply those insights into their practices with various athletes.

### **WKSP-17**

#### **P.S. YOUR TEAM NEEDS THIS... ESTABLISHING A CULTURE OF PSYCHOLOGICAL SAFETY**

*Brittany Prijatel, Magellan Federal;*  
*Lindsey Greviskes, University of Wisconsin-Whitewater*

In 2015, Google published findings from Project Aristotle, a 2 year study examining over 250 attributes, such as: education, personality, and skills, with the sole intent of answering the question: What makes the perfect team? The number one attribute of high performing teams was psychological safety. Similarly, recent peer-reviewed literature highlights the importance of building psychological safety within groups (Edmondson, 2018; Fransen, McEwan, & Sarkar, 2020). Psychological safety is defined as the condition that exists within an organization when its members believe they can take interpersonal risks in that environment without fear (Edmondson, 1999 & Khan, 1990). Among many outcomes, psychological safety enables members to admit mistakes and failures, ask for help, offer criticism, and take risks, by leveraging a foundation based off of trust and respect (Edmondson & Lei, 2014). Due to the aforementioned outcomes, psychological safety has been linked to greater levels of group cohesion, inclusivity, healthier functioning, and improved performance (Fransen, et al., 2020). It is often up to

leaders of a group to create psychologically safe environments and within performance contexts, such as athletics, military, or business, there are multiple levels of leadership. For example, within an athletics department there are athletic directors/administrators, coaches, and team captains. When working with groups to build psychological safety, it is important to address it at all levels.

This workshop will provide practical examples of strategies and activities that work to build psychological safety across different levels of leadership within two different performance contexts. More specifically, this workshop will demonstrate activities utilized with collegiate athletes and military leaders to increase psychological safety among members of the team or unit. Additionally, the workshop will discuss a values based approach by highlighting barriers and benefits of help seeking behaviors, a specific component of psychological safety that can mitigate potential high risk behaviors.

### WKSP-18

#### PRACTICAL STRATEGIES FOR TEACHING HEALTHY BREATHING FOR OPTIMAL PERFORMANCE

*Inna Khazan, Harvard Medical School/Boston Center for Health Psychology and Biofeedback*

Healthy breathing is one of the foundations of human health and optimal performance. Overbreathing, a behavior of breathing out too much carbon dioxide, resulting in hypocapnia, or low levels of carbon dioxide, is one of the most common breathing dysregulations. Overbreathing affects 10-25% of the US population (Tavel, 2020) and is particularly common during intense exercise and in moments of anxiety or stress (Davies and Craske 2014; Tsakiris et al, 2020). Overbreathing is associated with exercise-related bronchoconstriction, asthma, panic disorder, anxiety, chest pain, gastrointestinal distress, and chronic pain (Meuret and Ritz, 2010; Tolin et al, 2017, Vollmer et al, 2015). For athletes and other high-performing individuals, overbreathing has profound effects on their ability to perform at their best. Overbreathing disrupts physiological, emotional, and cognitive function, leading to difficulty focusing and making decisions, a feeling of "brain fog", slowing of reaction time, lightheadedness, shortness of breath, fatigue, muscle tension, and cramping, and decreased endurance (Friend et al, 2019; Gardner, 1996; Laffey and Kavanaugh, 2002; Studer et al, 2011; Tavel 2020, Tolin et al, 2017). In short, overbreathing is detrimental to sport and professional performance. In this workshop, participants will be introduced to relevant respiratory physiology, ways to recognize and address overbreathing in clients with the purpose of improving their athletic and professional performance.

The learning objectives of this workshop are threefold: 1. Discuss the physiology of healthy breathing and overbreathing; 2. Identify presence and consequences of overbreathing on sport and professional performance; 3. Observe or practice healthy breathing skills, as well as skills to overcome overbreathing when it happens.

Issues of diversity and cultural awareness will be addressed in a discussion of applicability and buy-in into breathing training. Workshop participants will learn from PowerPoint presentation, live demonstrations, and experiential practice.

