Network of Master programs of European universities in Sport & Exercise Psychology

SPORT & EXERCISE PSYCHOLOGY POSTGRADUATE LEVEL INTENSIVE COURSE

JANUARY 24-29, 2022
UNIVERSITY OF THESSALY, TRIKALA, GREECE

Organized by

EUROPEAN MASTER IN SPORT & EXERCISE PSYCHOLOGY

UNIVERSITY OF THESSALY

University of Thessaly
Dept of Physical Education & Sport Science
Trikala-Greece

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European Master's Studies
in Sport and Exercise Psychology Intensive Course
in Trikala, Greece
24th to 29th of January 2022

Dear students,
Welcome to the Intensive Course (IC) of the European Master in Sport and Exercise Psychology, Trikala, Greece. We are very pleased to host again this historic IC of one of the oldest ever networks of Master's programs of European universities. The first IC of the European Masters in Sport and Exercise Psychology was hosted in Leuven, Belgium in 1996, followed by its organization across 12 European Countries, almost once every academic year. You can read more about this European Master program in the book chapter that published under the auspices of the European Federation of Sport Psychology (FEPSAC).

This is the 7th time that this IC will be hosted by the University of Thessaly. Last time that we organized it in Trikala was in 2020 and both students and lecturers were so satisfied that we decided to host it again in 2022. Our team consisted of the excellent European colleagues of our network will do our very best to provide the same level of quality and satisfaction that our network has offered to an entire generation of European Sport Psychologists. This high level of students' satisfaction sustained alive this historic IC for more than 20 continuous years. As always, the high standards of the IC are due to the enthusiasm and volunteerism of the lecturers of this network. The main motive of these lecturers is to sustain alive the spirit of continuous development of European Sport Psychology and to disseminate this enthusiasm and spirit to the youngest generation of European sport psychologists, that is, to you!

Since its beginning and until 2014, the European Commission was covering an important portion of the costs of this program. This is the fourth year that the organization of this intensive course is entirely self-financed by you and by our universities. Hence, we are more than pleased to notice that despite this challenge and all the financial difficulties that Greece and the rest of Europe face, this year the largest ever number of students applied to participate to this course! You have been selected among a much higher number of applicants. This is the biggest boost to all of us to continue the organization of this IC for many more years. Thank you very much!

The first time that we organized the same IC in Trikala was in 2007. Since then some of the IC 2007 students and several other students from other ICs become university professors but also lecturers of this IC! We strongly believe that some of you will be our colleagues who will teach to the same course few years later. This course is at our heart and we are sure that it will remain at your hearts too. We believe that over the years it has helped all of us to develop a young profession and a

scientific association in Europe which has a truly European identity; an identity that harmoniously integrates the diverse experiences of all of us who live, study, teach and apply sport and exercise psychology in this continent but also globally. We welcome you to join the alumni of graduates of the European Masters in Sport and Exercise Psychology and the European associations of sport and exercise psychology: FEPSAC (European Federation of Sport Psychology) and ENNYSP (European Network of Young Specialists in Sport Psychology). Our international non-European students can also join these associations, as well as the International Society of Sport Psychology (ISSP). During the IC you will meet some key-members participating in these organizations.

We, the lecturers at the University of Thessaly, are more than pleased to host all of you in our School, which holds a truly international Master's program in Sport and Exercise psychology. We very much hope to sustain this IC alive, maybe to organize it in Trikala soon again and to persuade you that it might be worthy to meet us again in the future!

Trikala, January 2022

Athanasios Papaioannou, Professor of Sport Psychology
Dean of School of Sport & Exercise Science
Director of the 2022 Intensive Course of the European Master's in Sport and Exercise Psychology

The University of Thessaly

The University of Thessaly was founded in 1984 and has elected the first Rectorate Board in 1998. Its administrative and academic centre is in the city of Volos.
In order to serve the needs of the region of Thessaly, its first Departments were based on agricultural, educational and technological sciences. In its initial phase of organization and operation there have been eight Departments, seven of them in Volos and one, the School of Medicine, in Larissa. Since 1984 and onwards the University of Thessaly has been gradually growing with new Departments in the four biggest cities of the region of Thessaly, Volos, Larissa, Trikala and Karditsa.

The main mission of the University of Thessaly is the promotion of scientific knowledge through research and the contribution to the cultural and economic development of the local community and wider society. It is known for its excellent research performance and outstanding scientific achievements, in accordance with the international standards. The excellent equipped Laboratories of the different Departments and Research Units have a number of well-trained researchers to support them. The members of the academic and research staff participate in European research networks and numerous innovative research projects in the EC.

Emphasis is also given on the bond between the University of Thessaly and the local society. This bond is further supported by the operation of the University Hospital of Larissa which covers the medical needs of the whole region of Thessaly. The University brings also students in contact with the labour market through its Career Office, and it encourages a great deal of social activities and public lectures on various issues held by qualified academic staff. Since May 2009 there has also been a significant cooperation between the University and the National Radio of Volos for the organization of radio broadcasts, which have a main impact in the local and wider society.

Student life in the University of Thessaly is also rather intense. The students have established well-organized associations which are highly active in the fields of sports and culture.

Today the University of Thessaly more than 10,000 undergraduate, 1,500 postgraduate and 1.200 PhD students. It also has 560 members of teaching and research staff, 98 members of teaching staff with a temporary teaching contract, 308 members of administrative staff and 57 members of Special Technical Laboratory Staff. It is a University with its own identity and with a prominent position in our national educational system, known for its quality in teaching, research, human resources, spirit of cooperation at all levels and a dynamic presence in the society.

Find more http://www.uth.gr/en/

School of Physical Education and Sport Science

Photo: at the department

The Department of Physical Education and Sport Science (TEFAA UTH) was established in 1984 and the first students were admitted in the Academic year 1994-1995. The Department is located in Trikala. Initially housed in the Matsopoulos Park facilities, it has moved to the new Karyes campus on July 1999.

Four - year studies in the Department lead to a Degree in Physical Education and Sport Science qualifying its graduates to teach in all levels of Education. The focus of the studies is primarily on outdoor actrivities and sports which are greatly favoured by the surroundings of Trikala, sych as: skiing, in the Skiing Center of Pertouli, mountaineering on Mount Pindos, climbing in the Meteora Rocks, rafting in River Aspropotamos, and rowing in Lake Plastira.

Department of Physical Education & Sport Science: http://www.pe.uth.gr/

The students of the 2022 Intensive Course

UNIVERSITY	STUDENT
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	Maria del Carmen Manzano
	Miriam Cardoner
	Pedro Schargorodsky
	Victor Merino
University of Jyväskylä	Atte Kinnunen
	Ivan Čulák
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	Laura Hyvönen
	Michal Šimeček
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Karlsruhe Institute of Technology	Lara Schmitt
Leipzig University	John Bell
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University of Warsaw	Julia Karbowska
University of Thessaly	Anna Guerra Aragones
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Greek Time (CET time)	**Monday 24/1/2022**	**Tuesday 25/1/2022**	**Wednesday 26/1/2022**	**Thursday 27/1/2022**	**Friday 28/1/2022**	**Saturday 1/2/2020**
10.00-12.00 (09.00-11.00)	LET'S MEET	SELENIA DI FRONSO Recovery in Sport	JOAN PONS Coping in sport: A cognitive-motivational-relational perspective	JULIAN FRITSCH Emotions in Sport: A focus on outward emotional reactions	OLIVER LEIS Systematic Reviews	Departures
12.00-12.30 (11.00-11.30)	Break	Break	Break	Break	Break	
12.30-14.30 (11.30-13.30)	ANI CHRONI From Elite athlete to coach: The transition event and experience	ATHANASIOS PAPAIOANNOU Self-Transcendence and Growth Goals to Promote Well-being for all	IOANNIS MORRES Exercise on prescription for depression. Maximizing antidepressant effects and minimizing dropout.	YANNIS THEODORAKIS Sports against smoking and substance use disorders	RITA DE OLIVEIRA Visual perception in sports	
14.30-16.00 (13.30-15.00)	Lunch break	Lunch break	Lunch break	Lunch break	Lunch break	
16.00-17.00 (15.00-16.00)	*Meet the lecturers*	*Meet the lecturers*	*Meet the lecturers*	*Meet the lecturers*	FEPSAC - ENYSSP Getting to know the European Sport Psychology associations	
17.00-19.00 (16.00-18.00)	ANTONIS HATZIGEORGIADIS Self-talk in Sport	CHRISTOPHE GERNIGON The dynamics of approach and avoidance motivation in sport	12 YEARS EMSEP GRADUATES' CAREERS	SASCHA LEISTERER Students' affects and emotions in Physical Education		
19.15-20.15 (18.15-19.15)	*Meet the lecturers*	*Meet the lecturers*		*Meet the lecturers*	*Meet the lecturers*	

