Erasmus+

SPORT AND EXERCISE PSYCHOLOGY

INTENSIVE COURSE 2025

27-31 January, 2025 | **Trikala, Greece**

Organized by the

EUROPEAN MASTER IN SPORT & EXERCISE PSYCHOLOGY

More than 50 students and 12 lecturers
from collaborating European Universities

University of Thessaly
Department of Physical Education and Sport Science

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emsep.uth.gr/intensive-course

All times are UTC+2

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Sport and Exercise Psychology Intensive Course

Trikala, Greece

27th to 31st January, 2025

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 9th time that this IC will be hosted by the University of Thessaly. 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 the spirit of continuous development of European Sport Psychology alive and to disseminate this enthusiasm and spirit to the youngest generation of European sport psychologists, that is, to you!

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 Master 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).

We, the lecturers at the University of Thessaly, are more than pleased to host all of you in our School, which holds a truly European Master's program in Sport and Exercise psychology, which started fifteen years ago in collaboration with the Universities of Jyvaskyla, Lund and Leipzig. In the most recent years, this Master's program continues it operation in collaboration with the University of Leipzig, the D'Annuzio University of Chieti-Pescara and the University of Leipzig.

All lecturers teaching in this IC are committed to continue the long tradition of collaboration between European universities with expertise in sport and exercise psychology, in the organization of the present IC. We very much hope to sustain this IC alive, 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 2025

Athanasios Papaioannou
Professor
Director of the 2025 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 center 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.

Department of Physical Education and Sport Science

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 was 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 and Sport Science Website: http://www.pe.uth.gr/

The Students of the 2025 Intensive Course

UNIVERSITY	STUDENT		UNIVERSITY	STUDENT
University of Thessaly	Michael Vance		University of Leipzig	Anna Eckert
	Santiago Passega			Antonia Hubalek
	Pedro Mendes			Nerija Sickel
	Alex Iscru			Daniel Leppin
	Ilias Arachovitis			Roisin Bolger
	Konstantina Gianniki			Josephine Kroll
	Dimitris Maggos			Ronja Lichau
	Kiriaki Alexopoulou			Ehsan Shamaeli
	Christina Kepesidou			Joleen Meissner
	Paraskevi Koutali			Merle Riether
	Efstathios Belevonis			Moritz Schnockel
	Myrto Salli			Richard Rong Yi Hu
	Arsinoi Kafritsa			Nathalie Seifert
	Stefania Tsouri			Luc Riedmayr
	Stylianos Jenevrakis			Hritvi Chitroda
	Zaharias Pogkas			Ece Batur
	Ioanna Karasi			Kesia Benny
	Antigoni Andreadi		Free University of Bozen-Bolzano	Marta Duina
	Laura Armengol Bosch		University of Jyvaskyla	Inna Syrykh
	Mustafa Cosgun			Marti Oller Brunet
	Andy Liebner			Shehayar Arif
Goethe University Frankfurt	Zoe Holland-Cunz			Komal Abbasi
	Lisa Mundt			Sanni Lappi
	Lorenz Imhof			Ilias Karapanos
	Tim Bellina		Autonomous University of Barcelona	Laia Ruiz Mainar
University of Orleans	Arno Robin			Sara Targa Mas
KU Leuven	Emma Boone			
Bursa Uludag University	Ahmet Anil Yildiz			
	Ece Tekay			

The Lecturers of the 2025 Intensive Course

CARRARO ATTILIO
Free University of Bozen-Bolzano, Italy

CASAS ANNA JORDANA
Autonomous University of Barcelona, Spain

CHRONI STILIANI (ANI)
Inland Norway University of Applied Sciences Norway

ENGLERT CHRIS
Goethe University Frankfurt, Germany

FRITSCH JULIAN
Goethe University Frankfurt, Germany

GERBER MARKUS
University of Basel, Switzerland

GORGULU RECEP
Bursa Uludag University, Turkey

HATZIGEORGIADIS ANTONIS
University of Thessaly
Greece

KETTUNEN EEVA
University of Jyvaskyla, Finland

MORRES IOANNIS
University of Thessaly
Greece

PAPAIOANNOU ATHANASIOS
University of Thessaly, Greece

THEODORAKIS YANNIS
University of Thessaly
Greece

WALTER NADJA
University of Leipzig
Germany

All times are UTC+2

Time	Friday 24/1/2025		Time	Monday 27/1/2025	Tuesday 28/1/2025	Wednesday 29/1/2025	Thursday 30/1/2025	Friday 31/1/2025
			9.00-11.00	LET'S MEET	IOANNIS MORRES Exercise for Clinical Adult Samples with Anxiety and Depression Symptoms. Considerations of Perceived Exertion	ATTILIO CARRARO Values-based education through sport and PE: A critical reflection	MARKUS GERBER Physical activity, stress and coping	ANI CHRONI Going from Elite Athlete-To-Coach: Transiting from Being the Flower to Becoming the Gardener
			11.00-11.30	*Break*	*Break*	*Break*	*Break*	*Break*
12.00-12.45	VIRTUAL COMPONENT YANNIS THEODORAKIS Enhancing Substance Use Disorder recovery through integrated physical activity and behavioral interventions		11.30-13.30	NADJA WALTER Side Effects in Sport – Exercise Addiction	VIRTUAL COMPONENT ANNA JORDANA CASAS Perfectionism and beliefs in the sport context: the influence of social agents	Trip to Meteora	RECEP GORGULU Psychophysiological indicators of mental control under pressure in sport	ANTONIS HATZIGEORGIADIS Strategic Self-talk in Sport
			13.40-14.20	WORKSHOP YANNIS THEODORAKIS – How Physical Activities Enhance Therapeutic Goals in Substance Use Disorders	VIRTUAL COMPONENT Getting to know FEPSAC		*Lunch Break*	Getting to know ENYSSP
			14.20-15.50	*Lunch Break*	*Lunch Break*			*Lunch Break*
			15.50-17.50	JULIAN FRITSCH Methods of How to Assess the Emotional Dynamics in Sports	EEVA KETTUNEN Increasing exercise motivation and self-efficacy through the use of sport and wellness technology: Case studies among different user groups		ATHANASIOS PAPAIOANNOU Self-Transcendence and Growth Goals to Promote Well-being for all	
					21.00 *Greek Night!* *Food, Music and Dance*	*19.00* *Movie Night!*	*21.00* *Night Out!* *Drinks, Music and Dance*	

Travelling to and moving in Trikala

The following links and tables will provide you with all necessary information required to travel between Greece's two biggest airports and Trikala. Average travel time from/to Athens and Thessaloniki is approximately a little over 4 hours and 2 and a half hours, respectively.

