

European Master's Studies in Sport and Exercise Psychology

ADVANCED KNOWLEDGE IN SPORT PSYCHOLOGY

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Introduction to the Advanced Knowledge in Sport Psychology Module

The focus in sport psychology — in the narrow understanding used here — is on physical activity in achievement situations, thus normally competitive sport. Currently, sport psychology is a broad field of study and includes all levels of involvement from recreational to high level, as well as different age groups and populations. A huge amount of research has been conducted in the field of competitive sport, and it is no exaggeration to say that sport psychology in the first 30 years of its history was mainly a psychology of high achievers. Many researchers have been attracted by the mere fact of extraordinary performance, so sport became a challenge for psychologists. Theories have been developed and, according to the changing scientific zeitgeist, later disappeared. Nevertheless, there is a considerable body of knowledge about different facets of sport performance, and it is possible to present the most relevant theories and findings, but this Advanced Knowledge in Sport Psychology Module follows a more phenomenological approach with the acting subject, the athlete, at the center. If we want to look at psychological characteristics of high performance, we have to consider a lifelong developmental aspect. Before an athlete succeeds in important sport contests, he or she normally has a history of years of training.

Structure of the Module

The contents of this module address contemporary areas and issues of interest to sport psychologist practitioners. The module includes a wide range of topics and is designed to offer a broad perspective of applied sport psychology topics.

How to use this Advanced Knowledge in Sport Psychology Module?

The structure remains the same for each topic within this module. The different sections should help you to go through the topics.

- Each topic starts with a short introduction. You should read this at the very beginning in order to have a rough idea what the topic is about.
- The learning outcomes focus on the knowledge and skills you should have after completion of the topic. This is important to remember in order not to dissipate your effort on less important details.
- The key concepts define the most important terms and should help you to understand the content of the chapter(s).
- The chapters in the required reading list give the basic knowledge required to fulfil the Advanced Knowledge in Sport Psychology Module. They are mostly comprehensive textbook chapters that focus on relevant theories and models, present the most frequently used research paradigms in the area and include sound empirical findings. You should read the chapter carefully and try to extract the relevant information with regard to the objectives. Time is indicated you are expected to use for reading and summary notes.
- The additional reading list gives supplementary or contrasting texts in the area.

- A number of review questions should, on completion of the reading, allow you to check your understanding of the topic.
- Exercises are designed to apply the knowledge and skills to the field of sport. If several alternatives are given, choose one. Time is indicated you are expected to use for each exercise, including writing a report of up to 500 words.

Assessment

Assignments should be agreed with and submitted to the coordinator in the home university.

TOPIC 1

Sport Psychology in Europe

by Glyn Roberts

This topic is not part of the assignments. It is just for information.**Introduction**

The origins of sport psychology date back to Triplett's (1898) experimental research on competitive rivalry. However, it was not until the early 1920's that sport psychology was formally established in Germany, Russia and USA. The first research laboratories were set up in Illinois (Coleman Griffith), Berlin (Carl Diem), and in St Petersburg (Piotr Roudik) all in 1925. The first book on sport psychology (*The Psychology of Coaching*) was written by Griffith and published in 1926.

During the 1930's to the 1960's, there were some individual studies, but it was in the 1960's that sport psychology grew from an infant to early maturity. One of the most influential occurrences was the founding of the International Society of Sport Psychology (ISSP) in 1962 and held its first congress in Rome (1965) under the presidency of Ferruccio Antonelli (Italy). This conference was such a success that the North American Society for the Psychology of Sport and Physical Activity (NASPSPA) was founded in 1966 in direct response to a request from ISSP. NASPSPA held the second sport psychology conference in Washington, DC, in 1968. In 1969, the European Federation of Sport Psychology, (FEPSAC), the overarching association in Europe, was founded. Thus, the infrastructure to promote sport psychology was set up in the 1960's.

There was a great growth in sport psychology research in the world, but especially in the US during the 1970's. The growth of sport psychology in Europe occurred during the 1980's. During the 1990's, the application of psychological principles to sport became very popular and new associations focusing on applied psychology were formed. The Association for Applied Sport Psychology (AASP) was founded in 1986, and the Sport Psychology Division (12) of the International Association of Applied Psychology (IAAP) was established in 1994, and Division 47 (Sport Psychology) of the American Psychology Association (APA) was also established in the 1990's. The 1990's and the first decade of the 21st century saw a huge increase in exercise and health psychology which has now become an independent discipline with its own associations.

The last 30 years has also seen a huge increase in large congresses of sport psychology. Annual meetings and world congresses used to meet on university campuses, but now the field is so large that we meet in large convention centers. We have also seen the growth of national and regional societies of sport and exercise psychology.

With the emergence of the "entrepreneurial university" system, especially in the US, we have seen a decline of sport psychology in the major research universities of the US in favor of exercise and health psychology based simply on the ability to be "fundable". Sport psychology is seen as being less deserving of research funding when compared to exercise and health psychology in the present economic climate. However, in Europe the experience is different. Sport psychology in Europe has grown at all levels (undergraduate and postgraduate) and is being conducted at major research

universities, and with the emphasis on both applied and conceptual issues. The Bologna Accords have had a positive impact with the conversion of most master's programs to two years. But a few countries still have only one-year programs (e.g., Britain, The Netherlands, Belgium).

In the 1990's, FEPSAC initiated the European Master's Studies in Sport and Exercise Psychology (launched in 1996-97) and twelve European Universities participated. In addition, an initiative of former students of the master's program set up the European Network of Young Specialists in Sport Psychology (ENYSSP) in 2003. Recently, the master's program has been selected by the European Commission as an Erasmus Mundus Program. The program consists of 120 ECTS credits spread in two years including lectures and seminars, independent study, a joint intensive course, practicum placement, and a Master's research project. Graduates receive Master's degrees from two universities, one from their home university and the other from their exchange university.

The growth of sport psychology in Europe has had a positive impact on research quality in Europe. In many countries, there is a research assessment exercise where Universities are rated in terms of research productivity. The findings have shown that there has been an increase in research activity and the quality of journal articles has improved. This is now reflected in the authorship records of the major research journals in sport and exercise psychology. In reviewing sport psychology journals from 1997-2008, Papaioannou, Machaira and Theano (2013) found that North America dominated the research journals with 60% of the research articles written by North American authors. In contrast, European authors had 29% of the articles. However, Roberts (2009) looked at the submission rates into two journals in 2008 (PSE and JASP) and found that Europe dominated with almost 50% of the submissions. The US had approximately 30% of the submissions. This is evidence to demonstrate that the majority of contemporary quality research in sport psychology has shifted to Europe. The growth of sport psychology in Europe in the 1990's and 2000's has had the effect of increasing the research productivity.

Sport and exercise psychology is now accepted as an important sport science in Europe with increased specialization. However, there are trends in European sport psychology that show that sport psychology is at an important crossroads as we enter the third decade of the 21st century. What conceptual paradigms should drive our research and practice? Some argue for "European" paradigms, but it is probably more important to understand what central cognitions, affect, and behavioral concepts affect our experience in sport psychology. What emphasis should be placed on academic versus practice foci? We must remember that the best practice is informed by theory and behavioral evidence, and that if we do not understand our psychological process and constructs, then we cannot be effective practitioners. Where should we concentrate our efforts and resources (i.e., performance enhancement, exercise promotion, sport for children)? It is our response to these issues that will determine the direction of our programs and the field of sport psychology over the next few decades!

What should European sport psychology pay attention to in the future? There is still a need to develop the sport psychology's knowledge base. We need more focused research that is conceptually informed! There are still too many empirical studies that are not informed by theory. We need to increase the accountability of applied sport psychology and insist on evidence-based practice. The effectiveness of our interventions should receive more attention. More emphasis should be on evidence-based interventions and on developing graduate training programs to prepare scientist-

practitioners. We need to ensure we have the highest ethical preparation for our professional sport psychologists.

There are some political issues too: The eastern and central European countries need to be integrated better into mainstream European sport psychology. As an example, they are underrepresented in FEPSAC committees at present. To contribute to the knowledge base of international sport psychology, we need to communicate in the language of science. This is politically sensitive, but to join the international community of scholars, it is a necessity!

The future of European sport psychology is bright and will become the primary leader for international sport and exercise psychology in the future.