GOING FROM ELITE ATHLETE-TO-COACH: THE TRANSITION EVENT AND EXPERIENCE

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Introduction

During the mastery phase of the athletic career, elite athletes are immersed in intense training, competing, and traveling leaving them little time to prepare for the inevitable end of the athletic career and the transition to life after training to win. Hiring retired athletes as coaches is common practice worldwide, purporting athletic experience as an important element of the coaching profession. However, coaching is complex, requiring specialized knowledge across multiple domains (professional, interpersonal, intrapersonal; ICCE, 2014). While the transition out of sport (discussed in the literature as athlete retirement) has received ample attention (for a review see Park, Lavallee, & Tod, 2013), knowledge on the post-athletic career transition inside sport where the athlete transits from competing-to-coaching is limited (Chroni, Pettersen, & Dieffenbach, 2020; Chroni, Dieffenbach, & Pettersen, 2020). To make things even harder, the career transition into sport coaching is also an under-researched area (Lavalee, 2006), and in some cases going from athlete-to-coach does not even feel like retirement (Lavallee, Gordon, & Grove, 1997).

To facilitate the post-athletic career life, research and interventions led to the development of international initiatives (e.g., Athlete365 Career+, International Olympic Committee, 2019) and regional policies (e.g., Athlete Dual Careers, European Commission, 2012). These program agendas aim to enhance the life inside sport and the transition outside sport via promoting a holistic approach during the career, providing the athlete with education and/or employment along the pursuit of athletic excellence (see Tekavc et al., 2015). Countries have developed their state-programs for supporting their champion athletes' post-sport careers (see Stambulova & Ryba 2013). Furthermore, 'fast-tracking into coaching' programs have been developed to provide speedily the retiring athletes with a startup toolkit for coaching. With fast-tracking being one of the pathways to coaching, researchers are recently exploring its efficiency and impact on those undertaking this route (see Blackett & Evans, 2018; Blackett et al., 2017; 2019; 2020; Rynne, 2014). Regardless of the pathway (fast-tracked or traditional accreditation courses), the transition from being an elite athlete to becoming a coach has inherent unique challenges and requires for the person to possess resources and coping apt for the experience of adjusting to a new identity and role. Alike those who employ the retiring athletes as early career coaches, neither sport psychology practitioners nor coaching educators and developers have thought through what the transition signifies for the person and the job they perform. The elite athlete-to-coach transition is a distinct event, where in one move in time and within what seems to the naked eye as 'same world', the person transits from his/her expert in training and competing elite-athlete-self to a non-expert in training, competing, and relating novice-coach-self.

Today, transiting out of elite training and competing directly into coaching remains a rather unchartered event and experience. Rynne (2014) looked into the nuances of the fast-tracking pathway to coaching from a pedagogical framework and found biases and weakness. Blackett and colleagues (2017, 2018, 2019, 2020, 2021a, b) have approached the transition informed by

the sport sociology framework and noted how challenging yet critical is to develop a coach identity when one has to define a coaching philosophy that is different from the playing philosophy of one's previous life as an athlete. Few studies have explored in depth the athlete-to-coach transition as a lived experience from the sport psychology framework. Kavanagh (2010) studied three tennis players who transited to coaching without any formal pre-retirement planning and minimal part-time assistant coaching experience. Chroni (2014) scrutinized the case of an alpine skier who terminated his athletic career post the Vancouver Olympics and started coaching a month later. Chroni, Pettersen, et al. (2020) explored the experiences of six early career winter sports coaches who started coaching right out of retirement and developed the empirical model titled, "Athlete-to-Coach Transition Journey in Norwegian Winter Sports." Chroni, Dieffenbach et al. (2021) expanded their work to understand what could facilitate the athlete-to-coach transition via interviewing ten sport federation officials who were involved in the recruitment of elite athletes as coaches. These researchers agree that the inside sport transition from elite athlete-to-coach is not as easy as it seems at first glance. Instead, it is a rather abrupt process of certain phases that necessitates apt adjustments, coping, and support where sport psychology practitioners can provide their expertise both as educators and consultants.

Recently, concerns are surfacing around the fast-track and the passive approach to athlete-to-coach preparation as these may perpetuate incorrect, inappropriate, even abusive coaching practices. McMahon et al. (2020) brought to light the perpetuation of abusive practices by a coach who had experienced and normalized these as an athlete. Based on recent research advancements and the absence of an applied practice course of action, Chroni and Dieffenbach (2021), put together a range of resources that can inform sport psychology practice in support of the person-in-transit.

Objectives

- The students will be introduced to the literature on the athlete-to-coach transition exploring it as an event and an experience from different scientific lens.
- The students will be introduced to an empirical transition model on the athlete-to-coach transition and the resources, demands, and barriers inherent in the transition through real cases.
- The students will be introduced to research gaps on the topic
- The students will be challenged to identify areas where they can intervene to better support those undergoing the athlete-to-coach transition, considering their own context.

Selected Literature

Blackett, A. D., Evans, A. B., & Piggott, D. (2021). Negotiating a coach identity: A theoretical critique of elite athletes' transitions into post-athletic high-performance coaching roles. *Sport, Education and Society*, *26*(6), 663-675.

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International Olympic Committee. (2018). *Athlete365 Career+*. Accessed December 22, 2021 http://www.olympic.org/athlete-career-programme Kavanagh, T. E. (2010). *Transitions to the other side of the net: Tales of tennis players who became coaches.* Doctoral dissertation, Victoria University.

Lavallee, D. (2006). Career awareness, career planning and career transition needs among sports coaches. *Journal of Career Development, 33,* 66-79.

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Review Questions

1. What challenges are experienced by early career coaches who transited to coaching upon retiring as elite athletes?

2. What do you need to consider in facilitating the athlete-to-coach transition?
3. How can you support an athlete preparing to retire and start coaching or an early career coach who recently retired from training and competing?
4. What would you recommend to a club/team for supporting their early career coaches on the job?

Thought Questions

1. Are challenges experienced by early career coaches who transited to coaching upon retiring from a non-elite athlete background different, and if so, how?
2. How comfortable are you with the coaching profession, what do you know and how much of it do you understand?

Assignment: Understanding the A-to-C experience

Working with the assignment

1. Read the literature on A-to-C
2. Develop an interview guide and conduct two interviews on the lived experience of the athlete-to-coach transition. Ensure that the questions you will ask suit aptly the person, sport, context. The questions should aim to explore the lived experience (what/how it happened, what/how it was lived).