Athens and Thessaloniki Airports

Athens International Airport "Eleftherios Venizelos"
How to travel from and to the Athens International Airport

Thessaloniki Airport "Makedonia"
How to travel from and to the Thessaloniki Airport

KTEL Bus Stations (Athens)

KTEL Trikala Bus Station, +302431073130
KTEL Athens Bus Station (Liosion 260), +302108311434

Departure from TRIKALA							Arrival in Athens
MON	TUE	WED	THU	FRI	SAT	SUN	
00:45	00:45	00:45	00:45	00:45	00:45		05:00
6:30	6:30	6:30	6:30	6:30	6:30		10:45
10:00	10:00	10:00	10:00	10:00	10:00	10:00	14:15
13:30	13:30	13:30	13:30	13:30	13:30	13:30	17:45
15:30	15:30	15:30	15:30		15:30	15:30	19:45
				16:00		17:00	20:15
19:00	19:00	19:00	19:00	19:00	19:00	19:00	23:15

Departure from ATHENS							Arrival in Trikala
MON	TUE	WED	THU	FRI	SAT	SUN	
6:30	6:30	6:30	6:30	6:30	6:30		10:45
10:00	10:00	10:00	10:00	10:00	10:00	10:00	14:15
13:30	13:30	13:30	13:30	13:30	13:30	13:30	17:45
15:30	15:30	15:30	15:30	15:30	15:30	15:30	19:45
18:30	18:30	18:30	18:30	18:30	18:30	18:30	22:45
21:00	21:00	21:00	21:00	21:00	21:00	21:00	01:15

KTEL Bus Stations (Thessaloniki)
KTEL Trikala Bus Station, +302431073130
KTEL Thessaloniki Bus Station, +302310595405

Departure from TRIKALA						
MON	TUE	WED	THU	FRI	SAT	SUN
6:30	6:30	6:30	6:30	6:30	6:30	
10:15	10:15	10:15	10:15	10:15	10:15	10:15
13:30	13:30	13:30	13:30	13:30	13:30	13:30
				15:15	15:15	15:15
16:00	16:00	16:00	16:00	16:00		
						17:15
20:00	20:00	20:00	20:00	20:00		20:00

Departure from THESSALONIKI						
MON	TUE	WED	THU	FRI	SAT	SUN
9:30	9:30	9:30	9:30	9:30	9:30	
12:00	12:00	12:00	12:00	12:00	12:00	12:00
15:15	15:15	15:15	15:15	15:15	15:15	15:15
17:00	17:00	17:00	17:00	17:00		17:00
				18:30		18:30
					19:00	
20:30	20:30	20:30	20:30	20:30		20:30

Getting around Trikala
The Department of Physical Education and Sport Science is located here.

We have arranged for a city bus to transfer students from the city center to the Department and back again.
The bus will start its route every day at 8:30 am at this location and will leave for Trikala again at 18:15.

The Lithaion Hotel, for those of you that will choose to stay there, is located here.

The Panellinion Hotel, where the dinner on Tuesday evening will take place, is located here.

VALUES-BASED EDUCATION THROUGH SPORT AND PHYSICAL EDUCATION: A CRITICAL REFLECTION ON "RESPECT"

Attilio Carraro
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Introduction

Values education is one the prerogatives needed for the development of global competencies (OECD, 2018). The key characteristic of values, as defined by Bruner (1996), is that they depend on cultural influences and are not univocal within different social groups. Because of this characteristic, it is difficult to define values, however it is possible to clarify their functions, which are generalizable for any context: Values are the guiding principles that underpin what people believe to be important when making decisions in all areas of private and public life (included, of course, sport participation). They determine what people will prioritise in making a judgement, and what they will strive for in seeking improvement (Halstead and Taylor, 2000; Haste, 2018). Values help to outline life goals, enable a harmonious relationship with the surrounding sociocultural context, and guide to use appropriate behaviour in different situations. In general, the purpose of values is to improve people's quality of life (OECD, 2019).

Values-based Education (VbE) is the term by which values education is defined in the international context. This educational methodology takes into consideration the individuals and the social environment in which they are immersed, to provide explicit learning experiences based on positive values in order to ensure the moral development of citizens (Lovat & Toomey, 2009).

Respect (for self, others, country, diversity, and the environment) is recognized within the fundamental values of citizenship. It is an attitude towards someone or something where the object of that attitude is judged to have some kind of importance, worth or value which warrants positive regard and esteem (Council of Europe, 2016). According to the Council of Europe (2016), respect encompasses three key aspects: (a) Appreciation and value for someone or something based on the belief in their intrinsic importance; (b) Esteem for others as equal human beings, acknowledging a shared dignity and the same set of human rights and freedoms regardless of beliefs, opinions, lifestyles, or practices; and (c) Positive regard for the beliefs, opinions, lifestyles, and practices of others, as long as they do not compromise or violate the dignity, rights, or freedoms of others. Respect can therefore take several forms, depending on the nature of the "object" that is respected (e.g. respect for one's health, opponents, referees, rules of the game, sport facilities and equipment).

It is commonly spread the notion that sport and PE allow youths to experience a variety of situations which can enable them with the shaping of different forms of desirable emotional and social competencies (Beni, Fletcher, & Chróinín, 2017). Several international Organizations (among these the International Olympic Committee - IOC, the International Paralympic Committee - IPC, the United Nations Educational Scientific and Cultural Organization, - UNESCO, and the World Antidoping Agency - WADA) state in multiple documents that sport plays the role of antidote to social hazards and is a privileged tool for transmitting positive values to young people. According to the IOC, the three values of olympism, Excellence, Friendship and Respect constitute the foundation on which "the Olympic movement develops its activities to promote sport, culture and education with a view to building a better world" (https://olympics.com/ioc/olympic-values). However, the practice of sports can

lead to the development of proper values only if it is properly timed and specifically focused towards that end (Abad Robles, Navarro Domìnguez, Cerrada Nogales, & Giménez Fuentes-Guerra, 2021).

Objectives

- Becomes familiar with the concepts of respect and values-based-education;
- Introducing the use of some scenarios to stimulate participants' critical reflection (that is a way to change our thinking and behaviour about a subject) on the value of respect;
- Introducing ideas for didactic and research in the area of VbE.

Key concepts

The practice of sports can lead to the development of proper values, included respect, only when it is properly designed, taught, and managed.

The "winning at all costs" mentality, the widespread justification of violence, the acceptance of illegal behaviour, and the diffusion of homophobic, sexist, and racist discourses suggest for a cautious approach to the assumption that sport provides a prototypical activity to promote respect.

All these negative characteristics of sport are easily reflected in PE at school, particularly when the adopted teaching model is inspired by sports didactic and, mostly, team sports didactic.