Learning Outcomes

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

- understand the development of international sport psychology, and the role of European psychology in that development
- know the current status of sport Psychology in Europe
- appreciate the challenges Sport Psychology faces nowadays

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TOPIC 2

Children in Sports

by Marta Borrueco & Yago Ramis

Introduction

Youth sport participation and its effects, either positive or negative, on children's psychosocial development is one of the fundamental areas in Sport and Exercise Psychology. Some authors have outlined the importance of participation in youth competition in order to achieve outcomes related to performance (i.e., sport expertise), health (i.e., physically active lifestyle), and personal and psychosocial development (Hancock & Côté, 2015). However, there is also some evidence of negative effects of athletic participation such as the punitive communication style of some coaches, parents' overemphasis on competitive outcomes, or lack of peer acceptance (Fraser-Thomas and Côté, 2009). In short, both adult leaders -coaches, parents, officials, sport organizers and peers who interact with young players determine the quality of a child's athletic experience (Côté & Erickson, 2016; Holt et al., 2017). Research on this topic in the field of Sport Psychology has shown that the climate created by adults and peers influences athletes' commitment to sport (e.g., Torregrossa et al., 2011), motivation (e.g., Ramis et al., 2013), anxiety levels (e.g., Ramis et al., 2017), and moral behavior (e.g., Borrueco et al., 2018), among many others psychological and psychosocial aspects. Based on a Positive Youth Development perspective (PYD; Lerner, 2002) it is interesting to analyze how specific interactions between coaches, parents, peers, and athletes may affect the latter's reactions to their athletic experience, and to use this information to develop interventions (e.g., Borrueco et al., 2020) aimed to improve the quality of children's experience in sport.

Learning Outcomes

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

- Understand the influence of the climate created by adults (e.g., coaches, parents) in young athletes' experience in the sports context.
- Develop an intervention session with coaches following the positive youth development approach suggested by Harwood (2008, 2015).
- Assess the efficacy of interventions with coaches in applied research.
- Evaluate parents' and peers' contribution to youth sport by means of questionnaires, interviews, and observation instruments.
- Plan and design communication channels between coaches and parents, and peers.
- Assess the efficacy of an intervention or campaign with parents in applied research.

Key Definitions

Positive Youth Development (PYD) is an umbrella term that includes a range of conceptual approaches that share the feature of adopting an asset-building approach to youth development research and practice (Lerner, 2017). This approach emphasizes the need of enhancing strengths

and developing potential in all youth escaping from the ‘deficit-reduction approach’, which views youth as ‘problems to be managed’ (Roth et al., 1998).

Based on this approach, Lerner et al., (2011) established the foundations to promote PYD through sport. The 5Cs Model considers how ecological assets and the strengths of adolescents interact to produce five indicators (namely the 5Cs of PYD: confidence, competence, connection, character, and caring) of optimal development. Holt et al., (2017) proposed that PYD outcomes can be gained through the climate created by adults (coach and parents) and peer relationships.

Required Reading

- Côté, J., & Erickson, K. (2016). Athlete development. In R. J. Schinke, K. R. McGannon, & B. Smith (Eds.), *Routledge international handbook of sport psychology* (pp. 128–137). New York, NY, US: Routledge/Taylor & Francis Group
- Fraser-Thomas, J., & Côté, J. (2009). Understanding adolescents’ positive and negative developmental experiences in sport. *The Sport Psychologist*, 23, 3–23. <https://doi.org/10.1123/tsp.23.1.3>
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- Côté, J., y Hancock, D. J. (2014). Evidence-based policies for youth sport programmes. *International Journal of Sport Policy and Politics*, 8(1), 51–65.
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- Harwood, C. G. (2017). Enhancing coaching efficacy in the psychosocial development of athletes. En R. Thelwell, C. G. Harwood y I. Greenlees (Eds.), *The psychology of sports coaching* (pp. 203–217). Routledge.
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Review Questions

Answer 4 review questions using a total of 1000 words maximum.

1. Explain the most important aspects of the PYD approach and its utility in youth sport.
2. Describe and give examples of the ‘Model of PYD through sport’ proposed by Holt et al., 2017.
3. Summarize the evolution of intervention programs with coaches.
4. Explain Harwood’s 5C’s intervention program with coaches.
5. Summarize the objectives and content of a preseason coach-parent meeting.
6. Summarize the guidelines that coaches can use to cope with different types of parents
7. Describe the most important elements of the Barcelona campaign to promote sportpersonship in parents

Exercise

[expected time: 4 hours]

Write a report of 600 words.

Propose scientifically based interventions to work on the role of coaches, parents or peers in youth sport.

TOPIC 3

Coping in Sports

by Oliver Leis

Introduction

To maintain performance and well-being, athletes are required to cope effectively with stressors within the sports environment (e.g., Nicholls & Polman, 2007). Although coping strategies were originally categorized as either problem- or emotion-focused (Lazarus & Folkman, 1984), the five categories most widely used among sport psychology researchers include three additional categories, namely avoidance-, approach-, and appraisal-focused coping (e.g., Nicholls & Polman, 2007). So far, sport psychology research primarily focused on intrapersonal coping (e.g., Arnold et al., 2017; Nicholls & Polman, 2007). Since athletes can be part of social groups, they might employ strategies in a relational context to collectively cope with individual and collective stressors (e.g., Lyons et al., 1998; Tamminen & Gaudreau, 2014). As a result, the importance of interpersonal coping strategies has been emphasized (e.g., Crocker et al., 2015; Leprince et al., 2018; Lyons et al., 1998). Interpersonal coping strategies to deal with a shared problem (i.e., shared stressor) can be referred to as either dyadic coping (Bodenmann, 2005; Bodenmann, 1995) or communal coping (Lyons et al., 1998). Put simply, dyadic coping describes efforts employed by two partners to manage a shared stressor (e.g., athlete-coach, athlete-parent), while communal coping refers to coping processes used by social units (e.g., teammates). Given that (intra- and interpersonal) coping should be seen as a complex process intended to influence the specific transactional context between person and environment (Lazarus, 1999), this topic addresses some major generalizations from research on coping. In addition, interpersonal coping strategies will be covered.

Learning Outcomes

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

- critically evaluate the advantages and limitations of using coping categories,
- understand the concept of dyadic and communal coping, and
- discuss limitations of classifying coping strategies as either good or bad.

Key Definitions

Coping is defined as “constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (Lazarus & Folkman, 1984, p. 141)

Dyadic coping is referred to as “the attempt of one member of the dyad and as a common endeavor to cope with stress that originates inside the relationship” (Traa et al., 2014, p. 87)

Communal coping is “a process in which a stressful event is substantively appraised and acted upon in the context of [close] relationships” (Lyons, 1998, p. 583)

Required Reading

- Bodenmann, G., Randall, A. K., & Falconier, M. K. (2016). Coping in couples: the systemic transactional model (STM). In *Couples coping with stress* (pp. 31–48). Routledge.
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Review Questions

Answer 4 review questions using a total of 1000 words maximum.

1. Briefly summarise how (intrapersonal) coping has been classified and state 2–3 example strategies for each classification (e.g., Crocker et al., 2015).
2. What are the limitations of classifying coping strategies (e.g., Crocker et al., 2015; Lazarus, 1999)?
3. What are the benefits of engaging in interpersonal coping in contrast to intrapersonal coping (e.g., Lyons et al., 1998)?
4. Summarise the implications for future research focusing on the measurement of coping (e.g., Nicholls et al., 2007).

Exercise

[expected time: 4 hours]

Write a report of 600 words maximum.

Engage in conversations (interview) with your friends and family. Talk about instances when they employed avoidance-focused coping strategies on intra- and/or interpersonal levels. Try to identify the reasons for using this particular strategy and the associated consequences. Discuss the reasons why avoidance-coping has been used and what positive/negative consequences were acknowledged during the conversations.

TOPIC 4

A Holistic Ecological Approach to Talent Development

by Peter Elsborg

Introduction

In sport psychological research about talent development the traditional focus has been on describing the individuals' development (Ericsson et al., 1993; Côté, et al., 2003). Some authors have argued for a shift of focus away from individual factors (e.g., personality factors) and towards the environment that surrounds the talented athletes. In short, it is argued that whether an athlete reaches the world elite does not depend on the innate potential or training and learning alone, but on the entire environment. This environment includes the micro- and macro-environment, the sporting and non-sporting domain and the specific culture that is developed within the team. The macro level involves contexts such as the sports federation, the education system and the youth culture, where the micro level involves contexts such as the family, coaches, younger athletes and related teams/clubs. Some of the characteristics of successful talent environments are supportive training groups, the opportunity to be included in the training communities and constructive communication from parents, coaches and the surrounding communities.

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Learning Outcomes

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

- Explain the relationship between the micro and macro-environment as well as the relationship between the sporting and non-sporting domain in a talent development environment.
- Explain what role culture plays in successful and unsuccessful environments.
- Observe and analyze a talent development environment using the athletic talent development environment model (ATDE)
- Provide suggestions on how to positively influence and improve a talent development environment.
- Critically discuss the problems associated with an ecological approach to talent development.

- Evaluate existing literature about a holistic ecological approach to talent development in sport with respect to underlying assumptions and conceptual models.

Key Definitions

Holistic ecological approach — An approach to talent development that focusses on the entire environment that surrounds the athlete - in the non-sporting -as well as in the sporting domain.