   One interview should be with an early career coach who transited from competing to coaching less than 1 year ago, and one with a coach who transited from competing to coaching 5 to 10 years ago and managed to establish him/herself in the job.
3. Analyze the interviews thematically
4. Summarize your findings
5. Discuss your findings considering (a) the literature and (b) how could you have helped them

Delivering the assignment

Deliver as a short journal article (APA 7 guidelines for formatting and referencing). The assignment should include a brief introduction to the topic, description of two participants, information on methods of interviewing and analyzing the interviews, what you found, and the discussion of your findings, plus references. All parts should be referenced.

- In the discussion, critically reflect on your data to explain and interpret the two coaches' lived experiences and position these within the literature
- At the end of the discussion reflect on whether and how you could have helped them.
- If necessary, consider in your discussion the culture(s) of the sport(s), the employers' culture and expectations as well as interviewees' culture(s).

SELF-TALK IN SPORT

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Introduction

In sport psychology, the term self-talk has been conceptualised as "verbalizations addressed to the self, overtly or covertly, characterised by interpretative elements associated to their content; and it also either (a) reflects dynamic interplays between organic, spontaneous and goal-directed cognitive processes or (b) conveys messages to activate responses through the use of predetermined cues developed strategically, to achieve performance-related outcomes (Latinjak, Hatzigeorgiadis et al., 2019; p.11)." The self-talk in sport literature has followed three research lines: describing athletes' organic self-talk, explore the antecedents of organic self-talk, and identify the effectiveness of self-talk interventions on performance. Regarding organic self-talk, several distinctions and taxonomies have been identified in the literature, based on the origin (organic/strategic), the valence (positive/negative), the neural pathways (spontaneous or System I/ goal-directed or System II) and the function (diverse cognitive and motivational functions) (e.g. Hardy, 2006; Latinjak, Zourbanos, López-Ros, & Hatzigeorgiadis, 2014; Van Raalte, Vincent, & Brewer, 2015; Zourbanos, Hatzigeorgiadis, Chroni, Theodorakis, & Papaioannou, 2009). Regarding the antecedents of self-talk, three broad clusters have been identified, personal factors (e.g., motivational orientations) situational factors (e.g. state anxiety), and social-environmental factors (e.g., coaching behaviour) (Hardy, Oliver & Tod, 2009; Zourbanos, Hatzigeorgiadis, Tsiakaras, Chroni, & Theodorakis, 2010). Finally, regarding the effectiveness of self-talk interventions, which has attracted most of the research attention in sport psychology because of its direct applied value, there is strong evidence that self-talk strategies can facilitate learning and enhance performance in motor and sport tasks. The effectiveness of self-talk has been supported through a meta-analysis that identified a moderate effect size (0.48) and identified factors moderating the effect of self-talk strategies on performance (Hatzigeorgiadis, Zourbanos, Galanis, & Theodorakis, 2011). Hatzigeorgiadis, Zourbanos, Latinjak, and Theodorakis (2014) recommended the use of what they called the Self-Talk IMPACT (Identify, Match, Practice, Ascertain, Create, Train), an approach for the development and the implementation of effective self-talk interventions in sport. In relation to the effectiveness of self-talk strategies research is currently exploring the mechanisms explaining the effectiveness of self-talk strategies (Galanis, Hatzigeorgiadis, Zourbanos, & Theodorakis, 2016); such research will help maximizing the effectiveness of self-talk interventions. Contemporary self-talk research is also expanding across the fields of physical education and exercise (Zourbanos, Hatzigeorgiadis, Kolovelonis, Latinjak, & Theodorakis, 2015).

Objectives

After this session the students should be able to:

- Understand the basic concepts and the current trends of the self-talk literature
- Develop research questions and implement empirical studies relevant to the
- contemporary self-talk in sport literature
- Develop and implement, based on the ST-IMPACT principles, self-talk plans in various tasks

- Provide directions for effective self-talk plans to coaches and athletes

Key Concepts

Organic / Strategic self-talk

Self-talk can be described as organic or strategic. Organic self-talk refers to thoughts individual experience intrinsically, because these are the things we say to ourselves which are not planned or prepared. In contrast, strategic self-talk refers to the instrumental use of predetermined cues or phrases that are planned or used in a systematic way as a psychological intervention strategy.

Instructional / Motivational cues

Instructional cues in strategic self-talk refer to statements or cue-words, that the athlete repeat to himself/herself, which relate to attentional focus (e.g., focus on the ball), technical information (e.g., bend your knees), and tactical choices (e.g., always hit the ball on the right side of the pitch), whereas motivational cues in strategic self-talk refer to statements or cue-words, that the athlete repeat to himself/herself, which relate to confidence building (e.g., I am the best), effort input (e.g., try harder) and positive moods (e.g., stay relaxed).

ST-IMPACT

In this acronym, each letter represents a step. In step 1(**I**) and step 2(**M**), the coach together with the athlete should Identify what they want to achieve during training and **M**atch the appropriate self-talk cues (e.g., instructional or motivational) to athletes' needs and motor demands of the task. In step 3**(P)** the athlete should **P**ractice with consistency different motivational, instructional, or kinesthetic self-talk cues. In step 4**(A)** should **A**scertain which cues work best. In step 5(**C**) they should **C**reate the self-talk plan that matches better with the motor demands of the drill and in step 6(**T**) should **T**rain as much as he or she can.

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Additional reading

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Review questions

1. Identify different taxonomies of self-talk types and provide examples of corresponding self-talk.
1. Why is it important to study the factors that influence athletes' self-talk?
2. Why is it important to study the functions and mechanisms of self-talk?
3. How can we develop effective self-talk strategies?

Assignments

(choose one of the two exercises – your essay should be approximately 1500 words).

1. Interview 2 athletes with regard to their self-talk in training and competition and describe their self-talk based on the different taxonomies regarding the origin, the content, and the functions.
2. Prepare a review of studies examining the effects of different self-talk intervention types on different motor and sport activities, and provide recommendations for practice.

RECOVERY IN SPORT

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Introduction

Overall, athletes experience several physical and psychosocial demands such as high training volumes, intense physical exertion, pressures to win, mental fatigue, and injury (di Fronso et al., 2021; Gomez et al. 2018; Soligard et al. 2016; Podlog & Eklund, 2007). Moreover, all athletes contend with a variety of non-sport stressors (relationships, work or study concerns) that can impact their athletic involvement. To manage physical and mental demands effectively, athletes require optimal recovery – that is physical regeneration and psychological recovery strategies. Unfortunately, competitors (especially the elite ones) do not always achieve an adequate balance between sport and/or life (e.g., interpersonal relationships, education, employment) demands and recovery needs. A continuous imbalance between demands and adequate recovery could lead to a state of underrecovery (Balk & de Jonge, 2021; Kellmann, 2002). Underrecovery refers to a condition of insufficient recovery in reaction to general stress, the latter of which can include, but is not limited to training-specific demands (Kellmann et al., 2018). In addressing the topic of underrecovery, two key questions are of interest. 1) Are there psychological factors that contribute to athlete underrecovery, and 2. What are the psychological and physical implications of underrecovery? To answer the first question, the interplay between individual difference factors – emotions, moods, personality – self-regulation and underrecovery is key. Indeed, individual difference factors may impact athlete self-regulation, self-regulation plays a critical role in optimizing recovery, and self-regulation failures may lead to underrecovery. In addressing the second question (implications of underrecovery), to highlight the impact of underrecovery on athlete's physical (e.g., injury) and psychological well-being, research on non-functional overreaching (NFOR) and overtraining syndrome (OTS) is crucial. For the purposes of clarification, Kellmann et al. (2018, p.241) suggest that "Underrecovery and NFO represent two closely related though slightly different concepts. While underrecovery appears to delineate a broader condition of insufficient recovery in reaction to general stress (eg, family, media), Meeusen et al. (2013) characterize NFO as training-specific negative psychological and hormonal alterations and subsequent decreased performance. Continuous underrecovery and NFO often serve as a precursor for overtraining syndrome (OTS)." OTS represents a cluster of physical and psychological symptoms athletes experience as a consequence of training overload and an inability to adapt to such training overload (Hooper & Mackinnon, 1995). Given the host of deleterious implications of underrecovery and/or associated states (i.e. NFOR and OTS), strategies for mitigating underrecovery are needed. Depending upon the nature of the resources which have been depleted, athletes' may require different recovery strategies; also, consistent with the notion that stressors should be counterbalanced by specific recovery strategies (Pelka et al., 2016), and considering the complex relationship between athletes and sleep, it seems reasonable to suggest the potential usefulness of yoga nidra (YN), literally, yoga sleep (see di Fronso & Bertollo, 2021)

as a “tool” for physical and mental *restoration* and to manage athletes’ sleep challenges and debts.