Suggested readings

Carraro, A. (2024). Are sport and physical education capable of promoting personal and social values? A brief critical reflection on "respect". In J. Hofmann, K. Weiss, J. Breithecker, L. Kroll, Ul. Röger-Offergeld (Eds.). *Sport, Bewegung und Gesundheit in nationaler und internationaler Perspektive*. Germany: Hofmann. ISBN: 978-3-7780-9170-8

OECD (2019). Attitudes and values for 2030. OECD. France: OECD. https://www.oecd.org/education/2030-project/teaching-and-learning/learning/attitudes-and-values/Attitudes_and_Values_for_2030_concept_note.pdf

OECD. (2018). *Preparing our youth for an inclusive and sustainable world. The OECD PISA global competence framework.* France: OECD. https://www.oecd.org/pisa/Preparing-youth-inclusive-sustainable-world.pdf

UNESCO (2019). *Sport values in every classroom. Teaching respect, equity and inclusion to 8-12 year-old students.* Paris: United Nations Educational, Scientific and Cultural Organization.Sport values in every classroom. https://www.wada-ama.org/en/sport-values-every-classroom

Additional suggested readings

Abad Robles, M. T., Navarro Domìnguez, B., Cerrada Nogales, J.A., & Giménez Fuentes-Guerra, F. J. (2021). The development of respect in young athletes: A systematic review and meta-analysis. *PLoS ONE*, *16*(6), e0252643. doi.org/10.1371/journal.pone.0252643

Bailey, R., Armour, K., Kirk, D., Jess, M., Pickup, I., & Sandford, R. (2009). The educational benefits claimed for physical education and school sport: An academic review. *Research Papers in Education*, *24*(1), 1-27.

Baliulevicius, N. L. & Macário, N. M., (2006). Jogos cooperativos e valores humanos: persp,ectiva de transformação pelo lúdico. *Fitness & Performance Journal 5*(1). https://doi.org/10.3900/fpj.5.1.50

Beni, S., Fletcher, T., & Déirdre Ní Chróinín (2017) Meaningful experiences in physical education and youth sport: A review of the literature, *Quest*, *69*, (3), 291-312. https://doi.org/10.1080/00336297.2016.1224192

Binder, D. L. (2012). Olympic values education: evolution of a pedagogy. *Educational Review, 64*(3), 275-302.
Binder D. L. (2004). *Teaching olympism in schools: Olympic education as a focus on values education. university lectures on the Olympics*. Bellaterra: Centre d'Estudis Olímpics (UAB). International Chair in Olympism (IOC-UAB) http://olympicstudies.uab.es/lectures/web/pdf/binder.pdf
Bruner, J. (1996). *The culture of education*. Cambridge, MA: Harvard University Press.
Carraro, A. & Marino, M. (2016). Lo sport che educa: tra miti e realtà. *Formazione & Insegnamento*, (14)3/s, 13-23.
Carraro, A., McCuaig, L., Marino, M., & Gobbi, E. (2017). Values-based education through physical education and sport: A toolkit for teachers. In D. Colella, B. Antala, S. Epifani (Eds.). *Physical education in primary school. Researches, best practices, situation* (pp. 223-240). Lecce: Pensa MultiMedia. ISBN: 978-88-6760-474-6.
Council of Europe (2016). *Competences for democratic culture. Living together as equals in culturally diverse democratic societies*. Strasbourg: Council of Europe.
Freire, E. & Miranda, M. (2014). The production of knowledge about the building of values in physical education at school: Methods, methodology and epistemology. *Physical Education and Sport Pedagogy, 19*(1), 35-47.
Halstead, J. & Taylor, M. (2000). Learning and teaching about values: A review of recent research. *Cambridge Journal of Education, 30*(2), 169-202.
Hassandra, M., Goudas, M., Hatzigeorgiadis, A., & Theodorakis, Y. (2007). A fair play intervention program in school Olympic education. *European Journal of Psychology of Education, 22*(2), 99-114.
Haste, H. (2018). *Attitudes and Values and the OECD Learning Framework 2030: A critical review of definitions, concepts and data*. OECD, https://www.oecd.org/education/2030-project/contact/Draft_Papers_supporting_the_OECD_Learning_Framework_2030.pdf.
Hellison, D. (2011). *Teaching Personal and Social Responsibility Model*. Hanover, PA: Human Kinetics.
Kavussanu, M., Stanger, N., & Boardley, I. D. (2013). The Prosocial and Antisocial Behaviour in Sport Scale: Further evidence for construct validity and reliability. *Journal of Sports Sciences, 31*(11), 1208–1221. https://doi.org/10.1080/02640414.2013.775473
Lovat, T. and Toomey, R. (2009). *Values education and quality teaching: The double helix effect*. Dordrect: Springer.
Sukys, S. & Majauskiene, D. (2014). Effects of an integrated Olympic education program on adolescent athletes' values and sport behavior. *Social Behavior and Personality: An international journal, 42*(5), 811-822.

Review Questions

- Define respect and the meaning of respect in sport;
- Identify the pros and cons of sport and PE to teach respect;
- Reviewing the effectiveness of teaching respect through sport and PE intervention in recent studies.

Assignments

- Search (on the web) and critically analyse existing toolkits on VbE through sport and PE.
- Hypothesizes a synthetic school annual project (students age to be decided between 8 and 16 year-old) for promoting respect. Describe methods and procedures, highlighting the structure of both quantitative and qualitative measures (e.g. the questionnaire package to be used and the general structure of interviews or focus groups).

PERFECTIONISM AND BELIEFS IN THE SPORT CONTEXT: THE INFLUENCE OF SOCIAL AGENTS

Anna Jordana
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Introduction

Considering that sport is increasingly competitive, detail-oriented and, consequently, more challenging for athletes, the drive for perfectionism and the demanding for success seem to be highly valued in this context. In daily life, trying to do things perfectly is unrealistic and irrational, but in sport and exercise, as well as other performance activities (e.g., dance, music), endeavour for perfection can be part of the day to day (Hill et al., 2020). An athlete who sets exceptionally (or impossibly) high goals, who follows precise and fixed routines (i.e., rigidly), and who cares not to make mistakes and thus perform perfectly to be the best in his/her sport, could be considered a treasure. However, the perfectionist athlete can also carry in his/her backpack rigid and unrealistic views of the self and the world, considerable levels of emotional distress, as well as a difficulty in enjoying potentially pleasurable and rewarding experiences.

The variety of challenging situations athletes face throughout their careers is inherent and unavoidable, and research has often asked why some athletes are able to deal with them in healthy ways, while others experience consequences such as anxiety, decreased performance or worsening of mental health (Rumbold et al., 2012). Some of these challenging situations can be related to competitive stressors (e.g., performance expectations), organizational (e.g., travel), personal (e.g., family), and numerous transition events (e.g., injury, transition from junior to senior, disruption of the Olympic cycle, retirement from elite sport). Scientific evidence indicates that what predicts success in coping has more to do with the athletes, with their way of thinking, feeling, and behaving, than with the situation itself (Collins et al., 2016). Therefore, an environment that supports athletes in the creation of their own meanings around the sports experience can be beneficial for their development and mental health (Pereira-Vargas et al., 2021).