Required Reading

- Henriksen, K., Larsen, C. H., & Christensen, M. K. (2014). Looking at success from its opposite pole: The case of a talent development golf environment in Denmark. *International Journal of Sport and Exercise Psychology*, 12(2), 134–149. <http://doi.org/10.1080/1612197X.2013.853473>
- Henriksen, K., Stambulova, N., & Roessler, K. K. (2010a). Holistic approach to athletic talent development environments: A successful sailing milieu. *Psychology of Sport and Exercise*, 11(3), 212–222. <http://doi.org/10.1016/j.psychsport.2009.10.005>
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- Henriksen, K., Stambulova, N., Roessler, K. K., & others. (2011). Riding the wave of an expert: A successful talent development environment in kayaking. *Sport Psychologist*, 25(3), 341.
- Henriksen, K., & Stambulova, N. (2017). Creating optimal environments for talent development: A holistic ecological approach. In J. Wattie, J. Schorer, & S. Cobley (Eds.), *Handbook of talent identification and development in sport* (pp. 276–284). Routledge.

Additional Reading

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- Larsen, C. H., Alfermann, D., Henriksen, K., & Christensen, M. K. (2014). Preparing Footballers for the Next Step: An Intervention Program from an Ecological Perspective. *The Sport Psychologist*, 28(1), 91–102. <http://doi.org/10.1123/pes.2013-0015>
- Henriksen, K. (2015). Developing a High-Performance Culture: A Sport Psychology Intervention from an Ecological Perspective in Elite Orienteering. *Journal of Sport Psychology in Action*, 6:3, 141–153, DOI: 10.1080/21520704.2015.1084961

Review Questions

Answer 3 review questions using a total of 1000 words maximum.

1. How does the ecological approach differ from the more traditional approaches such as talent detection and talent development?
2. Describe Henriksen and colleagues (2010a) environment success factor (ESF) working model.
3. Summarize how the Danish golf environment investigated by Henriksen and colleagues (2014) differs from the sailing environment investigated by Henriksen and colleagues (2010a)
4. Describe a successful talent environment's interplay between cultural artefacts, espoused values and basic assumptions.
5. Explain what role family and school play in a successful and an unsuccessful talent development environment.
6. Describe which possibilities the holistic ecological approach to talent development offers the sport psychology consultant who is working with young athletes.
7. Describe and give examples of contexts within the macro-level of the athletic development environment-working model (ATDE).

Exercise

[expected time: 6 hours]

Write a report of 600 words.

Interview one active young athlete (below 18 years of age) about his/her talent environment. Gather information about the environment by visiting the sporting club/training facilities, observe a practice and/or visit relevant websites. Using the gathered empirical data material, analyze the environment by applying the athletic talent development environment-working model.

TOPIC 5

Motivational Processes

by Glyn Roberts and Christophe Gernigon

Introduction

Sport practice requires intensive and continuous commitment from athletes, a motivated behavior which is often challenged by the harshness of training and by periods of doubt that may occur following negative events such as failures, non-selections, injuries, etc. Because numerous theories of motivation can account for the processes that are involved in athletes' commitment and persistence (see Roberts, 2001), summarizing the psychological processes of achievement motivation is a difficult challenge. Simply speaking, these processes might be gathered around the feelings of control and, more specifically, the feelings of competence.

Feelings of control may be considered from at least two perspectives: The perception of control of one's behavior and the perception of control of outcomes. The first perspective responds to the human being's basic need of feeling oneself self-determined and not constrained by external pressures such as rewards or punishments. Such a feeling is at the origin of what has been labelled intrinsic motivation (e.g., Deci & Ryan, 1985). A large body of research has shown that perceptions of self-determination are related to intrinsic motivation in sport and exercise (see Hagger & Chatzisarantis, 2007). The second perspective addresses the individual's perception that there is a link between one's behavior and outcomes. This perception depends on their attribution to causes (e.g., Weiner, 1986), in other words the nature of the causes that they use to explain particular events. Causes that are seen to stem from oneself (internal), to be changeable (unstable) and manageable by oneself (controllable) have been found to entail adaptive motivational patterns, either after failure or success (see Biddle et al., 2001).

A specific feeling of control is perceived competence. One of the most famous theories of competence is Bandura's (1997) self-efficacy theory whose relevance has been widely shown in both sport and exercise psychology (but mostly exercise) (see Feltz et al., 2008; McAuley et al., 2001). In essence, when the activity is important to you, for any reason, and you feel competent to complete the task, then you feel efficacious and that is motivational (McAuley et al., 2001). Broadly speaking, the more individuals feel competent, the higher their achievement motivation. However, competence is a complex construct. Some argue that competence is a basic need (e.g., Deci & Ryan, 2001), while others argue it is your cognitive evaluation of your competence in an activity where achieving success is important to you (Roberts et al., 2007).

Deci and Ryan argue that three basic needs (competence, relatedness and autonomy) drive your motivational commitment, and your goal is to be self-determined to satisfy these basic needs. Your self-determined motivation falls along a self-regulation continuum from intrinsic to extrinsically regulated motivation. However, another argument is that motivation is a learned schema of thought when you are trying to reach an achievement goal (e.g., Roberts et al., 2007). Individuals strive toward feeling successful and to avoid feeling unsuccessful and success is defined by either self- or other- referenced criteria (i.e., task involved or ego-involved criteria, respectively). Therefore, when striving for an achievement goal, one is either task or ego involved to achieve the goal. One becomes task or ego involved through one's internal disposition (task

and/or ego orientation, because the orientations are independent) or because the extant environmental criteria are mastery (task involving) or performance (ego involving). Therefore, contemporary models of achievement motivation address the motivational properties of being task or ego involved. An attempt to add valence dimensions to task and ego involvement (approach and avoid valence) has met with a chequered research history (see Roberts et al, 2007). The vast bulk of the research has parsimoniously demonstrated the adaptive motivational properties of being task involved (whether by the individual difference variable of task and ego orientation, or because of the mastery or performance criteria inherent in the motivational climate), and the maladaptive motivational properties of being ego involved (whether by orientation or the motivational climate) (see Roberts, et al., 2007).

Learning Outcomes

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

- Broadly describe the psychological processes on which the theories of self-determination, causal attribution, self-efficacy, and achievement goals are based.
- According to these theories, describe the adaptive and the maladaptive achievement patterns that have been identified in sport psychology.
- Name the main determinants of these adaptive and maladaptive achievement patterns, as they were identified in sport psychology.
- Formulate practical implications of these theories for coaches and athletes.

Key Concepts

Achievement Goal — The desire to develop and demonstrate competence and to avoid demonstrating incompetence.

Achievement Motivation — The desire to perform well or the striving for success, evidenced by persistence and effort in the face of difficulties.

Causal Attribution — A cognitive activity where one attributes post hoc the specific causes of an achievement outcome.

Ego Involvement — Motivation that comes from trying to demonstrate superiority to others at a task, a normative evaluation of success or failure.

Intrinsic Motivation — A type of motivation that comes from inside an individual because of the pleasure he or she gets from the task itself, rather than from any external or outside rewards.

Self-Efficacy — Beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments.

Task involvement — Motivation that comes from trying to demonstrate mastery of a task, a self-referenced evaluation of success and failure.

Required Reading

- Biddle, S. J. H., Hanrahan, S. J., Sellars, C. N. (2001). Attributions: Past, present and future. In R.N. Singer, H.A. Hausenblas, & C. Janelle (Eds.), *Handbook of sport psychology* (2nd ed., pp. 444–471). New York: Wiley.
- Feltz, D., Short, S., Sullivan, P. (2008). *Self-efficacy in sport*. Champaign, IL: Human Kinetics.
- Hagger, M., & Chatzisarantis, N. (2007). *Intrinsic motivation and self-determination in exercise and sport*. Champaign, IL: Human Kinetics.
- McAuley, E., Pena, M. & Jerome, G. (2001). Self-efficacy as a determinant and an outcome of exercise. In G.C. Roberts (Ed.), *Advances in motivation in sport and exercise* (pp. 235–62). Champaign, IL: Human Kinetics.
- Roberts, G.C. (2001). Understanding the dynamics of motivation in physical activity: The influence of achievement goals on motivational processes. In G.C. Roberts (Ed.), *Advances in motivation in sport and exercise* (pp. 1–0). Champaign, IL: Human Kinetics.
- Roberts, G. C., Treasure, D. C., & Conroy, D. E. (2007). Understanding the dynamics of motivation in sport and physical activity: An achievement goal interpretation. In G.T. Tenenbaum & R.C. Eklund (Eds.), *Handbook of sport psychology* (3rd ed., pp. 3–30). Hoboken, NJ: Wiley

Review Questions

[estimated time for reading and answering 4 review questions with a maximum of 1000 words: 8 hours]

Answer 4 review questions using a total of 1000 words maximum.