Objectives

After this session the students should be able to:

§ Understand the basic concepts and current trends of recovery literature

§ Develop research questions and implement empirical studies relevant to recovery in sport literature

§ Provide directions for effective recovery plans to coaches and athlete

Key Concepts

Recovery-stress balance

An increase in stress demands must be followed by an increase in recovery activity. If an athlete does not properly recover from the demands of training and competition, stress may accumulate and overtraining and burnout may occur. In other words, to stay healthy and perform optimally, athletes must match their stress demands with meaningful passive and active recovery activities.

Recovery

Recovery is regarded as a multifaceted (e.g., physiological, psychological) restorative process relative to time. In case an individual's recovery status (i.e., his or her biopsychosocial balance) is disturbed by external or internal factors, fatigue as a condition of augmented tiredness due to physical and mental effort develops. Fatigue can be compensated with recovery, that is, the organismic allostatic balance is regained by reestablishing the invested resources on a physiological and psychological level. Recovery is an umbrella term, which can be further characterized by different modalities of recovery such as regeneration or psychological recovery strategies.

Underrecovery trap

The underrecovery trap is a specific manifestation of the apparently paradoxical relation between sport demands and detachment from sport. Specifically, the underrecovery trap suggests that higher sport-related demands are associated with higher physical fatigue, which can interfere with mental recovery, and as such potentially set up an athlete for underrecovery.

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Review questions

1. Identify and provide examples of different kind of recovery strategies

3. Why is it important to study recovery-stress balance in sport?

4. Why is it important to study the underrecovery and its consequences in sport?

5. How can we implement Yoga Nidra for athletes' recovery?

Assignments

(choose one of the two exercises – your essay should be approximately 2000 words).

§ Interview 2 athletes with regard to their recovery strategies in sport and describe them based on the different classification existing in literature.

§ Prepare a guided relaxation for recovery in sport, considering the different stages typical of Yoga Nidra.

SELF-TRANSCENDENCE AND GROWTH GOALS TO PROMOTE WELL-BEING FOR ALL

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Introduction

The promotion of human happiness is a central aim of professionals in sport, physical activity, psychology and education settings. Since ancient times happiness or well-being has been defined both in hedonic terms (e.g., the Greek philosopher Aristipus argued that a good life consists of maximum pleasure) and eudaimonic (for Aristotle a life well-lived allows us to experience the very best within us and to flourish through the development of excellence/virtue). Participation in sport and physical activity very often has positive effects on indices of hedonic well-being, e.g., on positive affect and life satisfaction (e.g., Fox, 1999). However, as indicated by the several unethical behaviors and mental health problems in sport (e.g., Reardon, et al., 2019), mere participating in sport might lower eudaimonic well-being, particularly when it is not accompanied by sport experiences fostering character development.

A social psychological environment emphasizing the intrinsic benefits of sport and physical activity facilitates the promotion of both hedonic and eudaimonic well-being (Ryan, Huta & Deci, 2008). According to these authors, coaches and Physical Education (PE) teachers can help individuals to experience the intrinsic value of sport and physical activity through practices that contribute to the satisfaction of participants' needs for competence, autonomy and relatedness as well as the promotion of beneficence (Martela & Ryan, 2016). Integrating this approach within a climate that also emphasizes mastery goal adoption in sport and physical activity settings is expected to increase even further the benefits on well-being (e.g., Reinboth & Duda, 2006; Duda, Papaioannou, Appleton, Quested, & Krommidas, 2014).

Importantly, a holistic approach in physical activity settings that emphasizes mastery goal adoption and growth across multiple life contexts (e.g., sport, school, social settings etc.) can strengthen the sense of meaning in sport and learning environments and enhance multidimensional self-concept, general self- esteem and satisfaction both in physical activity and academic settings (Milosis & Papaioannou, 2007). Moreover, an emphasis on personal growth goal can promote adaptive self-regulation strategies, healthy lifestyles, intrinsic motivation and both hedonic and eudaimonic indices of well-being (Papaioannou et al., 2009; 2011). A mastery climate emphasizing personal growth goal facilitates the teaching of interdisciplinary or life skills (e.g., self-monitoring, goal-setting and corrective intervention strategies) and the adoption of metacognitive strategies (Papaioannou et al., 2012) that enables individuals to succeed in life.

Recent research also implies that self-transcendence goals aiming to help peers improve their compe- tence in physical activity settings accounts for additional variance in well-being and preference for group learning than the variance accounted for mastery goals (Papaioannou & Krommidas, 2020). Self- transcendence and personal growth goal adoption are connected with life goals that envision the flourishing of both individuals and societies (Papaioannou et al., 2009).

Future intervention studies are needed to investigate how to promote both self-transcendence and personal growth goals across different cultural and physical activity settings. This knowledge is important for sport programs aiming to promote Olympic ideals, positive social change and health and well-being for all (Lyras & Peachey, 2011; Papaioannou 2017).

Objectives

On completion of this section, students should be able to:

- Consider sport and exercise participation as an opportunity to promote both hedonic and eudaimonic well-being.
- Understand that a climate emphasizing satisfaction of participants' needs for autonomy and relatedness, personal growth and self-transcendence goal adoption, is a prerequisite for the promotion of personal and social well-being.
- Start practicing the transfer of mastery goal adoption and self-regulation skills in sport in other life settings.

Key concepts

Perceived motivation climate refers to individual composite views regarding the situationally empha- sized goal structures operating in achievement settings.

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Assignment

Develop a series of 4-5 daily lesson plans for a particular sport or for physical education aiming to develop a climate emphasizing students' autonomy and relatedness and mastery goal adoption to promote children's or adolescents' personal growth goal and self-regulation strategies across different life settings. Some of the self-regulation strategies that you might chose can include self-monitoring, goal setting, positive thinking and self-talk. Please provide all the tasks/activities/drills/games that you will use in these lessons, as well as all the appropriate tools, forms etc., which will be used by athletes or students. Please clarify what you would do to help students find the tasks meaningful.

THE DYNAMICS OF APPROACH AND AVOIDANCE MOTIVATION IN SPORT

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Introduction

Approach and avoidance goals play a critical role in energizing and directing behavior in achievement contexts such as sport settings (e.g., Roberts, Treasure, & Conroy, 2007). There is a general agreement in self-regulation and achievement motivation literature that approach and avoidance goal systems are hierarchically organized, with goals providing integration for sub-goals. In addition, these goals and sub-goals are determined by numerous dispositional, contextual, and situational antecedents (e.g., Elliot & McGregor, 2001; see also Conroy & Hyde, 2011; Roberts, Treasure, & Conroy, 2007, for reviews). Such a complexity may suggest that an achievement goal is a complex system, provided, however, that the internal dynamics of a goal system promotes self-organization in service of integration (Gernigon, Vallacher, Nowak, & Conroy, 2015).