According to Rational Emotive Behavioural Therapy (REBT; Ellis, 1957), people can develop healthy, functional, and adaptive emotions, thoughts, and behaviours in challenging moments through changing beliefs. Ellis hypothesized that emotional problems are largely the result of irrational beliefs, so by changing people's beliefs, emotional problems could be minimized by helping to maintain and

promote mental health (DiGiuseppe et al., 2014). The adaptation of REBT in the sports context (e.g., Jordana, Turner et al., 2023; Turner, 2019) has made it possible to study athletes' beliefs and their influence on psychological variables (e.g., anxiety, motivation) and performance (e.g., Maxwell-Keys et al., 2022), identifying this form of CBT as an effective and expanding framework to promote mental health and performance in athletes (Jordana, Ramis et al., 2023; Turner, 2016).

There are a variety of works that have studied perfectionism in the context of performance activities (e.g., Nordin-Bates et al., 2017; Stoeber & Eismann, 2007) and, specifically, in the sports context (e.g., Hill, 2013; Watson et al., 2021). However, the area that is yet to be fully explored is the study of perfectionism from the perspective of REBT. Some studies highlight the relationship between perfectionism and irrational beliefs in the context of performance activities (e.g., Jordana, Ramis et al., 2023; Jordana & Turner, 2023; Turner, Chadha et al., 2022).

In this lecture, we will explore the role of perfectionism and irrational beliefs in the sports context from a theoretical and practical perspective based on REBT. The main objective is to provide students with conceptual and applied tools to understand and address the psychological challenges associated with high-performance sports, promoting well-being and sustainable athletic careers. Thus, we intend to reflect on the possible ways to relate and continue exploring the link between perfectionism and irrational beliefs in the field of sport and exercise.

Objectives

- Understanding the role of perfectionism and irrational beliefs in the sport context.
- Reflecting on (non)adaptative according to the context.
- Fostering the adaptative interpretation of the sports experience and the role of involved agents.
- Promoting the use of REBT to promote and protect athletes' mental health.

Key concepts

In this lecture we will describe and discuss the role of perfectionism (i.e., strivings, concerns) and irrational beliefs (i.e., demandingness, awfulizing, frustration intolerance, conditional acceptance) in the sports context. We will reflect on (a) its reciprocal relationship based on the GABC framework proposed by REBT, (b) its (non)adaptative according to the context, and (c) its perpetuity in high-performance sport. Concepts like success, failure and adversity are concomitant of the sports experience. However, the experience, beyond what happens to us, is the interpretation we make of the facts. Thus, well-being

or discomfort is more related to how we interpret what happens to us than to the event itself. To dispute irrational beliefs and promote adaptive, realistic and reasonable objectives that protect the athletes' mental health, and to promote and maintain healthy, successful and sustainable athletic career regardless of performance outcomes, we are going discuss the use of REBT in work with athletes and the environments in which they develop

Suggested readings

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Review Questions

- What are rational beliefs, and how do they differ from irrational beliefs?
- What are the different types of perfectionism, and how could they manifest in sports?
- What is the perfectionism paradox in sports, and why is it significant?
- How could the concepts of success and failure influence athletic careers in elite sports? Reflect on their impact on athletes' development.

Assignments

A professional soccer academy hires you as a sports psychologist. During the first meeting with the families of the young soccer players, most of them express high expectations regarding their children's professional achievements. For the second meeting, you decide to discuss the role of perfectionism and beliefs in sports and its possible consequences for young athletes developing in professional soccer academies. Draft what you would explain to them.

(Your essay should be from 800 to up 1.200 words).

GOING FROM ELITE ATHLETE-TO-COACH: TRANSITING FROM BEING THE FLOWER TO BECOMING THE GARDENER

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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; Dieffenbach & Chroni, 2023; 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 training-and-competing-to-coaching is limited (Chroni et al., 2020; Chroni et al., 2021). 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 et al., 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 programs' 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 some state-programs for supporting the post-sport careers of their champion athletes' (see Stambulova & Ryba 2013).

In present time, two career options seem very appealing to retiring elites: TV commentating and coaching. For the first options, so far there's no scientific knowledge about, like how they get recruited, what skills of theirs are valued, or whether they receive any training for the TV. For the latter option, the naïve assumption 'you played, therefore you can coach' continues to influence clubs and teams (Dieffenbach & Chroni, 2023) who recruit retiring elites usually thinking that the ex-great-athlete will gain respect faster as coaches and/or will help reproduce the team culture (Blackett et al., 2017; 2019; 2020). To support these transitioning elites, 'fast-tracking' programs have been developed to provide them with a startup coaching toolkit. With fast-tracking being a relatively new development for coaching pathways, researchers are looking into its efficiency and impact on those undertaking this route (see Blackett & Evans, 2018; Blackett et al., 2017; 2019; 2020; Rynne, 2014; Rynne et al., 2024).

Regardless of the pathway (fast-tracked or traditional coach education), 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 relating training, and competing novice-coach-self (Chroni, 2024). 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 (2022), put together a range of resources that can inform sport psychology practice in support of the person-in-transit.

In closing, transiting out of elite training and competing directly into coaching remains a rather unchartered event and experience, while 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 which sport psychology practitioners can provide their expertise both as educators and consultants.

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.

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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).

A CRITICAL DISCUSSION OF CURRENT SELF-CONTROL RESEARCH PRACTICES IN SPORTS

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Introduction

Self-control describes a process, which enables us to inhibit dominant response tendencies in order to achieve desirable (long-term) goals (Baumeister et al., 1998). This process is especially important in sports and exercise contexts, where individuals often have to ignore immediate sensations of pain or fatigue and instead have to focus on the long-term benefits of their behaviors. Self-control is also highly important among individuals engaging in physical activity for recreational or health reasons. For instance, self-control is needed to resist the temptation to postpone a scheduled, potentially exhausting workout session. However, exerting self-control is effortful and failures are common. In order to explain lapses in self-control performance, several theoretical models have been developed over the years, with the strength model of self-control being one of the most cited but also most criticized models (e.g., Englert et al., 2021). The strength model assumes that individuals only have a limited self-control capacity which can become temporarily depleted after a previous self-control act and is not immediately replenished, leading to performance impairments (i.e., ego depletion effect). In a similar fashion, the psychobiological model also assumes that individuals tend to perform worse after an initial effortful task, but not because of a temporarily depleted self-control resource, but rather because of changes in cognitive, physiological as well as behavioral processes (i.e., mental fatigue; e.g., Van Cutsem et al., 2021). The current talk aims to present recent developments in the field of self-control research in sport and exercise psychology and to discuss potential future avenues to improve our understanding of how self-control operates and why it can fail under certain conditions.

Objectives

After this session, the students:

- Can define what self-control is.
- Can give sports specific examples of situations during which self-control processes are highly relevant.
- Can explain the most dominant self-control models.
- Can critically reflect the strengths and shortcomings of the most dominating self-control models.
- Can derive practical as well as scientific implications how to improve self-control performance.