1. Describe the different types of self-regulated motivation according to self-determination theory, as well as their motivational effects.
2. Feeling competent is a major determinant of achievement motivation. However, attributing success to competence is not always motivationally adaptive. Identify and discuss the cases when attribution to competence is adaptive or maladaptive, based on the causal dimensions that can be associated to the attributions of competence.
3. Name and describe the different sources of self-efficacy.
4. Define the following determinants of motivation: task versus ego involvement, task versus ego orientation, mastery versus performance climate. Then, identify the achievement patterns with which each of these conceptions is associated.
5. Describe some specific behaviors that coaches could adopt during training sessions to favor athletes' achievement motivation.

Exercise

[estimated time: 5 hours]

Write a report of 500 words.

Interview two athletes of similar levels of practice: One who is still engaged in the practice of his or her sport at the highest level he or she can, one who has dropped out of the practice at his or her highest level (or has completely dropped out). Try to identify the reasons for both persistence and dropping out. Discuss these reasons with regard to the theoretical models of achievement motivation.

TOPIC 6

Achievement Goal Theory and Motivational Climate in Sports and Physical Education

by Silke Dankers

Introduction

One central theory exploring motivation and related outcomes in sports and physical education is the achievement goal theory (AGT). Following AGT, one's personal definition of competence within a sport context can result in the adoption of two different achievement goal orientations, namely 'task' and 'ego' goal orientations (Ames, 1992). While task-oriented individuals identify competence as mastery of tasks, skill development and expression of effort, individuals adopting ego goal orientations define their own competence as the ability to outperform others. However, research has shown that individual goal adoption can also be determined by environmental factors, more specifically, the motivational climate.

In sports and physical education, the motivational climate is defined as the way in which individuals perceive their sport environment (structured by their coach/teacher) (see Smith & Smoll, 2009). A mastery motivational climate is perceived as stressing learning, improvement, and effort while a performance climate is perceived as emphasizing normative comparison and outperforming others. Consequently, individuals perceiving a mastery motivational climate are more likely to adopt task achievement goal orientations while individuals perceiving a performance motivational climate are more likely to adopt ego goal orientations.

Both task-oriented achievement goals as well as the mastery motivational climate are associated with adaptive cognitive, affective and behavioral outcomes (e.g. decreased anxiety, increased commitment) (Braithwaite et al., 2011).

One approach to the creation of a mastery motivational climate within the sport context is the TARGET framework (Task, Authority, Recognition/Reward, Grouping, Evaluation, Time) (see Ames, 1992; Ntoumanis & Biddle 1999). By means of this approach, the sport environment can be structured in a way that individuals are able to participate in a variety of new and cooperative tasks, can engage in own decision-making processes, and perform exercises in small, mixed-ability groups with sufficient time for task completion. Moreover, reward of effort, persistence, cooperation and learning are given individually. All of these six TARGET structures have been argued to be salient to the development of a mastery motivational climate.

Learning Outcomes

On completion of this section, students should be able to

- describe/summarize the terms achievement goals and motivational climate
- critically evaluate and compare results of current research regarding achievement goals and motivational climates in differing sport contexts (organized sports and physical education)
- describe the concept and application of the TARGET framework

Key Concepts

Achievement goal theory — Social-cognitive theory of achievement motivation which distinguishes between individuals' mastery goals (demonstrate competence by mastery of a task) and performance goals (show competence by outperforming others)

Motivational climate — Psychological climate perceived within an achievement context; Mastery motivational climate: Environment is perceived as promoting mastery of tasks and learning; Performance motivational climate: Environment is perceived as promoting performance and social comparison

TARGET approach — Approach aiming at the creation of a mastery motivational climate in achievement settings by implementation of six specific achievement structures (Task, Authority, Recognition, Grouping, Evaluation, Time) salient to the development of a mastery motivational climate.

Required Reading

Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology, 84*, 261–271.

Ntoumanis, N., & Biddle, S. J. H. (1999). A review of motivational climate in physical activity. *Journal of sports sciences. Journal of Sports Sciences, 17*, 643–665.

Smith, R.E., F.L. Smoll, & S.P. Cumming (2009). Motivational climate and changes in young athletes' achievement goal orientations. *Motivation and Emotion, 33*, 173–183.

Braithwaite, R., Spray, C.M., & Warburton, V. E. (2011). Motivational climate interventions in physical education: A meta-analysis. *Psychology of Sport and Exercise, 12*, 628–638.

Review Questions

1. Summarize the achievement goal theory and define the term motivational climate (use your own words).
2. Describe the TARGET-approach for the creation of a mastery motivational climate.
3. Summarize the most important findings of motivational climate interventions. Structure these findings by type of outcome (e.g. affective, behavioral, cognitive) and discuss.
4. Most intervention studies implemented the TARGET approach in the physical education context instead of organized sports. Think of possible explanations for this and discuss whether and why/why not TARGET might also be suitable for the organized sports setting.

Exercise

[expected time: 4 hours]

Choose one, 600-word report is expected.

1. Design one session using the TARGET – approach (in either the physical education or organized sport setting, e.g., a football or floor ball practice) and describe how you plan to address the motivational climate. Make sure to provide information regarding:
 - a. Sample characteristics (age, gender)
 - b. type of sport
 - c. Content of exercises that you want to include in the session and how these are executed based on TARGET. Be sure you give a clear description of the entire session and each individual exercise and how it relates to TARGET.
2. Interview two different athletes about the way that they perceive the motivational climate within their sport environment. Which positive/negative outcomes of their perceived motivational climate can you identify?
3. Find 3 articles focusing on intervention studies aiming at the promotion of a mastery motivational climate by implementation of approaches different from TARGET. Compare the different approaches you found and discuss possible advantages/disadvantages.

TOPIC 7

Emotional Processes

by Montse Ruiz

Introduction

Competitive sport offers an ideal natural environment for the study of emotions as important aspects of human life. For decades, researchers have examined the relationships between emotions and performance (for a summary of theoretical approaches, see Ruiz & Robazza, 2020). Emotion regulation refers to the processes by which individuals manage the type, intensity, or duration of emotions they experience. In sport, emotion- and action-centered regulation strategies is considered more effective than focusing solely on emotion regulation. The multi-states (MuSt; Ruiz et al., 2021) theory, which accounts for the variety of performance states that athletes experience in training and competition, is proposed for the regulation of action-centred aspects of athletic performance and athletes' emotional states.

The MuSt theory combines the use of psychobiosocial states (emotion) and core action components (action) for emotion- and action-centred regulation. Psychobiosocial states are defined as the constellation of subjective experiences in which an individual's functioning is displayed that include affective (emotional), cognitive, motivational, volitional, bodily, motor-behavioural, operational, and communicative aspects. Psychobiosocial states are determined by athletes' appraisals of their interaction with the environment, their perceived resources, and their ability to cope with the demands of the situation. A challenge appraisal results from a positive evaluation of anticipated benefits reflecting sufficient perceived personal resources to meet situational or task demands, whereas a threat appraisal reflects a negative evaluation or anticipated harms occurring when task demands are perceived as exceeding personal resources. Core action components are conceptualized as fundamental movements or action-related behaviours that are subjected to higher variability and accuracy fluctuations than automated technical elements, which are typically executed without conscious attention.

According to the MuSt theory, performance states depend on the interaction between athletes' psychobiosocial states and their differential levels (i.e., high/low) of action monitoring or voluntary control. Self-regulation strategies can be used to help athletes shift from dysfunctional to more functional emotional states, and to maintain an appropriate focus on the most relevant aspects of their task execution, which in turn would result in more optimal performance. The self-regulation process consists of three phases: (1) identification of psychobiosocial states and core action components to enhance awareness, (2) performance prediction, and (3) use of self-regulation strategies.

Learning Outcomes

After completing this section, students should be able to:

- understand the relationship between emotions and athletic performance;
- apply individual-oriented methods in the assessment athletes' experiences; and
- identify the critical steps for self-regulation.

References

- Ruiz, M. C., Bortoli, L., & Robazza, C., (2021). The multi-states (MuSt) theory for emotion- and action-regulation in sports. In M. Ruiz & C. Robazza (Eds.), *Feelings in sport: Theory, research, and practical implications for performance and well-being* (pp. 3–18). Routledge.
- Ruiz, M. C., Robazza, C., (2020). Emotion regulation. In D. Hackfort & R. Schinke (Eds.), *The Routledge International Encyclopedia of Sport and Exercise Psychology* (Vol 2, pp. 263–280). Routledge.