Self-organization is the process by which the interactions among the changing elements of a system spontaneously promote the emergence of a coherent qualitative pattern of behavior of that system. The literature pertaining to self-regulation and achievement goals supports the hypothesis that approach and avoidance goal systems display self-organization with respect both to their dynamism (Fryer & Elliot, 2007; Gernigon, d'Arripe-Longueville, Delignières, & Ninot, 2004; Rebar & Conroy, 2013; Schantz & Conroy, 2009) and to their ability to integrate sub-goals and antecedents into single coherent patterns or multiple mutually inconsistent coherent patterns of approach and avoidance (e.g., Carver & Scheier, 2002; Kruglanski et al., 2002).

Approach or avoidance can therefore be considered a global behavior of a complex goal system. Transitions in this global behavior may be represented by trajectories that converge on specific regions—the attractors—of the space of its possible states. The emergence of a single approach or avoidance attractor as well as the simultaneous emergence of approach and avoidance (conflicting) attractors can be accounted for by mathematical equations that describe the interactions among a few key social-cognitive variables: competence expectancies, benefit for the self, and threat for the self. This focus on competence- and self-relevant information can parsimoniously overcome the losses of parsimony, discriminant validity, and predictive value that have resulted from the proliferation of goal dimensions that characterized the successive refinements of the achievement goal theory (see Roberts, 2012, for a critical review). For instance, this dynamical model of approach and avoidance has already been found to better predict student's intrinsic motivation regarding a basketball trial than Elliot and McGregor's (2001) 2 × 2 model did (Teboul, Le Bars, & Gernigon, 2017).

The dynamical model of approach and avoidance also offers a guideline for coaches. To promote the emergence and persistence of adaptive-goal attractors, emphasis should be given to goals and sub-goals that minimize potential threats and maximize potential benefits for the self, whether those goals involve self- or norm-referenced senses of competence. This strategy is especially relevant for dealing with the unstable motivational state that results from the co-existence of competing attractors. For instance, it would be useful to diminish the importance of failure and to enhance the value of success prior to, and after a task is carried out, so as to tip the balance of the attractor landscape in favor of the approach-goal attractor.

Objectives

Students should be able to:

1. Define the different types of goals according to both the dichotomous (Nicholls, 1989), the 2 × 2 (Elliot & McGregor, 2001), and the 3 × 2 (Elliot, Murayama, & Pekrun, 2011) models of achievement goals.
2. Discriminate the conditions for which mastery-avoidance goals are either adaptive or maladaptive.
3. Formally simulate the effects of the combination of different values of competence expectancies, benefit for the self, and threat for the self.

Key Concepts

Approach: The energization of behavior by, or the direction of behavior toward, positive stimuli (objects, events, possibilities).

Avoidance: The energization of behavior by, or the direction of behavior away from, negative stimuli (objects, events, possibilities).

Dynamical system: Set of elements whose complex interactions make emerge—via a process of self-organization—specific states of that whole set that change nonlinearly.

Mastery: A self-referenced sense of competence.

Performance: A norm-referenced sense of competence.

Key Readings

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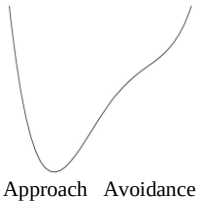
Review Questions

1. Provide concrete examples of mastery-approach goals, mastery-avoidance goals, performance-approach goals, and performance-avoidance goals in a given sport.
3. Why can we consider that the determinants of goal involvement are complex? Base your answer on some studies conducted in sport.
3. Why can we consider that goal involvement states are dynamic? Base your answer on some studies conducted in sport.

Assignment

Based on the values of competence (c) , benefit for the self (b_s), and threat for the self (t_s) that are indicated in the table below, (1) report in this table the resulting values of the control parameter k,

(2) sketch a small picture of the resulting attractor landscapes of approach and avoidance, and (3) provide an example from the literature pertaining to self-regulation or achievement motivation that is consistent with each landscape (follow the example provided in the first line of the table).

c	b_s	t_s	k	Attractor Landscape Graph	Examples
1	1	1	**1**	 Approach Avoidance	Definite approach to a high challenge due to high competence expectancies (e.g., Lazarus & Folkman, 1984) resulting in the stable pursuit of the goal to be reached.
0	1	.5	**?**	**?**	**?**
0	1	1	**?**	**?**	**?**
0	.5	1	**?**	**?**	**?**

Note. $k = (c \times b_s) - [t_s \times (1 - c)]$ with $c \in [0; 1]$, and b_s and $t_s \in]0; 1]$.

COPING IN SPORT:
A COGNITIVE-MOTIVATIONAL-RELATIONAL PERSPECTIVE

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Introduction

The Cognitive-Motivational-Relational Theory of Emotions (CMRT; Lazarus, 1991, 1999) is a holistic theory that addresses human adaptation to stress responses. According to this theory, people are continuously evaluating their environment through cognitive appraisals (i.e., primary and secondary). Primary appraisals refer to the assessment about the personal relevance of a given event regarding one's goals, beliefs, and values. Secondary appraisals evaluate the (perceived) personal resources to manage a certain situation. Accordingly, cognitive appraisals might result into four possible evaluations of a given event: (a) benefit (a gain that already occurred); (b) harm/loss (a damage that already occurred); (c) challenge (gains that might come from a situation); or (d) threat (concerns about possible losses from a given situation).

Depending on the evaluation of the environment, a person will experience one or another emotion. Evaluations of change and benefit are usually associated with positive emotions (e.g., happiness, excitement); while evaluation of threat and harm/loss are associated with negative emotions (e.g., sadness, anxiety). At the same time, emotions alter the state of homeostasis and mobilise efforts oriented to recover it. Coping efforts are the attempts that people make to mitigate the discomfort generated by the alteration of homeostasis.

Coping is defined as the "constantly changing cognitive and behavioral efforts to manage specific internal and/ or external demands that are appraised as taxing or exceeding the resources of the person" (Lazarus & Folkman, 1984, p. 141). Despite coping is defined as a dynamic process, previous research has identified personal tendencies to cope with emotions across time and situations (Crocker et al., 2015). Therefore, coping efforts that address a similar objective are grouped into coping strategies (e.g., increasing effort, logical analysis, acceptance). From a macro-analytic approach, coping strategies can also be grouped into general coping tendencies labelled coping styles (e.g., active/passive, approach/avoidance).

Objectives

The objectives of the session are:

- Get a general overview on the postulates of the CMRT
- Categorise coping efforts at different levels
- Apply CMRT to help athletes regulate their emotion

Key concepts

Cognitive appraisals: Evaluations about the significance of what is happening in a person's environment.

Emotions: An organized psychophysiological reaction to ongoing relationships with the environment, most often, but not always, interpersonal or social.

Coping: Constantly changing cognitive and behavioral efforts to manage specific internal and/ or external demands that are appraised as taxing or exceeding the resources of the person.

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Review questions

1. What are the key components of the CMRT?
2. How do operate the key components of the CMRT?
3. What are the different options to modify the emotion process?
4. How can coping efforts be classified?

Assignment

Imagine a case of an athlete having difficulties coping with their emotions and apply the Cognitive-Motivational-Relational Theory to try to help him/her. Concretely, (a) Describe the case and the circumstances in which her/she is having problems in emotion regulation and what negative consequences it has for him/her; (b) Use CMRT to analyse the different emotion components involved in that case (i.e., triggering event, cognitive appraisals, evaluation of the situation, emotions experienced); and (c) Suggest a training program based on improving his/her coping skills.