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Review questions

1. Why is self-control highly important in sports and exercise?
2. How can/should you conduct self-control research?
3. What are the critical aspects of current self-control research approaches?
4. How can you improve self-control performance?

Assignments

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

1. Interview four athletes and ask them the following questions: 1) why is self-control important in your sports; 2) under which conditions is it difficult for you to control yourself; 3) how do you force yourself to keep working on a straining sports task.
2. Prepare a review of studies examining the effects of mental fatigue on different motor and sport activities, and provide recommendations for practice.

METHODS OF HOW TO ASSESS THE EMOTIONAL DYNAMICS IN SPORTS

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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.

It is further important to consider the multicomponential nature of emotions involving changes in subjective experience, physiological processes, and motoric expression (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, 2013). 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 motoric expression component of emotions consists of changes in an individual's facial expressions, gestures, postures, or verbalizations. 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 situations 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 the motoric expression component of emotions, 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., 2023). Another second main research question is about the consequences of emotions in sports. Here, a qualitative study indicates that outward emotional reactions may influence performance-relevant processes such as athletes' confidence, concentration, and motivation (Fritsch et al., 2022). At the same time, the motoric expression component of emotions highlights the social context of emotions. In this regard, the same study indicates showing emotions outwardly 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, 2015). 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

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.

Appraisals

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. Relevant appraisal processes that determine quality and quantity of affective processes are the goal relevance (i.e., is the situation important for me?), goal congruence (i.e., is the situation good or bad for my goal?), and controllability (i.e., can I control the situation?).

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.

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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 1500 words).

§ Interview 2-3 athletes with regard to their antecedents of emotions based on appraisal emotion approaches.

§ 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.

PHYSICAL ACTIVITY, STRESS AND COPING

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Introduction

The topic of stress regulation and sports can be viewed from two different perspectives (Gerber & Colledge, 2023). From the point of view of sports as a health-promoting activity, the focus is on sports as a means to regulate and manage stress ("stress regulation through sports"). The central question is the degree to which sports and physical activity can help us to cope with daily challenges (such as at work, or with family) or major life events so that negative health effects of these stressors can be avoided or reduced (Gerber & Pühse, 2009; Uchino, Smith, Holt-Lunstad, Campo, & Reblin, 2007). From the point of view of performance sports, on the other hand, the central focus is on "stress regulation during sports or within the setting of sport". In other words, how can athletes cope with high level of training and psychological pressure, without suffering a drop in physical performance or psychological complaints (Gerber et al., 2018; Heidari, Kölling, Pelka, & Kellmann, 2018)? Important factors are those which allow top-level and elite athletes to perform at the highest level under pressure (Kellmann, 2010; Kellmann et al., 2018). These perspectives are linked to differing research traditions. While the disciplines of health psychology, sports medicine, and biopsychological stress research are primarily concerned with the perspective of "stress regulation through sports", "stress regulation during sports or within the sport setting" is closely linked to "classic" sport psychology (Gerber & Fuchs, 2020). Key research subjects in this domain are the management of performance pressure and competition anxiety (Ehrlenspiel & Mesagno, 2023; Furley, Laborde, Robazza, & Lane, 2023; Sarkar & Fletcher, 2014). Both perspectives will be addressed in this session, but the main focus will be on "stress regulation through sports" (Gerber, Börjesson, Ljung, Lindwall, & Jonsdottir, 2016; Gerber, Endes, et al., 2017).

Objectives

After this session, the students:

- Can clearly explain the societal relevance of stress.
- Are able to define stress from different perspectives.
- Can list the most important stress models and can reproduce their main content in their own words.
- Can describe the main physiological reactions to stress.
- Can list physical and psychological consequences of stress.
- Can explain how physical activity, exercise and sport can reduce stress.
- Can explain why participation in (elite) sport can become stressful.
- Know the main sources of stress to which elite athletes are exposed to.

Key concepts

Reaction-focused, stimulus-based and cognitive transactional stress models

Stress can be defined as a reaction of the human body when an equilibrium (homeostasis) is disrupted. Alostasis refers to the human ability to adapt to constantly changing conditions, and if necessary initiate or end specific processes (McEwen, 2002; McEwen & Wingfield, 2003). Stress can also be understood as external factors (stressors), which are responsible for increased allostatic load. Stress-provoking stimuli can be everyday problems (daily hassles) (Kohn, 1996) or major life events (Hobson et al., 1998). The latter have been associated with posttraumatic stress disorder (Rosenbaum, Stubbs, Schuch, & Vancampfort, 2017). Finally, cognitive-transactional stress theories highlight that stressors can be perceived very differently by different individuals. Stress reactions therefore strongly depend on evaluative processes (appraisals) (Lazarus & Folkman, 1984).

Coping

Beyond subjective appraisals, how a person deals with a given problems is critical (Antonovsky, 1979). Generally, stressful situation evokes some sort of coping behavior. These behaviors allow an individual to avoid stress, reduce or eliminate perceived stress, and minimize the negative consequences of the stressful experience (See & Essau, 2010). Problem-focused coping aims to address the stressor itself, whereas emotion-focused coping aims to stabilize the emotions that are provoked by a stressor (Lazarus, 1999).

Physiological stress reactions

Stress provokes a variety of different physiological stress reactions due to changes in the central nervous system, the hormonal system and the immune system. These changes prepare the body and mind for a fight-or flight response. If the body and mind are kept on alert for a long period of time, this can lead to negative health consequences in the long run (Gerber, Ludyga, et al., 2017; Mücke, Ludyga, Colledge, & Gerber, 2018).

Stress-buffering effects of physical activity, exercise and sport

Physical activity, exercise and sport are considered as stress-buffers as they have the potential to moderate (mitigate) the detrimental effects of acute and chronic stress exposure (Gerber, Lindwall, Lindegård, Börjesson, & Jonsdottir, 2013). Physical activity, exercise and sport can function in isolation, or together with other protective or vulnerability factors (Gerber et al., 2020; Isoard-Gautheur, Ginoux, Gerber, & Sarrazin, 2019; Meyer, Grob, & Gerber, 2021).

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Review questions

1. Explain the difference between reaction-focused, stimulus-focused, and cognitive-transactional stress models.
2. Explain how the two main (physiological) stress axes work.
3. Explain how physical activity, exercise and sport can buffer stress?
4. Discuss whether participation in exercise and sport can be come sources of stress themselves?
5. Explain which factors can lead to burnout symptoms in elite athletes.

Assignment

(Your essay should be approximately 1000 words)

Interview four individuals and ask them whether they use physical activity, exercise and sport as a strategy to better cope with stress. If yes: Why? If not: Why not? Also ask these people about their main barriers that (might) keep them away from being physically active on a daily basis.