Required Reading

[Estimated time for reading and reflection: 10 hours]

- Ruiz, M. C., Bortoli, L., & Robazza, C., (2021). The multi-states (MuSt) theory for emotion- and action-regulation in sports. In M. Ruiz & C. Robazza (Eds.), *Feelings in sport: Theory, research, and practical implications for performance and well-being* (pp. 3–18). Routledge.
- Ruiz, M. C., Raglin, J. S., & Hanin, Y. L. (2017). Individual zones of optimal functioning (IZOF) model (1878–2014): Historical overview of its development and use. *International Journal of Sport and Exercise Psychology*, 15, 41–63. <https://doi.org/10.1080/1612197X.2015.1041545>

Additional Reading

- Hanin Y. L. (2007). Emotions in Sport: Current issues and perspectives. In G. Tenenbaum & R.C. Eklund (Eds.). *Handbook of Sport Psychology* (pp. 31–58). Hoboken, NJ: John Wiley & Sons.
- Robazza, C., & Ruiz M. (2022). Why study emotions in sport? *Psychology of Sport and Exercise*, 61, Article 102213. <https://doi.org/10.1016/j.psychsport.2022.102213>
- Ruiz M. C., Appleton, P., Duda, J., Bortoli, L., & Robazza, C. (2022). Perfectionism and performance related states: The mediating role of competition appraisals. *European Journal of Sport Science*. <https://doi.org/10.1080/17461391.2022.2049374>
- Ruiz M. C., Luojumäki, R. Karvinen, S., Bortoli, L., & Robazza, C. (2021). Self-regulation in high-level ice hockey players: An application of the MuSt theory. *International Journal of Environmental Research and Public Health*, 18(24), 13317. <https://doi.org/10.3390/ijerph182413317>
- Terry, P. C., Karageorghis, C. I., Curran, M. L., Martin, O., & Parsons-Smith, R.L. (2020). Effects of music in exercise and sport: A meta-analytic review. *Psychological Bulletin*, 146, 91–117. <https://doi.org/10.1037/bul0000216>

Review Questions

1. What are the main tenets in the MuSt theory?
2. What are the main performance types as stated within the MuSt theory?
3. How is the MuSt theory similar/different to other theoretical approaches?

Exercise

[expected time: 4 hours]

Write a report on the following:

Observe an athlete in a practice session or competition. Identify his or her emotional states prior to performance. Ask your athlete to think about and comment on the functional impact he or she thinks such emotions had on performance. Discuss the athletes' perceptions in light of the literature.

TOPIC 8

Social Interaction and Team Dynamics

by Erwin Apitzsch

Introduction

An athlete's performance in a team sport depends not only on his or her personal characteristics, but also on his/her relationships within the team, and with the coach. In order to understand sport performance, the social psychology of sport has produced research where the different group processes have been investigated, namely those which are connected to interaction, communication, cohesion and leadership in sport teams.

Learning Outcomes

On completion of this section, students should be able to

- describe the main theoretical models used in sport team research
- explain the most important results of current research concerning sport team processes
- use appropriate tools and methods in interventions within a social psychological sport context

Key Concepts

Communication — Interpersonal communication contains multiple levels of meaning. All communication contains a content component (the what) and a relational component (the how). A majority of research pertaining to interpersonal communication in sport is more focused on the content component than the relational component (LaVoi, 2007).

Sport team — “a collection of two or more individuals who possess a common identity, have common goals and objectives, share a common fate, exhibit structured patterns of interaction and modes of communication, hold common perceptions about group structure, are personally and instrumentally interdependent, reciprocate interpersonal attraction, and consider themselves to be a team” (Carron, Hausenblas, & Eys, 2005, p. 13).

Team building — The employment of a range of techniques designed to help foster a sense of collective efficacy within the team and to strengthen relationships between team members (Kremer, Moran, Walker, & Craig (2012).

Team dynamics — Sport teams are characterized by energy, vitality, and growth and development; they are dynamic. The dynamism is manifested in the developing nature of the structure of sport teams, their cohesiveness and collective efficacy, as well as in interaction and communication among team members, group decision-making, and team achievements (Carron, Hausenblas, & Eys, 2005).

Team performance — how well the team carries out its tasks (Carron, Hausenblas, & Eys, 2005).

Team cohesion — “dynamic process which is reflected in the tendency for a group to stick together and remain united in the pursuit of its goals and objectives” (Carron, Hausenblas, & Eys, 2005, p. 229).

References

- Fehr, C. (2021). *Team cohesion – Strategies for success*. Sport Coach America.
- Kremer, J., Moran, A., Walker, G., & Craig, C. (2012). *Key concepts in Sport Psychology*. Sage.
- LaVoi, N.M. (2007). Interpersonal communication and conflict in the coach-athlete relationship. In S. Jowett, & D. Lavallee. (Eds.) *Social psychology in sport* (pp. 41–54). Human Kinetics.

Required Reading

- Chelladurai, P. (2007). Leadership in sports. In G. Tenenbaum & R.C. Eklund (Eds). *Handbook of sport psychology* (pp. 113–135). John Wiley & Sons.
- Eys, M., & Kim, J. (2017). Team Building and Group Cohesion in the Context of Sport and Performance Psychology. <https://doi.org/10.1093/acrefore/9780190236557.013.186>.
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Additional Reading

[Estimated time for reading and reflection: 7 hours.]

- Apitzsch, E. (2009). Coaches' and elite team players' perception and experiencing of collective collapse. *Athletic Insight*, 11.
- Apitzsch, E. (2019). Collective collapse in football. In E. Konter, J. Beckmann & T.M. Loughhead (Eds). *Football Psychology – From Theory to Practice* (pp. 117–126). Routledge.
- Carron, A.V. & Eys, M.A (2012). *Group dynamics in sport*. (4th Ed). Fitness Information Technology.
- Kremer, J., Moran, A., Walker, G., & Craig, C. (2012). Social psychology of sport. In J. Kremer, A. Moran, G. Walker, & C. Craig, *Key concepts in Sport Psychology* (pp. 121–164). Sage.
- Moran, A.P. (2012). Exploring team cohesion in sport: a critical perspective on sport. In A.P. Moran, *Sport and Exercise Psychology* (2nd ed., pp. 243-276). Taylor & Francis.

Review Questions

Answer the four review questions using a total of 1000 words maximum.

1. Describe how team building and team cohesion can contribute to optimal team performance.
2. What are the practical implications for leadership behavior in team sports?
3. What effect may the adoption of a social–cognitive perspective have on team functioning?
4. Discuss the consequences social loafing can have on team performance and describe how social loafing can be minimized.
5. What do we know about gender issues in team sports?

Exercise

[Estimated time: 3 hours]

Write a 500-word report.

A team player belongs to a squad from which players are selected to be starters or substitute players in a particular game. Thus, every player has to face a rivalry situation. On the other hand, cohesion and cooperation within the team is necessary to produce a good performance. How does the cooperation-competition situation affect the players on the squad?

TOPIC 9

Coaching and Leadership

by Reinhard Stelter and Sidonio Serpa

Introduction

Most sports involve leadership roles, including the coach, manager, and team captain. Moreover, the coaching processes have an important impact on the athletes' development, performance, and emotional reactions. For example, leadership and coaching for excellence is one of the areas of increasing interest in sport, and the concept of transformational leadership has recently been related to it.

Two main models have stimulated international research on sports leadership. The Mediation Model of Leadership (Smith et al., 1978; Smoll & Smith, 1989) includes the coach's behaviors, the players' perceptions and recollections on those behaviors, and the players' evaluative reactions. All these variables are influenced by the situational factors. On the other hand, the Multi-dimensional Model of Leadership (Chelladurai, 1978, 1993; Chelladurai & Carron, 1978) takes into account the required, preferred, and actual coaches' behaviours whose antecedents are the situational, leaders' and members' characteristics.

In order to study leadership behaviors, interviews, observation (commonly using the Coaching Behavior Assessment System, developed by Smith et al., 1977), and questionnaires have been used. The leadership scale for sports (Chelladurai & Saleh, 1980) is the most disseminated one, but other tools have also appeared like the Coaching Feedback Questionnaire (Amorose & Horn, 2000), and the Coaching Behavior Questionnaire (Kenow & Williams, 1992).

To be able to handle specific and sometimes even personal challenges the athlete is faced with, coaching can be introduced as a specific form of leadership style – a form of dialogue between the athlete or sports team and the coach.

Coaching is defined as the coach's participation in the development and learning process of the person or team in focus. The main orientation is on meaning-making (Stelter, 2022). Coaching is a form of conversation which always shall be related to a specific context and situation in which the focus person is experiencing something significant and challenging – challenging in the sense that the focus person is governed by a desire for an in-depth reflection, understanding and change of him- or herself and certain circumstances in their life, sport or work. As a completely new way of coaching, the dialogical work shall be seen as a collaborative practice where the coach strives towards being a fellow-human companion (Stelter, 2016).

Learning Outcomes

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

- know the main theoretical models used in sport leadership and coaching research;
- discuss the most important results of current research concerning coaching processes;
- be able to use appropriate tools and methods in interventions within a social psychological sport context.