### WKSP-19

#### SEEING IS BELIEVING: USING VIRTUAL REALITY AND BIOFEEDBACK TO QUANTIFY MENTAL FITNESS IN INJURY REHABILITATION

*Stephanie Zavilla, Winter Park Competition Center;  
Michael Mata, University of Denver;  
Eleanor Gilbert, Stratton Mountain School;  
Jessica Hanson, Altitude Mental Performance Group;  
Irene Oyang, University of Denver;  
Jacob Kluger, University of Denver;  
Courtney Richardson, University of Denver;  
Benjamin Barone, GetWellNetwork, Coretex Performance*

While there is a comprehensive body of literature surrounding the physical elements of injury and return to sport (RTS), there is a growing desire to investigate the psychological ramifications (Larson, et al, 1996). There are several factors that increase risk of reinjury (Crossman 1997, Rotella, 1985), therefore, the intent of potential interventions is to decrease stress and desensitize fear. Biofeedback technology offers the capability to instantaneously assess an athlete's baseline psychophysiological status and changes in response to recovery techniques. Heart Rate Variability (HRV) is a biofeedback modality that can assist in training athletes to gain awareness and influence over physical, cognitive, and emotional functioning (Strack & Gevirtz, 2011). Biofeedback offers quantitative measures of the potential effectiveness of various interventions, specifically in this pilot study, a virtual reality (VR) psychophysiological intervention. In conceptualizing the factors contributing to a successful outcome, the Biopsychosocial Model of Injury (Appaneal & Perna, 2014) provides a multidimensional framework encompassing many areas of self-regulation. Further, there is a growing body of research utilizing technology to improve rehabilitation and the RTS experience by means of VR (Hromada, 2018). There is opportunity for exploration surrounding the implementation of technology and exposure therapy techniques to enhance injury rehabilitation. The objectives of this workshop include: 1) Reviewing theories of psychology of injury and HRV training in athletic populations; 2) Exploration of technology-facilitated psychophysiological intervention to address cognitive, affective, and behavioral influence on RTS; 3) Presenting a case study to discuss the practicality and accessibility of applications of biofeedback and VR technologies. Attendees will have the opportunity to participate in a biofeedback-assisted VR intervention, learning self-regulation techniques that can be applied regardless of access to technology. This workshop highlights the importance of a holistic approach to Western culture's primarily physiological focused RTS programs, prioritizing athlete wellbeing and safety through the rehabilitation process.

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### WKSP-20

#### **THE BLACK ATHLETE ACTIVIST LEADERSHIP MODEL (BA2L): A FRAMEWORK OF ENGAGEMENT, EDUCATION AND EMPOWERMENT**

*Gyasmine George-Williams, University of La Verne*

This generation of student activists are reminiscent of those who fiercely exercised their activism in the 1960s, answering the call to social justice. In the same way, the re-emergence of 21st century Black athlete activism reflect the leadership of Black activists in the 1960s, who also took advantage of their intersecting positionality to actively dismantle anti-Blackness and inequality. To gain a deeper understanding, and increased knowledge of the lived experiences of Black college athlete activists of this generation, critical race theory was utilized as a conceptual framework on the qualitative study with Black college athletes from across the United States. From those narratives, the Black Athlete Activist Leadership model (BA2L) was birthed. This session should benefit athletic departments and their liaisons and higher education practitioners overall, who are seeking insight on successful processes and strategies to expand their understanding and support of Black college athlete activists. By incorporating the Black Athlete Activist Leadership model (BA2L): at their institutions, stakeholders can create, strength and revamp curricular and co-curricular programming for this student population that would benefit their holistic development.

### WKSP-21

#### **USING SOCIAL NETWORK ANALYSIS TO DECIPHER INTRA-TEAM RELATIONS TO INFORM INTERVENTION DESIGN IN TEAM SPORT**

*Eesha Shah, Singapore;*  
*Jamie Barker, Loughborough University;*  
*Matthew Slater, Staffordshire University*