SELF-CONTROL IN SPORT

Psychophysiological Indicators of Mental Control under Pressure

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Up to date, one of the common challenges in sport psychology is to ensure that the interventions provided by sport psychologists for athletes have sound evidence based theoretical underpinning. Traditional approaches to explain the anxiety-performance relationship have relied upon attentional mechanisms. These early theoretical foundations will be addressed briefly before examining contemporary research based upon more sophisticated attentional explanations and situation base specific explanations for anxiety effects, grounded in self-control mechanisms (Masters, 1992; Wegner, 1994).

In competitive sports, for an optimal level of performance athletes need to control their levels of arousal, anxiety and stress under pressurized situations (e.g., sporting competitions) in orderto get calmer and more focused on the actual task at hand (e.g., performing a penalty shoot-out; (e.g., Woodman et al.,), force themselves to work persistently on a straining physical exercise (e.g., Wagstaff, 2014), or force themselves to adhere to work out plans over extended time periods (e.g., Bandura, 2005). In various performance domains, during tasks that require high self control while making rapid decisions and responses to ever changing environmental stimuli (e.g., competitive sport, emergency services, and armed forces) can be severe. In fact, many performance psychologistsconduct their work with the aim of facilitating peak performance under pressure (i.e., anxiety). While professionals have made a number of advancements over the past decades, these developments have tended to be rather descriptive and focused on the measurement or categorisation of constructs related to anxiety (Wilson, 2008). Indeed, as Janelle (2002) highlighted, 'despite extensive research devoted to determining the nature of pressure (e.g., stress, anxiety) and performance relationship, there has been little systematic examination' of the precise nature of performance breakdown underlying this relationship. On the other hand, there are number of theories that offer suggested pathways through which anxiety might influence performance. However, there is only one theory that specifically examines the precise performance errors under pressure is called Wegner's (1994) ironic processes of mental control theory.

Wegner (1994) suggests that the very processes that enable an individual to regulate mental control are also, under certain conditions (e.g., anxiety, time pressure), inherent in undermining intentional mental control. Specifically, under pressure where cognitive resources are critically depleted (e.g., by a concurrent mental task, stress, anxiety), the ability of the operator to focus attention solely toward wanted thoughts becomes limited, leaving the conscious mind hypersensitive to unwanted thoughts supplied by the monitor (Russell & Grealy, 2008). This is precisely ironic because the monitoring process that normally ensures that the to-be-avoided state is kept at bay is the very process that increases the awareness and likelihood of the to–be-avoided state emerging (Woodman,

Barlow, & Gorgulu, 2015).

Research into ironic effects is sparse within sport psychology. Recently, Bartura and colleagues (2023) conducted a systematic review of ironic effects in motor control studies and shed light on key implications regarding ironic effects in sports. Specifically, authors clarify the mechanisms of ironic effects and assist in the development of interventional programs to diminish the likelihood of ironic effects in sports performance. To sum up, the current lecture explores relevant existing research and evaluates the effectiveness of experimental manipulations and cognitive load measurements for investigating ironic effects on motor task performance under pressure conditions.**Objectives**

After this session the students should be able to:

• *Understand the basic concepts and the current trends of the self-control theories.*

• *Develop research questions and implement empirical studies relevant to the contemporary self-control literature in sport.*

• *Based Wegner's theory and to eradicate ironic errors, they can develop psychological skillstraining plans in various tasks.*

• *Provide directions for effective pre-performance routines and plans to coaches and athletesin order to enhance mental control when they need it especially under pressure situations.*

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Review Questions
Assignments

(Your essay should be approximately 1500 words).

1- In relation to ironic effects, please write down a case study based on your own sport-interest and identify the potential ironic error by giving an example. Prepare an intervention programme to reduce ironic errors and provide recommendations for practice.

- Define your sport and the task which affected by ironic processed and suffers from ironic errors under pressure.

- Describe the athlete's demographics (age, gender, years of experience in this sport, level of expertise, cultural background etc.) and sport itself.
- Make a plan (e.g., use tables or figures) for procedure of the interventional programme.
- Provide evidence based practical recommendations.

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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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.

INCREASING EXERCISE MOTIVATION AND SELF-EFFICACY THROUGH THE USE OF SPORT AND WELLNESS TECHNOLOGY: CASE STUDIES AMONG DIFFERENT USER GROUPS

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Due to the decreasing levels of physical activity across different populations, it is important to explore ways to support people in increasing their physical activity. Technology been involved in physical activity in various ways, especially through sport and wellness technology. Even though the use of such technology has been proven to be somewhat effective, there is still a need to develop solutions that are more personalised and motivational and provide instructive assistance. There is a lack of studies which focus on investigating the influence of these devices from a sport and exercise psychology perspective.

This session focuses on investigating, from both a psychological and a practical point of view, how sport and wellness technology, especially digital coaching, can support different types of users in terms of physical activity. The session includes examples of various intervention studies, both qualitative and quantitative. The intervention studies' results discussed in this session show how digital coaching can influence a user's exercise self-efficacy and exercise motivation. The findings also identify people's experiences of using digital coaching and how they think it should be developed further to provide better support. In the session we also focus on functionality and usability related problems which can decrease the positive motivational influence of the sport and wellness technology.

The goal of the session is to inspire students to think how sport and wellness technology could be used in sport and exercise psychology research and also the value and possible negative issues that sport and wellness technology can bring in sport psychology consultation work.

Objectives

After this session the students should be able to:

- Be familiar on how sport and wellness technology usage can influence exercise self-efficacy and motivation
- Understand how this influence can vary between different target groups and between individuals
- Understand the concept of digital coaching and how it differs from more traditional sport and wellness technology
- Inspire students to design their own sport or exercise psychology study/intervention which includes sport and wellness technology

Articles

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- Kettunen, E., Critchley, W., & Kari, T. (2019). Can Digital Coaching Boost Your Performance? : A Qualitative Study among Physically Active People. In Proceedings of the 52nd Hawaii International Conference on System Sciences (HICSS 2019) (pp. 1331-1340). University of Hawai'i at Manoa. Proceedings of the Annual Hawaii International Conference on System Sciences. https://doi.org/10.24251/hicss.2019.163

Key Concepts

- *Sport and wellness technology*: Technology that is designed for and used in physical activity, sport and wellness settings to measure performance or to give guidance.
- *Digital coaching*: Service on a technological device that not only gives feedback but also offers advice, suggestions and future steps for a user to follow in the pursuit of their wellness and fitness goals.
- *Self-efficacy:* Self-efficacy refers to an individual's belief in his or her capacity to execute behaviours necessary to produce specific performance attainments
- *Self-determination theory*: Self-determination theory suggests that all humans have three basic psychological needs (autonomy, competence, and relatedness) that underlie growth and development.

Review Questions

- What can influence a person’s usage experience with sport and wellness technology?
- Explain some ways how sport and wellness technology can influence user’s exercise motivation or self-efficacy?
- What would be your ideal digital coach like? Why?