Key Concepts

Leadership — set of behaviors influencing individuals and groups towards specific goals also being characterized by interaction and power.

Transformational Leadership — Type of personal influence on the subordinates promoting the ownership of the organization and/or leader's vision, as well as inspirational motivation and intellectual stimulation

Coaching — An approach to learning and leadership where the aim is to develop athletic, personal and social potential and the ability for self-regulation of the person or the team to be coached.

Required Reading

Chelladurai, P. (2007). Leadership in sports. In G. Tenenbaum & R. Eklund (Eds.), *Handbook of sport psychology* (pp. 113-135). New Jersey: John Wiley & sons.

Stelter. (2016). The Coach as a Fellow Human Companion. In *Coaching Psychology: Meta-theoretical perspectives and applications in multicultural contexts* (pp. 47–66). Springer International Publishing. https://doi.org/10.1007/978-3-319-31012-1_3

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Smoll, F. L., & Smith, R. E. (1989). Leadership behaviors in sport: a theoretical model and research paradigm 1. *Journal of applied social psychology*, 19(18), 1522–1551.

Additional Reading

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Smoll, F. L., Smith, R. E., Curtis, B., & Hunt, E. (1978). Toward a mediational model of coach-player relationships. *Research Quarterly. American Alliance for Health, Physical Education and Recreation*, 49(4), 528–541.

Review Questions

1. Answer all review questions using a total of 1000 words maximum.
2. Compare and discuss Chelladurai's Multidimensional Model of Leadership in Sport (2007) and Smith & Smoll's Mediational Model of Leadership (1989).
3. Discuss the relationship between leadership and sport excellence.
4. What are the main theoretical ideas of the approach of coaching presented here?
5. Discuss the characteristics of the tools that you may use to handle leadership in sport

Exercise

[expected time: 4 hours]

Write a 500-word report.

Think about a sports team you have participated in. Try to characterize the leadership style of the coach using Chelladurai's Multidimensional Model of Leadership. Trying to be reflective:

- a) describe your perception about the situational, leader's and members' characteristics;
- b) describe the required, actual and preferred coach's behavior;
- c) describe the members' and individual satisfaction and performance
- d) Suggest what could be done in order to improve performance and meaning making, if necessary
- e) Where could you see possibilities where and how the coach or another support person could practice coaching?

Coaching Behavior Assessment System (CBAS)

Coach: _____ Sport: _____

Duration of time: _____ Practice or game: _____

Date: _____

	Time Period			
	1	2	3	4

I. General coach-initiated behaviors

A. Organizational comments (“you go over there”)				
B. General encouragement (“Let’s go!”)				
C. General punitive-negative (“I don’t want any of that today”)				
D. Instructions in methods (“be sure to...”)				

II. Behaviors in reaction to players’ behaviors

A. Positive, general comments to good performance (no instruction)				
B. Positive, general comment followed by instruction				
C. Negative comments, general to poor performance (no instruction)				
D. Negative Comment. followed by instructional content				
1) hostile delivery of instruction				
2) non-hostile delivery of instruction				

III. Verbal reactions to players’ question about game-practice content

A. Answers given with positive-cheerful tone				
B. Answers given with neutral tone				
C. Answers given with caustic, negative tone				

IV. Coaching behaviors unrelated to game/practice

A. Comments to players				
B. Comments to others				

TOPIC 10

Sleep in Athletes

by Patricia Frytz

Introduction

Sleep is considered to play an essential role in both mental and physical health: it helps with memory consolidation and motor learning, recovering from daytime demands, regulating the body's energy balance and supporting the immune system. How much and when we sleep is controlled by the interaction of the endogenous circadian rhythm and homeostatic control (Kölling et al., 2016). Based on the manual of the American Academy of Sleep Medicine (Iber et al., 2007), nocturnal sleep is divided into different sleep stages. Non-rapid eye movement sleep (non-REM) and REM sleep. Non-REM is divided into the stages non-REM 1 and 2 (light sleep) and non-REM 3 (deep sleep). Deep sleep is most pronounced in the first half of the night – REM sleep in the second half.

Sleep quality can be determined through different parameters: sleep architecture (sleep staging), sleep duration, sleep efficiency, sleep-onset latency or wake after sleep onset. Whereas polysomnography in a sleep laboratory is considered the gold standard of sleep monitoring, activity monitoring through wearable devices (actigraphy) is the most common in athletes due to the possibility of time and cost saving long-term testing in the field or at home. Another efficient way is subjective measurement by sleep diaries or questionnaires (Walsh et al., 2021).

The sleep-wake behavior and sleep quality of athletes are influenced by their sport's characteristics. A number of studies have already identified some of the main factors: type of sport, training time and duration, the amount of weekly sport activity, seasonal phase, competitions, and competition-related travel (Kölling et al., 2019).

Overall, inadequate sleep quality can have negative effects on the human body. Short-term effects include increased stress reactivity and emotional distress, mood swings, and cognitive impairments such as memory or attention deficits (Medic, Wille, & Hemels, 2017). In the context of competitive sport, increased fatigue, poorer mood, and lower sport-specific performance during exercise are related to reduced sleep quality in the previous night (Kölling et al., 2019).

Interventions such as strategic training and nap times, as well as establishing good sleep hygiene, e. g. bedtime routines, may be beneficial for athletes (Kölling et al., 2019; Walsh et al., 2021).

Learning Outcomes

On completion of this section, students should be able to

- Broadly describe the mechanisms of sleep-wake-behavior (circadian rhythm, sleep architecture, etc.)
- Describe the functions and beneficial effects of sleep and good sleep quality (especially in athletes)
- Discuss the different types of sleep measurements

- Explain the relationship between sport and sleep

Key Concepts

Circadian rhythm — Circadian rhythm is often called the “body’s inner clock”. It describes the natural 24h-cycle of physical, mental, and behavioral changes in the body. In detail, sleep, body temperature, hormones and appetite are primarily affected by circadian rhythms. Circadian rhythms are controlled by the Suprachiasmatic nucleus (pacemaker) in the brain and are influenced by solar (daylight) and social time (e. g. time zones) (Roenneberg et al., 2007).

Chronotype — Individual circadian rhythms are partly influenced by different variants of “clock” genes-specific genotypes that determine, for example, the period length of the circadian rhythm. Individuals adopt a specific temporal relationship between external and internal time. Differences in this relationship are called chronotypes. The two extremes are Eveningness (delayed sleep period) and Morningness (advanced sleep period) (Roenneberg et al., 2007).

Sleep architecture — The structure of sleep cycles and the different stages of sleep (NREM, REM) throughout the night.

Jet Lag — Symptoms of jet lag occur when endogenous (inner clock) and exogenous rhythms (time of day) do not match. It is primarily associated with travel through different time zones, but also occurs due to a mismatch between social and circadian clocks – e.g. getting up early for school/work – and is referred to as Social Jet Lag.

Required Reading

Kölling, S., Ferrauti, A., Pfeiffer, M., Meyer, T., Kellmann, M. (2016). Sleep in Sports: A short summary of alterations in sleep/wake patterns and the effects of sleep loss and jet-lag. *German Journal of Sports Medicine*, 67, 35–38. doi:10.5960/dzsm.2016.215

Kölling, S., Duffield, R., Erlacher, D., Venter, R., & Halson, S. L. (2019). Sleep-related issues for recovery and performance in athletes. *International Journal of Sports Physiology and Performance*, 14(2), 144–148. doi:10.1123/ijsp.2017-0746

Walsh, N. P., Halson, S. L., Sargent, C., Roach, G. D., Nédélec, M., Gupta, L., Leeder, J., Fullagar, H. H., Coutts, A. J., Edwards, B. J., Pullinger, S. A., Robertson, C. M., Burniston, J. G., Lastella, M., Le Meur, Y., Hauswirth, C., Bender, A. M., Grandner, M. A., & Samuels, C. H. (2020). Sleep and the athlete: Narrative review and 2021 expert consensus recommendations. *British Journal of Sports Medicine*, 55(7), 356–368. <https://doi.org/10.1136/bjsports-2020-102025>

Additional reading

Iber, C., Ancoli-Israel, S., Chesson, A., & Quan, S. F. (2007). The AASM Manual for the Scoring of Sleep and Associated Events: Rules, Terminology and Technical Specification. *American Academy of Sleep Medicine*.