EXERCISE ON PRESCRIPTION FOR DEPRESSION: MAXIMIZING ANTI-DEPRESSIVENESS AND MINIMIZING ATTRITION

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Introduction

Depression is a life-threatening and prevalent mental health disorder, affecting 300million people worldwide. Exercise is recommended for depression due to robust clinical evidence. Particularly, supervised aerobic exercise in adults with a referral/clinical diagnosis of major depression favors over depression treatments, showing low attrition (<15% dropouts) and consistent antidepressant effects in lower risk of bias and in various delivery formats and depressive severities or measures used (Morres et al., 2019a). Exercise shows similar antidepressant effects and attrition in various groups including perinatal women (Morres et al., 2022) and obese adults (Morres, Hatzigeorgiadis, Theodorakis, 2021; Morres et al., in preparation). Despite this positive clinical evidence, pragmatic-(real life) evidence reports that depressed outpatients show high attrition in exercise on prescription schemes (Crone, Johnston, Gidlow, Henley, & James, 2008; James et al, 2008; Tobi, Kemp, & Schmidt, 2017). Attrition is often attributed to various depression aspects, mainly a-motivation. However, depressed outpatients are highly motivated in the initial referral stage of exercise on prescription schemes, in particular from the referral endorsement through to the first appointment (e.g., Crone et al., 2008; Harrison, McNair, & Dugdill, 2005). Hence, motivation may not play a salient role in adopting or adhering to exercise on prescription schemes. Indeed, Morres (2017) examined Self-Determination macro-Theory (SDT) (SDT; Ryan & Decci, 2017) in major depressed outpatients (N= 206) and found that the predictive effect of motivation on depression relief and exercise participation were deactivated by the predictive impact of SDT basic psychological needs of competence, autonomy and relatedness. Morres, Stathi, Martinsen, & Sørensen (2014) describe the SDT needs as follows: Competence is the sense of being effective in performing the behavior. Autonomy is the perception that the behavior is self-administrated with no external threats. Relatedness is the sense of belonging and meaningful connection with others. A recent study developed an SDT-driven exercise intervention for depression given the psychological needs importance and the depressed patients' (1) diverse profile with different needs/preferences and (2) disturbed exertion with abnormal processing of information in exercise on prescription intensities (Morres, Hinton-Bayre, Motakis, Carter, & Callaghan (2019b). Specifically, Morres et al (2019b) compared the antidepressant effects of the ideographic model of preferred intensity exercise (self-determined intensity) vs. the nomothetic model of prescribed intensity exercise (fixed intensity set by guidelines). Based on the study findings, 32% of the preferred intensity group (n=6) experienced clinically significant depression relief corresponding to recovery and revealed "normal" perceived exertion due to positive correlation between heart rate and effort perception (Morres et al., 2019b). The remaining 68% of the preferred intensity group experienced no clinically significant changes in depression and revealed disturbed exertion due to lack of correlation between heart rate and effort perception (Morres et al., 2019b). Interestingly, only one patient (5%) in the prescribed intensity group showed clinically significant depression relief, consistent with chance (Morres et al., 2019b).

Objectives

On completion of this section, the participants of the Intensive Course-2022 should:

- Become familiar with the literature on the antidepressant effects of exercise in adults with major depression, in adults with obesity and in adult perinatal women.
- Develop theory-driven consultancy to satisfying the SDT psychological needs for exercise.
- Describe an ideographic exercise model and analyze individualized treatment responses.

Key concepts

Exercise reveals antidepressant effects in clinical settings, but depressed adult patients show high attrition in the pragmatic settings of exercise on prescription schemes. Satisfying the SDT basic psychological needs for exercise can support exercise adoption/adherence and improve depression in depressed outpatients. Preferred vs. prescribed intensity exercise led 32% of depressed patients (n= 6) to individual and clinical significant treatment responses, which corresponded to depression recovery. A visa versa comparison showed one patient in the prescribed intensity group (5%) with clinical significant treatment response, consistent with chance.

Key reading

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Tobi, P., Kemp, P., & Schmidt, E. (2017). Cohort differences in exercise adherence among primary care patients referred for mental health versus physical health conditions. *Primary Health Care Research & Development, 18*(5), 463-471. doi:10.1017/S1463423617000214

Assignment

First, develop a state-of-the-art review for the anti-depressiveness of exercise in adults with obesity, with diagnosis of major depression, and with perinatal depressive symptoms. The review should (1) detail strengths/limitations of previous studies and describe key clinical aspects of exercise interventions; (2) describe a theory-driven consultancy on satisfying the SDT basic psychological needs for exercise to facilitate exercise participation and to improve depression in major depressed adult outpatients. Second, present theoretical grounds of preferred vs. prescribed intensity exercise for depressed outpatients, and outline individualized treatment responses.

EMOTIONS IN SPORT – A FOCUS ON OUTWARD EMOTIONAL REACTIONS

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Introduction

Emotions are an inherent part of sport competitions. Because athletes often pursue personally relevant goals with an uncertain outcome, athletes can experience extreme states of positive and negative emotions. In fact, the emotional rollercoasters associated with the highs and lows during sport competitions are one of the main reasons that make sports so fascinating, both for the athletes themselves and for spectators. In emotion research, it is important to distinguish between the terms emotions, mood, and core affect. While core affect refers to the raw feeling at a given moment, derived from the two dimensions valence and arousal, emotions are a psychophysiological response to a relevant stimulus (Russell, 2009). In addition, compared to emotions, moods often have no clear cause, are less intense, but last longer (Beedie et al., 2005). Furthermore, it is important to consider the multicomponential nature of emotions involving changes in subjective experience, physiological processes, and observable behavior (Mauss et al., 2009). Subjective experience refers to the internal experience of an emotion and is often considered the aspect that distinguishes an emotion from other psychological states (Scherer, 2009). Typically, validated questionnaires that attempt to measure either the subjective experience of specific emotions, moods, or, more generally, the subjective experience of positive and negative affective states are used. Physiological processes include changes in the autonomic nervous system and can be measured by an individual's heart rate, blood pressure, or skin conductance. Finally, the behavioral component of emotions consists of changes in an individual's facial expressions, gestures, postures, or verbalizations. Here, it has been postulated that focusing on the behavioral component of emotions may be a promising tool to measure emotions 'online' during sport competitions (Fritsch et al., 2020).

From a sport psychological point of view, a main research question is about the antecedents of emotions as it allows to study the conditions and the related psychological processes that lead to emotions. To study the antecedents of emotions, appraisal theories of emotions seem to provide a useful theoretical framework (Lazarus, 1991; Scherer, 2013). According to appraisal theories, emotions result from a person-environment transaction implying that it is not a situation per se that elicits emotions, but rather the way it is psychologically appraised by the individual. Focusing on outward emotional reactions, studies indicate that situational factors related to the importance of the situation (e.g., time point in the match) or related to the controllability of the situation (e.g., score configuration) can predict the occurrence of emotions (Fritsch et al., 2020; Fritsch et al., 2021). Another second main research question is about the consequences of emotions in sports. A recent qualitative study indicates that outward emotional reactions may influence performance-relevant processes such as athletes' confidence, concentration, and motivation (Fritsch et al., 2021). At the same time, the behavioral component of emotions highlights the social context of emotions. Here, the same study indicates that outward emotional reactions may also influence the opponent's confidence and motivation. Finally, given the relevance of emotions for sport performance, a third research question refers to emotion regulation. A model that aims to classify the

different ways of how individuals try to regulate emotions is the process model of emotion regulation postulating five emotion regulation strategies, namely, situation selection, situation modification, attentional deployment, cognitive change, and response modulation (Gross, 1998). Here, using this theoretical classification, it seems promising to tailor specific psychological strategies such as self-talk, imagery, or relaxation to the need of the athletes and the demands of the situation.