Assignment

- Design and write a sport and exercise psychology related study or intervention study proposal in your field of interest that somehow includes sport and exercise technology.
- In your description explain briefly and give justifications (if applicable) for example to the following parts:
    - Purpose of the study
    - The role of sport and wellness technology in the study
    - Study structure
    - Target group
    - Targeted behaviour change
    - Behaviour change method
    - Expected results

EXERCISE FOR CLINICAL ADULT SAMPLES WITH ANXIETY AND DEPRESSION SYMPTOMS. CONSIDERATIONS OF PERCEIVED EXERTION

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Introduction

Depression and anxiety are major public health problems. Exercise on prescription (set by fixed intensities) shows mental health benefits and low dropouts in clinical settings (Morres et al., 2019a; Morres et al., 2022). However, most mental health patients live in the community and dropout from real-life exercise settings (Crone et al., 2008; Tobi, Kemp, & Schmidt, 2017). Self-determination Theory (SDT) (Ryan & Deci, 2017) may contribute to lower dropouts from exercise, as the satisfaction of the SDT psychological needs of competence, relatedness and autonomy in mental health outpatients predicts exercise participation (Morres et al., 2017; Morres, 2017). Competence and autonomy satisfaction in exercise are, respectively, the sense of being effective and the sense of self-administrating without external threats, relatedness satisfaction is the sense of a meaningful human connection and social belonging. Indeed, SDT-driven exercise vs. exercise on prescription shows lower dropouts and larger depression improvement among depressed patients in a pragmatic context. However, patients with non-reliable depression improvement experience an imbalanced relationship between perceived physical exertion-(effort perception) and heart rate during exercise (Morres et al., 2019b). In particular, effort perception and heart rate corresponded, respectively, to light and moderate intensity and show zero correlation (Morres et al., 2019b) although they typically show a linear large correlation (Borg, 1998). Similarly, obese adults with increased anxiety are seen to experience an imbalanced relationship between effort perception and heart rate during a 30-min exercise session at fixed moderate intensity; again, effort perception and heart rate corresponded, respectively, to light and moderate intensity exercise and showed zero correlation.

Findings suggest many adults with negative affective states experience disturbed exertion during fixed moderate intensity or preferred intensity exercise. Research may examine if SDT dendrites reveal beneficial effects on disturbed perceived exertion.

Objectives

After this session the attendees should be able to:

- Understand basic definitions regarding symptomatology of depression and anxiety.

- Understand self-determination theory (SDT).
- Become familiar with the phenomenon of perceived exertion.
- Develop SDT-driven exercise interventions oriented to minimize disturbed exertion.

Key Concepts

Depression / Anxiety

Depression and anxiety are prevalent affective states comprising a series of cognitive, emotional and physiological components. Depression is often characterized by loss of interest or pleasure, sadness, psychomotor retardation, fatigue or lack of energy. Anxiety is mainly characterized by uncontrolled, persistent and/or excessive worries, fears and concerns in the absence of an obvious trigger, feelings of tension, rapid heartbeat or high blood pressure. Both anxiety and depression may share common characteristics including psychomotor agitation, sleep/appetite problems, and difficulties in thinking, concentrating or making decisions. A depressed person is often diagnosed with anxiety and visa versa.

Self-determination Theory

Self-determination Theory (SDT) is a well-grounded theory of anthropocentric motivation, personality development and wellbeing. Dendrites of SDT include intrinsic and extrinsic sources of motivation, which appear to be playing a central role in human evolution and development, especially with respect to the sense of volition and initiative. In line, experiences of the psychological needs of autonomy, relatedness and competence within the social environment are also detrimental dendrites of SDT. These psychological needs may catalyze by their own right or in interaction with motivational sources both psychological and behavioral aspects of the human nature.

Perceived Exertion

Perceived exertion is the self-reported quantification of perceived effort, referring to how heavy and strenuous the exercise feels to a person based on the subjective sense of muscle strain and fatigue, breathlessness, thermoregulation, or chest aches. Hence, perceived exertion is the individual subjective orientation, not a physiological cue or what the actual exercise workload is. The Borg's 6-20 Rating Perceived Exertion Scale (RPE) is a widely used measure of perceived effort (Borg, 1998). The 6-20 RPE scale quantifies

homeostatic changes during exercise, involving the collective integration of afferent feedback from cardiorespiratory, metabolic, and thermal stimuli and feed-forward mechanisms.

Review Questions

1. Define basic depression and anxiety symptomatology.
2. Which are the SDT dendrites and how do they function?
3. What is perceived exertion?
4. How do you define disturbed exertion?
5. Which are the strategies to minimize disturbed exertion?

Assignments

(Your essay should be from 1.000 to up 1.200 words)

Prepare a review of studies comprising perceived exertion and involved correlators in adults.

Key reading

Borg, G. (1998). Borg's perceived exertion and pain scales. Champaign: Human Kinetics. USA.

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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

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 devel- opment.

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.

Key readings

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Reardon, C. L., Hainline, B., Aron, C. M., Baron, D., Baum, A. L., Bindra, A., ... & Engebretsen, L. (2019). Mental health in elite athletes: International Olympic Committee consensus statement (2019). British journal of sports medicine, 53(11), 667-699.

Reinboth, M., & Duda, J. L. (2006). Perceived motivational climate, need satisfaction and indices of well-being in team sports: A longitudinal perspective. Psychology of Sport and Exercise, 7(3), 269-286.

Ryan, R. M., Huta, V., & Deci, E. L. (2008). Living well: A self-determination theory perspective on eudaimonia. Journal of happiness studies, 9 (1), 139-170.

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.

ENHANCING SUBSTANCE USE DISORDER RECOVERY THROUGH INTEGRATED PHYSICAL ACTIVITY AND BEHAVIORAL INTERVENTIONS

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People with substance use disorders who decide to join drug recovery programs follow a multifaceted therapeutic approach that includes psychological support strategies and behavioral change techniques from a large team of specialists. Exercise and sports are typically included in these programs. However, the philosophy of implementing exercise programs as a complementary therapeutic tool within the overall framework of treatment has not been developed. This topic introduces a new area for research and practice for exercise psychologists.

Reviews and meta-analyses have documented the importance of physical activity and exercise programs in the treatment of addictions in various age groups and settings. Intervention programs have shown positive effects, a reduction in anxiety and depressive symptoms, enhanced working memory, increased self-confidence, improved self-esteem, positive changes in body image, mood enhancement, elevated well-being and quality of life, alterations in behavior, and positive lifestyle changes. Improved substance use outcomes in young people, including a reduction in the frequency of use, amount of use, intent to use, and/or cravings, as well as improved physical fitness and quality of life in the treatment of addiction to alcohol, tobacco, and other substances. The challenge is, to integrate therapeutic treatment and exercise programs into a unified therapeutic process.