Medic, G., Wille, M., & Hemels, M. E. (2017). Short- and long-term health consequences of sleep disruption. *Nature and science of sleep*, 9, 151–161. <https://doi.org/10.2147/NSS.S134864>

Roenneberg, T., Kuehnle, T., Juda, M., Kantermann, T., Allebrandt, K., Gordijn, M., & Merrow, M. (2007). Epidemiology of the human circadian clock. *Sleep Medicine Reviews*, 11(6), 429–438. <https://doi.org/10.1016/j.smr.2007.07.005>

Review Questions

[Estimated time for reading and answering the 4 questions with a maximum of 1000 words: 8 hours]

1. Discuss the advantages and disadvantages of the different types of sleep measurements.
2. Describe the mechanisms underlying the body's sleep-wake-rhythm and how it is influenced by internal and external factors.
3. Choose a sport discipline you are familiar with. Describe its specific impact on the athlete's sleep behavior (e. g. training schedule, competitions, travels).
4. Explain the functions of sleep and how inadequate sleep quality can affect an athlete's daily functioning.

Exercise

[Estimated time: 5 hours]

Write a 600-word report.

Interview an athlete about their sleep-wake-behaviour. Include a subjective sleep measurement you read about in the required papers. Collect some strategies and develop an individual intervention to improve their sleep based on the results of the interview and measurement, taking into account the literature.

TOPIC 11

Career Development and Transitions

by Natalia Stambulova

Introduction

A five-decade evolution of the career topic in sport psychology led to consolidation of the body of knowledge into what is currently called the athlete career discourse (ACD). The ACD is currently constructed of foundations (i.e., assumptions that are no longer questioned among career researchers and practitioners), two interrelated research areas – career development and career transitions – with an applied – career assistance – part of the ACD built upon, and cultural praxis of athletes' careers paradigm linking all parts of this construction together (Stambulova et al., 2021). Major conceptualizations established within the ACD include:

- Athlete as a whole person (Wylleman, 2019) that is a person who does sport (including elite level) together with other life matters (e.g., studies, work, family, friends, hobbies);
- Athletes' development as holistic (Wylleman, 2019) that means multidimensional with athletic development complemented by psychological, psychosocial, academic-vocational, financial, and legal layers influencing each other in multiple ways, where changes in one layer inevitably lead to changes in the other layers;
- Athletes' environment as holistic (Henriksen & Stambulova, 2017) that is constituted of micro- and macro- levels (with direct and indirect interactions and influences), athletic and non-athletic domains (e.g., sport club, sport federation, school, educational system, working place);
- Athletic career as part of, and contribution to, the life career expands the meaning of athletes' experiences from doing sport for the sake of sport to doing sport for the sake of sport and life;
- Career transitions as turning phases in career development involving appraisals of, and coping with, transition demands leading to successful or less successful outcomes and relevant changes in an individual's career trajectory. Career transitions are currently classified based on two criteria: a life domain, where the transition is initiated (athletic, non-athletic, and dual career transitions), and a transition predictability (i.e., normative, quasi-normative, and non-normative).

Career development research describes athletes' career pathways and predicts normative transitions that athletes might have (e.g., between adjacent career stages), while career transition research describes and explains the transition processes (demands, resources, barriers, coping strategies) and outcomes as imbedded into a career context and influenced by personal and environmental/contextual factors. Major transitions in foci of today's sport psychology research are the junior-to-senior athletic transition, dual career (in sport and education) transitions, cultural transitions, and athletic retirement.

Career assistance is aimed at helping athletes with various athletic and non-athletic career issues and facilitating their striving for career excellence. Recognition of the role of contexts in athletes' careers has led to the development of a paradigm termed cultural praxis of athletes' careers that

encourages researchers and practitioners to blend career theorizing, research, practice, and athletes' relevant contexts to address the diversity of athletes' careers across cultures (Stambulova & Ryba, 2013).

Learning Outcomes

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

- understand current structure of the athlete career (sport psychology) discourse (ACD) with its foundations, two research areas, applied part, and the cultural praxis of athletes' careers paradigm;
- define athletic career, career transitions, and career assistance;
- understand whole person and whole environment approaches in career research and assistance;
- distinguish between athletes' normative, quasi-normative, non-normative as well as athletic and non-athletic transitions;
- explain a transition process and outcomes contrasting a successful transition and a crisis-transition, and an unsuccessful transition;
- discuss a role of contextual factors in athletes' career development and transitions;
- discuss a professional culture of career assistance.

Key Definitions

Athletic career — term for a multiyear sport activity voluntary chosen by the person and aimed at achieving his/her individual peak in athletic performance in one or several sport events. It also can be defined as a sequence of stages and transitions.

Dual career — a combination of sport and studies or work.

Athlete career excellence — term for athletes' ability to sustain a healthy, successful, and long-lasting career in sport and life; healthy means high resourcefulness and adaptability (i.e., coping with career demands while adding to the individual resources), successful means athletes' striving for achieving meaningful goals in sport and life while satisfying basic psychological needs and maintaining health and wellbeing, and long-lasting means longevity in sport and life.

Career transitions — “turning” phases in career development with sets of specific demands athletes have to cope with to continue successfully in sport and life.

Normative transitions — relatively predictable transitions derived from the logic of an athletic or life career, e.g., junior-to-senior transition, athletic retirement, transitions within compulsory education.

Quasi-normative transitions — relatively predictable transitions for a certain category of athletes, for example, cultural transitions for transnational athletes or Olympic Games transitions for Olympic candidates.

Non-normative transitions — situation-related, idiosyncratic, and less predictable, for example, transition because of injury, changing club and/or coach.

Successful transition — the most favorable transition outcome resulting from a good fit between transition demands and barriers, on the one hand, and transition resources and strategies, on the other.

Crisis-transition — an alternative transition outcome that means inability of the athlete to cope with the transition demands on his/her own and implies searching for psychological assistance/intervention.

Unsuccessful transition — the least favorable transition outcome resulted from no timely crisis-coping intervention and characterized by, for example, premature dropout, mental ill health, or financial loss.

Required Reading

[Estimated time for reading and reflection: 12 hours]

Stambulova, N. (2017). Crisis-transitions in athletes: current emphases on cognitive and contextual factors. *Current Opinion in Psychology*, *16*, 62–66.
<http://dx.doi.org/10.1016/j.copsyc.2017.04.013>

Stambulova, N., Alfermann, D., Statler, T., Côté, J. (2009). ISSP Position Stand: Career development and transitions of athletes. *International Journal of Sport & Exercise Psychology*, *7*(4), 395–412. <http://dx.doi.org/10.1080/1612197X.2009.9671916>

Stambulova, N., Ryba, T. V., & Henriksen, K. (2021). Career development and transitions of athletes: ISSP Position Stand revisited. *International Journal of Sport and Exercise Psychology*, *19*(4), 524–550. <https://doi.org/10.1080/1612197X.2020.1737836>

Stambulova, N., & Wylleman, P. (2019). Psychology of athletes' dual careers: A state-of the art critical review of the European discourse. *Psychology of Sport and Exercise*, *42*, 74–88.
<https://doi.org/10.1016/j.psychsport.2018.11.013>

Wylleman, P. (2019). A developmental and holistic perspective on transitioning out of elite sport. In M. H. Anshel (Ed.) *APA handbook of sport and exercise psychology: Vol. 1. Sport Psychology* (pp. 201–216). Washington, DC: American Psychological Association.

Additional Reading

Henriksen, K., & Stambulova, N. (2017). Creating optimal environments for talent development: A holistic ecological approach. In J. Baker, S. Cobley J. Schorer, and N. Wattie (Eds.) *Routledge handbook of talent identification and development in sport*. (pp. 271–284). London and New York: Routledge.

Stambulova, N. (2010). Professional culture of career assistance to athletes: A look through contrasting lenses of career metaphors. In T. V. Ryba, R. J. Schinke, and G. Tenenbaum (Eds.) *The cultural turn in sport psychology* (pp. 285–314). Morgantown, WV: FIT.

Stambulova, N. (2010). Counseling athletes in career transitions: The five-step career planning strategy. *Journal of Sport Psychology in Action, 1*, 95–105.
<http://dx.doi.org/10.1080/21520704.2010.528829>

Stambulova, N. & Ryba, T. (2013). *Athletes' careers across cultures*. NY: Routledge.

Review Questions

Answer 3 review questions (1000 words)

1. Read and compare the ISSP Position Stands on athletes' career development and transitions published in 2009 and 2021: reflect on major changes in the topic since the first one was published.
2. What is a dual career and what contextual factors stimulated dual career research in Europe? (see Stambulova & Wylleman, 2019).
3. Reflect on the role of the whole person approach and the holistic athletic career model in athlete career research (see Wylleman, 2019).
4. How do existing career transition models explain the process and outcomes of a transition? Explain why athletes might need assistance in career transitions (see Stambulova, 2017).
5. What factors according to research facilitate athletic retirement? How can athletes be better prepared for the athletic career termination? (see Wyllemen, 2019 and both ISSP Position Stands)
6. Reflect on the athlete career excellence concept: how (based on career knowledge) help athletes to strive for career excellence? (see Stambulova et al., 2021)

Exercises

Based on your personal choice, select one exercise from the two suggested below.