Comprehending the interactions between every pair of teammates is nearly impossible yet such information is crucial to designing interventions to improve team identification and sport performance. A strong sense of shared identity can drive athletes to exert more personal effort to accomplish team goals (De Cuyper et al., 2016); to support each other (Hartley et al., 2020); to communicate better (Peters, 2020); and, to achieve effective results (Slater et al., 2018). The strength of athletes' identification with their teams has been found to vary with the number of social relations they share with their teammates (Graupensperger et al., 2019; Rodrigues et al., 2019). Psychometric assessments enable practitioners to glean athletes' perceptions of the various relations within their

teams but they do not reveal the patterns of actual intra-team relations (Lusher et al., 2010). Social network analysis (SNA) is an interdisciplinary approach that uses mathematical theory to measure interactions within groups. While the use of SNA has been encouraged in applied sport psychology (Wasche et al., 2017), its uptake is limited. The learning objectives of this workshop are threefold: to acquire basic know-how on using SNA in applied practice; to review current research on the use of SNA to study intra-team relations and their impact in team sport through a social identity lens; and, to apply this knowledge to design interventions based on needs and network maps of real, elite teams (e.g., building supportive connections in a culturally diverse team). While some direct instruction will be given to acquaint attendees with SNA methods and current research, the learning objectives will be primarily achieved through collaborative and inquiry-based learning as attendees work together through the activities. Delegates will be provided with guided worksheets as well as a variety of writing instruments to create and analyze network maps.

### WKSP-22

#### **WHAT'S YOUR MARKETING MESSAGE? FIXING THE ELEVATOR PITCH TO REACH YOUR IDEAL CLIENT**

*Russ Flaten, University of Western States;*  
*Jessica Woods, ULTIER LLC*

There has been ample research over the last several decades on athletes and coaches' attitudes towards sport psychology services (Martin et al; 2012; Ballesteros et al; 2020). The findings indicate a clear gap in mental performance consultants' marketing message, especially when addressing their capabilities, experience and services in today's digital age (Ong & Harwood, 2017).

The utilization of mental skills has remained relatively steady at 30% even before COVID (Ballesteros, 2020). As we work through COVID, we understand the importance of mental skills and resilience as multiple studies have documented the mindset of athletes during COVID (NCAA, 2020; UNT, 2020), but our marketing approach needs to evolve.

Therefore, this workshop will provide consultants the opportunity to develop a more effective elevator pitch and learn strategies to research their intended clientele.

The learning objectives of this workshop include: 1) Provide CMPCs a process to better understand their "brand" 2) How to research and understand their desired populations 3) Identify their brand and work through strategies based on current media sources to craft warmer messages 4) Attract and obtain buy in from parents, coaches, and athletes more effectively. The multimethod approach of teaching includes presentations, practical exercises in small groups and templates for participants to craft their message.

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### **WKSP-23**

#### **WHEN THE “PLAYBOOK” INCLUDES CLEFS, NOTES, TIES, & DOTS: RECOMMENDATIONS FOR PERFORMANCE PSYCHOLOGY PROFESSIONALS LOOKING TO CONSULT IN A MUSIC DOMAIN**

Jessica Ford, McDaniel College;  
Monna Arvinen-Barrow, University of Wisconsin - Milwaukee

In the absence of robust psychological music performance enhancement research, sport and performance psychology practitioners often use sport as a model to inform research and applied practice with musicians to optimize performance (e.g., Hays, 2002, 2012). This is somewhat problematic, as musicians have unique performance considerations that can be different from athletes (Pecen et al., 2016), many of which are not well understood. Drawing from the findings of a recent systematic review on the use of psychological skills training interventions in a music domain (Ford & Arvinen-Barrow, 2019), and informed by a recent PhD dissertation as well as applied consulting experiences with musicians, the purpose of this workshop is as follows: (a) to present a synthesis of existing empirical evidence as it relates to musician-specific psychological performance enhancement, (b) to conceptualize the existing evidence according to the McLeroy framework (McLeroy et al., 1988), (c) to present musician-specific performance enhancement strategies grounded in empirical evidence for sport and performance psychology practitioners to implement with their clients; and (d) to explore possible barriers and challenges associated with consulting in a music domain through the use of a case study (e.g., CMPC supervision/graduate training, CMPC role clarity, access and affordability of services). This workshop allows attendees interested in working in performance arenas outside of sport (e.g., performing arts) to learn more about the “specialty knowledge” (Portenga et al., 2011, p. 14) associated with the music domain. Given that education and training for individuals looking to work in domains outside of sport, especially within performing arts, is still considered novel territory (Pecen et al., 2016), this workshop can also serve as an impactful first step for attendees to develop contextually appropriate psychological performance enhancement interventions for musicians.