The implementation of exercise programs in addiction recovery should focus on teaching new life skills through cooperative trust and support activities, experiential learning, and high-adventure activities, all applied and tailored to the participants' individual levels and personal preferences. The proposed intervention programs prioritize comprehensive skill development, encompassing goal-setting, time management, emotional control, communication, social interaction, leadership, problem-solving, and decision-making—all seamlessly integrated into the context of the treatment protocols.

The role of governmental bodies and recovery agencies in the implementation of the suggested policy recommendations is pivotal in assisting at-risk populations. Through exercise programs and active participation in physical activities, these entities contribute to the revitalization of individuals, fostering social inclusion, the adoption of a healthy lifestyle, and achieving recovery. Health organizations, ministries of health, and other federations play a crucial role in advocating for sports and exercise programs to integrate former addicts into local communities..

Moreover, sports and exercise psychology play a unique role in exploring the possibilities of supporting exercise programs in therapeutic communities. In these programs, the most effective theories of behavior change, motivation, and self-confidence enhancement must be applied to help individuals achieve their reintegration into society.

After this seminar, students should be able to:

- Understand the basic concepts and the beneficial role of sports in the efforts of ex-addicted individuals to rebuild their lives.
- Understand how sports and exercise programs can be utilized as a supportive strategy in the treatment of drug addiction.

This presentation will continue with a workshop entitled "**How Physical Activities Enhance Therapeutic Goals in SUD Recovery: Practical Implications for Therapists and Sports Scientists.**" In this workshop, participants will have the experience of engaging in 4 tasks that combine therapeutic and exercise goals, either as "therapists" or as "individuals undergoing therapy". Below are the titles for each task:

Task 1: The Rope of Moston's Task.
Task 2: The Game of Everything.
Task 3: The Cycle of New Life.
Task 4: How to Set a New Goal Today… for Both Sports and Your Life Simultaneously: The Dart Throwing Task.

Through these activities, participants will experience the principles of creativity, collaboration, communication, problem-solving, life skills, trust, and inclusion. They will also experiment with how to guide the discussion after completing the task and how to connect therapeutic goals with athletic or exercise goals.

After completing each task, the discussion will focus on describing participants' emotions, what new insights they gained from the experience, how these insights can be applied in daily life, how they can help in life changes, and what new goals can be set.

The ultimate goal of this workshop is to highlight the role of exercise psychologists as therapists in addiction recovery programs, through exercise and psychological support.

Key Concepts:

- The systematic synthesis of new knowledge on this topic can enhance our understanding and guide the development of more effective intervention programs.
- Sports and physical activities can play a crucial role in establishing a secure environment, providing equal opportunities for individuals recovering from drug addiction, and contributing to their treatment and social reintegration.

Reference

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Review Questions:

- What is the role of physical activities and sports, as a strategy for reducing substance use and as adjunct treatments for substance use disorders?
- What strategies can be employed to promote increased exercise among individuals dealing with drug addiction?

Assignment:

- What role does sports and exercise psychology play in implementing exercise programs in therapeutic communities for addictions?
- Which types of exercise programs and physical activities are likely to be more effective in combating addiction?
- Can you discover and describe a relevant task, like those presented in this seminar, and explain how it can be implemented in addiction recovery?

SIDE EFFECTS IN SPORT – EXERCISE COMMITMENT AND EXERCISE ADDICTION

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Introduction

Regular physical activity is essential for maintaining physical and mental well-being. In addition, regular exercise is a fundamental measure for preventing chronic illnesses and obesity (WHO, 2010). Many individuals experience joy and pleasant social interactions through leisure time physical activity. However, for some individuals, regular physical activity develops into a behavior, which poses health risks (Colledge et al., 2020a). In this context, terms such as *excessive, obsessive* or *compulsive exercise* have been used to describe a phenomenon, in which individuals show a craving for physical activity with negative psycho-social-physiological consequences (Hausenblas & Downs, 2002). Furthermore, due to common characteristics with substance-related disorders (e.g., withdrawal symptoms) the terms *exercise addiction* or *exercise dependence* are used (Colledge et al., 2020a; Lichtenstein & Hinze, 2020; Marques et al., 2019), although it is neither listed in the International Statistical Classification of Diseases and Related Health Problems 11 (ICD-11; WHO, 2004) nor in the Statistical Manual for Mental Disorders (DSM-V; APA, 2022). As a result, this form of unhealthy leisure time physical activity is summarized under the umbrella of non-substance-related behavioral addictions, with its diagnostic criteria based on substance-related addictions as outlined in the ICD-11 and DSM-V (Marques et al., 2019). Hence, it is defined by seven psycho-physiological criteria (i.e., tolerance, intention effects, lack of control, time, withdrawal effects, reduction in other activities, continuance).

Prevalence rates of exercise addiction vary based on factors such as measurement instruments or sample structure (Di Lodovico et al., 2019; Downs et al., 2004; Hausenblas & Downs, 2002; Marques et al., 2019) and the majority of these instruments evaluate exercise addiction using the seven criteria mentioned (Colledge et al., 2020b). Estimated prevalence rates of exercise addiction range between 3 % and 7 % for fitness athletes, 10 % for team sports athletes, and even rates above 70 % for bodybuilders, power- and fitness lifters and for endurance sports and triathlon athletes (Di Lodovico et al., 2019). However, in most studies the risk of an addiction is estimated (i.e., high-risk individuals), rather than determined as an actual clinical or psychiatric disorder (i.e., primary exercise addiction), which only can be identified with (clinical) interviews (Colledge et al., 2020b; Egorov & Szabo, 2013).

From a historical point of view three approaches informed the first descriptions of potential risk factors and the etiology of exercise addiction (i.e., physiological, psychological and socio-theoretical approach). Compared with these one-dimensional approaches, multidimensional models have incorporated the three to explain the etiology more comprehensively, including the process model by Schack (2000, expanded by Schipfer, 2015) and the interactional model of the exercise paradox by Egorov and Szabo (2013, expanded by Dinardi et al., 2021).

Despite the extensive body of research on the phenomenon of exercise addiction many aspects, such as the term it-self and the developmental process are still debated.

Objectives

After this session students should be able to:

1. define exercise addition and name characteristic components.
2. distinguish different concepts such as passion for and commitment to sport and exercise, excessive exercise and primary and secondary exercise addiction.
3. cite several hypotheses and models to explain the developmental process of exercise addition e.g. physiological mechanisms, socialization process, personality traits, multidimensional approaches.
4. use and evaluate instruments to assess (the risk of) exercise addition.

Review questions (max. 800 words)

1. Please discuss critically the concepts: passion for and commitment to sport and exercise, excessive exercise and primary and secondary exercise addiction.
2. Please explain one multidimensional model to describe the development of exercise addiction!

Assignment (max. 1.000 words)

Find two individuals, *exercising excessively*, and asses their risk of exercise addiction both with a qualitative interview and a quantitative questionnaire (e.g., Exercise Dependence Scale, Expanded Exercise Addiction Inventory). Try to find out what motivates them being physically active and what are typical stressors or trigger to exercise excessively.

Key articles

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