Objectives

After this session the students should be able to:

§ Understand the multicomponential nature of emotions

§ Distinguish constructs such as emotions, moods, and core affect

§ Develop research questions and implement empirical studies relevant to emotions in sport literature

§ Identify antecedents and consequences of emotions within the context of sports

§ Provide directions for effective emotion regulation plans to coaches

Key Concepts

Emotions, mood, core affect

Emotions are considered a psychophysiological response to a relevant stimulus including changes in subjective experience, physiological processes, and observable behavior. Compared to emotions, moods often have no clear cause, are less intense, and last longer. Core affect refers to the raw feeling at a given moment, derived from the two dimensions valence and arousal.

Outward emotional reactions

Outward emotional reaction refers to a general integrated impression from the individual's behaviour to his/her emotional state. This impression integrates different body channels that are all related with indicating an emotional state, such as postures, gestures, facial expressions, and verbalizations. While a positive outward emotional reaction indicates that something emotionally-pleasant has happened to the individual (e.g., a won point), a negative outward emotional reaction indicates that something emotionally-unpleasant has happened to the individual (e.g., a lost point).

Emotion regulation

Emotion regulation refers to strategies athletes may use to influence the different components of an emotion (i.e., subjective experience, physiological processes, observable behavior). Based on the process model of emotion regulation, such five different emotion regulation strategies can be distinguished, namely, situation selection, situation modification, attentional deployment, cognitive change, and response modulation.

Key references

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Review questions

1. Identify different components of emotions and the corresponding measures.

2. Why is it important to study the antecedents of emotions in sports?

3. Identify different paths of how emotions may affect sport performance.

4. How can we develop effective emotion regulation strategies?

Assignments

(choose one of the two exercises – your essay should be approximately 2000 words).

§ Interview 2-3 athletes with regard to their emotions in sport and identify their emotion regulation strategies based on the process model of emotion regulation by Gross (1998).

§ Prepare a study protocol that aims to examine the antecedents and/or consequences of emotions in a specific sport by considering the different components of emotions.

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This seminar will focus on the effects of sports and physical activity as an additional mean to achieve both prevention and cessation from the addictive behaviors of smoking, alcohol abuse and drug use.

It seems that participation in sports and physical activity has a protective effect against smoking and alcohol abuse as well as a supportive effect on cessation treatments. However, preventive and intervention programs for addictions should focus on an overall healthy lifestyle including sports and exercise programs, rather than on the respective addictive behavior solely. Moreover, long-term interventions for addictive behaviors should be coupled accompanied with respective counselling strategies (Hassandra et al., 2015).

Recently, some studies indicated that sport and physical activity play an important and supportive role on the treatment and the prevention of the use of psychoactive substances, as it reduces anxiety and depressive symptoms, improves self-confidence, self-esteem and body image, enhances mood states, general well-being and quality of life, offers the opportunity to attain a pleasant mental state without substance use, and adopt a positive lifestyle change. All the above-mentioned psychological changes have been closely linked to positive substance-related outcomes such as reduced drug intake, increased abstinence rate, reduced craving, higher completion rate of the rehabilitation program, altered behavior and relapse prevention and created positive social outcomes, such as finding dwelling and employment, and development of friendship networks.

Relevant study indicated that after a six-month intervention program, exercise programs should be included in the philosophy of any rehabilitation program for drug addiction. Participants stressed that exercise helped improve their mood, self- esteem, energy levels, body sensation and body image, tension release, both physical and mental, and to adopt healthier eating habits (Diamantis et al., 2018).

Our research team completed a project called, the “Reintegration Through Sport” project. The project focused on the benefits of outdoor sports activities in order to create a secure environment, giving ex-drug addicts equal opportunities, contributing to their treatment and social reintegration. Adventure therapy (AT) is an experiential and interactive intervention, which lies upon psychosocial and educational theories. AT utilizes the outdoor adventure activities as a primary therapeutic tool, promoting real or perceived physical and psychological risk, as a clinically important factor in achieving desired outcomes and can be applied either as an exclusive, complementary or parallel therapeutic tool to a wide range of mental disorders. AT utilizes outdoor adventure activities as well as a range of activities including goal setting, confidence and problem-solving approaches, that are physically and/or psychologically demanding, to promote personal change such as positive reinforcement of the self-esteem and self-efficacy of the individual. Successful completion of these

activities could enhance self-efficacy especially when performance is the result of individual competence rather than incidental or external events. Relevant study indicated that Adventure Therapy offer an alternative therapeutic approach to addiction counseling by creating positive changes. The study provides supportive evidence that participation in an adventure-based therapy program had a significant impact on the addicted person's self-concept by enhancing the psychological factors of self-efficacy and self-esteem (Panagiotounis et al. 2020).

Objectives

After this seminar the students should be able to:

Understand the basic concepts and the current trends of the relationships between sports, physical activity and addiction.

Understand the reasons why exercise programs should be used as a supportive strategy for the treatment of addictive behaviors like smoking, alcohol abuse and drug addiction.

Key Concepts

- The underlying mechanisms of the positive effects of exercise and sports on smoking and alcohol
- The systematic synthesis of new knowledge on this topic can improve our understanding and inform the development of more effective intervention programs.
- Sports and physical activities can contribute to the creation of a secure environment, giving ex-drug addicts equal opportunities, contributing to their treatment and social reintegration.

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Additional reading

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Review questions

Relationships between sports and addictive behaviors.

Strategies to increase exercise for people with drug addiction.

Assignment

The benefits of sports and exercise programs on addicted behaviors.

What type of exercise programs and physical activities would be more effective against addiction?

STUDENTS' AFFECTS AND EMOTIONS IN PHYSICAL EDUCATION

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Introduction

While long-term benefits are related to positive affects and emotions in PE (Jekauc & Brand, 2017), how to foster emotions, such as enjoyment, in PE remains poorly understood. Therefore, there is a need to investigate the determinants of positive emotions in PE. In general, enjoyment in school declines as well as enjoyment of PE, over the course of a student's school career (Domville et al., 2019). But what can teachers do to motivate children and young people to engage in PE so that they satisfy WHO-recommendations for regular physical activity? This is where the importance of feelings experienced during PE comes into play. Positive affects and emotions play a decisive role in developing long-term exercise habits (Jekauc & Brand, 2017). In addition, there is evidence that in early ages, the foundations are laid for developing a physically active lifestyle (Hills et al., 2007). Recent findings show that the influence of the teacher's support of student autonomy in PE affects the physical activity of students via the students' intrinsic motivation (Leisterer & Jekauc, 2020) or via the satisfaction of particular basic psychological needs (Leisterer & Jekauc, 2019; Engels & Freund, 2020). Thus, the investigation of influencing determinants of positive emotions in PE, such as enjoyment, is warranted. In turn, empirical findings of intervention studies can be translated into practical implications for teaching, which may, if implemented consistently, lead to more enjoyment in PE.

Objectives

After this session the students should be able to:

§ Explain the difference between affects and emotions.

§ Provide practical implications to apply autonomy support to elicit positive emotions in sport and exercise related settings.

§ Reflect on methodological issues in investigating psychological aspects in PE.

§ Plan experimental studies according to the MaxConMin principles.

Key Concepts

Affect

Affect is a psychophysiological concept of human perception, which can be described within the circumplex model of affect (Russell, 19980) based on the dimensions of affective valence and arousal. Valence is the psychological perception of pleasure or unpleasure, whereas arousal describes the psychophysiological dimension of feeling activated or deactivated. Individuals perceive positive and negative affects permanently, changing within milliseconds–this stands in contrast to the concept of emotions.

Emotions

Emotions are individual perceptions containing a core affect, which is evaluated cognitively and which is associated with different psychological aspects, such as behavior, motivation, or communication. Due to cognitive evaluations, emotions are distinct and can be labelled as specific perceptions, for example "enjoyment", "sadness", or "hope". These distinct perceptions are intense and can last several minutes.

Autonomy support

Autonomy support means to create an environment in which individual autonomous motivation can be developed. Autonomous motivation is related to the satisfaction of the three basic psychological needs: autonomy, competence, and social relatedness. In order to satisfy these three needs in PE, an autonomy supportive environment focuses on self-determined task, informative feedback, and/or social interaction–to name a few actions (Reeve & Jang, 2006). Autonomy support is associated with positive psychological outcomes, such as enjoyment.

MaxConMin principles

The MaxConMin principles embrace methodological actions to clearly identify experimental effects. "MaxConMin" is an abbreviation for: Maximizing the primary variance (i.e., the influence of the predictor on the outcome variable), Controlling the secondary variance (i.e., the influence of confounding variables on changes of the outcome variable), and Minimizing errors (i.e., variances that corrupt the primary variance due to mistakes in the experimental procedure).

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Review questions

1. According to the circumplex model of affect, why is it possible that two different individuals can perceive the exact same core affect but different emotions in the same situation?
2. Please explain the importance of autonomy support of adolescents in sport and exercise related settings.
3. Why do we need intervention studies in PE and what might be possible methodological issues within this setting?

Assignments

(Choose one of the two exercises).

§ Imagine being a sport psychology practitioner and your client is a local high school. The school wants to revise their existing PE program to "make it more fun" for the students. Your mission is to create a portfolio of four sport psychological implications with a valid empirical background.

§ Describe the procedure of an intervention study to answer the following research question: "Which effect has social interaction on students' affective perceptions in an autonomy supportive class in PE?" Which methodological actions do you incorporate in your study procedure to maximize primary variances, control secondary variances, and minimize errors? Please clarify what you do, when you do it, and why you do it.

SYSTEMATIC REVIEWS

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Introduction

Locating your original work within the existing research, identifying limitations within previous literature, and signposting the way forward for future research can be challenging (e.g., Page et al., 2020). To review the existing literature in a rigorous and systematic way, different types of reviews have emerged such as the systematic review. Systematic refers to the approach of being transparent, reproducible, and defined before the search strategy is conducted. For example, researchers should specify methods and protocols a priori, document the search process, use explicit mechanism to handle quality assessment, and provide appendices including search strategies and sample data extraction (e.g., Booth et al., 2016). However, reviews of published reviews reported that key information about included studies is often poorly reported and thereby diminishes their value to readers (e.g., Liberati et al., 2009). To address these issues, researchers are advised to use a guideline that suits the focus of their systematic review (e.g., Gunnell et al., 2020). A commonly used tool is the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA; Moher et al., 2020). The PRISMA 2020 statement (Page et al., 2020) that expands and replaces the 2009 statement (Moher et al,, 2020) consists of seven sections including 27 items and additional guidance for each item, that deemed essential for transparent reporting of systematic reviews.

Objectives

After this session the students should be able to:

- Understand the basic concepts of systematic reviews
- Develop PICO criteria
- Use clear, explicit eligibility criteria and document their search strategy
- Describe mechanisms to handle quality assessment

Key Concepts

PRISMA statement

The Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) statement provides guidance for systematic reviews that reflects advances in methods to identify, select, appraise, and synthesize studies (Page et al., 2020). The statement consists of a 27-item checklist (e.g., item 3: describe the rationale for the review in the context of existing literature) that focused on the reporting of randomized trials. However, PRISMA can also be used for reporting other types or research.

PICO

The Population, Intervention, Comparison, and Outcome (PICO) framework increases the precision in the development of search strategies (Schardt et al., 2007). For example, the PICO criteria can be used to specify the type of quantitative and/or qualitative studies (e.g., randomized-controlled trials). To best suit your research questions, other frameworks can be used such as the Sample, Phenomenon of interest, Design, Evaluation, Research type (SPIDER) and the Setting, Perspective, Intervention/Interest, Comparison, Evaluation (SPACE) approach.

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Review questions

1. What is the difference between a review and a systematic review?
2. How are decisions about study eligibility made?
3. How are search strategies developed and executed?
4. Should a search be updated before the systematic review is published?
5. What steps would you consider to make sure that you don't miss relevant articles?
6. How should the quality and risk of bias be assessed?

Assignments

(your essay should be approximately 2000 words).

§ Develop PICOS criteria and search terms to identify (at least three) relevant articles on your research question of interest. Conduct an initial search of the literature, identify possible problems, and document your search strategy.

VISUAL PERCEPTION IN SPORT

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Introduction

Vision is one of the six sensory systems that we use to know and interact with our environment but it has been singled out as the most important form of exteroception for guiding action. The reason for this is probably that many human actions are directed at objects or targets beyond our immediate physical contact. The only link between these objects and us is the pattern of light reflected from their surfaces, and yet we identify and act upon them with great ease. No doubt, humans make significant strides in establishing appropriate relations between perceptions and actions at early stages of development. (Just think of the time and practice it takes a baby to be able to grasp an object within their reach.) But once the relations between perceptions and actions are better established, humans can be incredibly skillful at interacting with distant objects even when the constraints imposed on the interaction are severe and a high degree of precision is required.

In sports, there is an abundance of far aiming tasks, often with the purpose of scoring. Although it is evident that vision plays an important role in guiding far aiming actions, its exact role is often unclear. For example in static far aiming tasks such as rifle shooting, free throw shooting or billiards, the duration of the final fixation on the target before initiating the final movements correlates with expertise. In contrast, research has shown that in tasks that are more dynamic it is not so much the fixation duration that correlates with expertise but rather the timing of that fixation. These results beg the question *What role does vision play in guiding action?* One researcher (Gibson, 1966) proposed that the role of vision (or other sensory organs) is to detect patterns in the ambient array through stimulation of receptors. This detection of specific patterns leads to the perception of information that can guide actions. At the time, this was a radical theory because it proposed that perception was direct, or unmediated by cognitive processes, and it also highlighted the role of action in picking up visual information. In other words, it proposed that perception guides action and that action discloses perception in a cyclical bidirectional manner. Fast-forward three decades and researchers were terribly excited by the accessibility of eye-trackers; hefty glasses sometimes mounted on helmets which could show a researcher where the wearer was looking (or to be more precise, the direction where the wearer was looking). An enormously influential piece of research by Vickers in 1996 set the scene for the following two-decades of eye-tracking studies. Two decades looking at where sportspeople were looking without too much scrutiny over what role vision plays in guiding action. Elsewhere research by Oudejans' group (2002, 2006, 2007, 2008) contradicted both the findings and interpretations. While Vickers found long fixations *before* movement initiation, Oudejans found late fixations *during* the movement. One study, however, made a difference because it asked: *what is the information source that guides the action*?...

Conventional wisdom says that basketball players need to look at the basket before they shoot but this may be wrong is two ways. First, it is not granted that vision is required before the shot as opposed to during the shot. Second, it is not certain that the player must actually see the basket as opposed to merely looking at it. Once we turn our attention to what information sources may be guiding the actions, it also becomes clearer what type of training strategies should be used to improve performance.

Objectives

On completion of this section, students should be able to:

- Understand different theoretical positions concerning the use of visual information for action.
- Identify a range of perceptual-motor training methods and explain why they might be beneficial for learning.

Key concepts

Affordance is an action possibility

Key readings

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Additional reading

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Brand, M.T., & de Oliveira, R.F. (2017). Recalibration in functional perceptual-motor tasks: a systematic review. Human Movement Science, 56, 54-70.

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