Exercise 1

[estimated time: 3 hours; 600-800 words report is expected]

Analyze your dual career transition to college/university using the career transition model:

1. How did you decide to go to college/university?
2. Have you planned this transition?
3. What were the major demands in sport, education, social, and private life that you experienced?
4. Have you experienced any barriers to dealing with these demands (e.g., a lack of time)?
5. What personal resources helped you cope?
6. Who helped you and how (external resources)?
7. What coping strategies did you use to adjust to DC at college/university?

8. Do you think that you are now fully adjusted to your college/university life doing both sport and studies? Why, or why not (outcomes)?
9. Please, reflect on how the transition model helped you make sense of your experiences.

Exercise 2

[estimated time: 6 hours; 1500-1800 words report is expected]

Write an essay about your own athletic career using nine career metaphors as a framework (see in Stambulova, 2010 – required reading above). To facilitate your task here is a tentative plan for your essay:

1. Career as inheritance: What you have inherited from your family and/or from your socio-cultural background for your athletic career? Please, consider both resources and constraints.
2. Career as cycle: Please, divide your career into a number of stages and describe what happened during each of them.
3. Career as journey: What type of journey does your career represent? Do/did you have “a map” for this journey? Are/were you a passenger or a driver in this journey?
4. Career as action: What were the most important decisions you made during your athletic career? How these decisions influenced your athletic career and/or your life career?
5. Career as fit: What were major “good fits” in your athletic career? Tell about your one career situation where you experienced a lack of fit. How did you cope?
6. Career as relationship: What were the most important relationships related to your athletic career? How these relationships influenced your athletic career?
7. Career as role: How your athletic role co-existed with your other roles in life? Please, tell about intra- and/or inter – role conflict(s) you experienced.
8. Career as resource: What sport organizations you were related to during your athletic career? Do you think these organizations have had you as a resource and in which ways? What your resources you can/could transfer from your athletic career to your life outside/after sports?
9. Career as story: What your athletic career means for you? How has the meaning of sport changed for you across the career stages?

In conclusion reflect on the assignment and what you have learned analyzing your career from the different perspectives.

TOPIC 12

Injury, Prevention and Rehabilitation

by Urban Johnson

Introduction

Most athletes are confronted with physical injury sooner or later in their career. The gravity of the consequences in terms of personal tragedy, limitations on the potential success and financial costs, underline that it is essentially a negative experience or a career crisis.

Psychological factors have been associated with injury causes (psychological risk factors, injury prone athletes), with an attempt to develop prevention programs, e.g. by increasing the coping resources of the athletes, but also preventing injury outcome.

Medical surgery and rehabilitation strategies have contributed to reduce the time absent from training and competition in the past. It became, however, obvious that psychological aspects of injury prevention, treatment and rehabilitation are important elements, both in preventing potential injury outcome, overcoming injury crisis and in the preparation of a comeback.

Learning Outcomes

On completion of this topic, students should

- be able to appraise the gravity of the athletic injury problem in terms of incidence and consequences (personal, monetary, organizational costs)
- be able to assess the psychological risk factors related to the occurrence of athletic injury based on the knowledge of the relationship between the psychological and psycho-social factors and injury incidence and the mechanisms behind the stress-injury relationships
- be able to understand the injury from the athlete's perspective, including the meaning the injury had for the athlete as well as the impact the injury has on his/her life
- have knowledge of the most important psychological factors including indirect and direct interventions that can facilitate the rehabilitation process
- know how to assess the psychological readiness of the athlete to return to competition

Key Definitions

Psychological risk factors — Psychological factors that may contribute to injury vulnerability and resiliency. Personality factors (fairly stable, enduring qualities within the individual) and psychosocial factors (e.g., life stress events) are the most frequently investigated factors.

Stress-injury relationship — Theoretical model assuming that athletes who, as a function of personality, history of stressors, and coping skills, experience a more severe stress response in a potentially stressful situation, have a higher risk to be injured.

Psychological injury prevention — Strategies that reduce the injury risk. In line with the stress-injury model, psychological training form reduce the stress response seem to be promising.

Psychological injury rehabilitation — Any intervention that is likely to facilitate the management of an athlete's injury and to recover psychologically from it.

Psychological readiness — Complete psychological recovery when returning to competition, characterized by the absence of anxiety or fear of re-injury.

Required Reading

[Estimated time for reading and reflection: 9 hours]

Ivarsson, A., Johnson, U., Andersen, M. B., Tranaeus, U., Stenling, A., & Lindwall, M. (2017). Psychosocial Factors and Sport Injuries: Meta-analyses for Prediction and Prevention. *Sports Medicine*, 47, 353–365. doi:10.1007/s40279-016-0578-x

Piussi, R., Ferid Krupic, F., Senorski, C., Svantesson, E., Sundemo, D., Johnson, U., & Hamrin Senorski, E. (2021). Psychological impairments after ACL injury—do we know what we are addressing? Experiences from sports physical therapists. *Scandinavian Journal of Medicine and Science in Sports*, 1;00:1–10. doi.org/10.1111/sms.13959

Additional Reading

Gledhill, A. & Forsdyke, D (Editors, 2021). *The Psychology of Sports Injury: From Risk to Retirement*. Routledge, Taylor & Francis, UK. ISBN 9780367028695.

Ivarsson, A., & Johnson, U. (Editors, 2020). *Psychological Bases of Sports Injuries* (4 Edition). Fitness Information Technology, Morgantown, USA. ISBN: 9781940067490

Review Questions

Answer 4 review questions using a total of 1000 words maximum.

1. Briefly describe the roles of the history of stressors, personality and of coping resources in the stress-injury model.
2. Discuss the psychological and psychosocial factors that have been associated with increased vulnerability versus resiliency to injury.
3. Describe what actions can be taken by the sport psychologist to prevent injury.
4. Discuss the nature of the cognitive, emotional and behavioral responses to injury.
5. Describe how psychological factors can facilitate or debilitate the rehabilitation process.
6. Looking from the athlete's viewpoint what kind of social support is he/she receiving from whom (family, medical staff, including the sport psychologist, sports environment, friends/or colleagues outside the sport).

Exercise

[expected time: 4 hours]

Interview one athlete after a traumatic injury and one having an overuse injury. Focus on differences between the two in psychological, emotional and behavioral stress responses and received and preferred social support. Analyze the findings in the light of the literature you have read and write a 500-word report.

TOPIC 13

Doping Prevention

by Theresa Manges

Introduction

Even though sport is an ideal setting to foster moral competencies, these competencies are at the same time challenged by one of sport's major threats, namely doping. As defined by the World Anti-Doping Agency (WADA), doping comprises the occurrence of one or more anti-doping rule violations set out in the World Anti-Doping Code (WADA, 2021) whereby the most common violation is the use of banned substances or methods to enhance performance. With estimated prevalence rates ranging from 14-39% (de Hon et al., 2015) up to 44-57% (Ulrich et al., 2018), it is obvious that doping is a widespread problem, especially in elite sport.

Due to the potential health damages of doping, its menace to fair play and its negative influence on the integrity of sports, there are considerable efforts to minimize doping. The most popular strategy so far has been the detection and deterrence approach (see Mazanov and McDermott, 2009), which assumes that detecting and sanctioning doping will deter other athletes from resorting to it. However, since this approach is costly and at the same time not sufficiently effective in reducing the prevalence of doping, an educational anti-doping approach is viewed as promising and has been gaining importance. WADA (2018, p. 56) recognizes education “no longer [as][...] a worthy but optional extra”, but as “an essential and central pillar of the global anti-doping program”. This statement is further supported by the publication of the International Standard for Education (ISE, WADA, 2021) in which WADA also emphasizes the need for developing and delivering doping prevention programs that go beyond raising awareness and providing information about doping and that focus on a values-based educational approach.

The current state of anti-doping interventions suggests that programs targeting psychological and moral doping-related variables can have a meaningful impact on athletes' decision to dope. Regarding the question which variables exactly should be considered in anti-doping efforts, research indicates that both personal moral variables such as moral disengagement, moral identity, anticipated guilt, and empathy and social context variables such as perceived norms or a groups' collective moral attitude have been strongly related to doping likelihood, intention or susceptibility (Ntoumanis et al., 2014; Kavussanu et al., 2015). This is in line with Bandura's (1991) social cognitive theory of moral thought and action which has served as a foundation for recent anti-doping research (e.g., Boardley et al., 2017; Kavussanu et al., 2021).

Learning Outcomes

On completion of this topic, students should:

- be aware of the importance of primary doping prevention;
- understand the relationship of moral and psychological variables and proxies of doping behavior (e.g., doping likelihood);

- critically evaluate different approaches of doping prevention;
- be able to inform and to advise coaches and teachers (or others) looking for doping prevention methods about effective ways to tackle doping

Key Definitions

Doping — wider sense: the occurrence of one or more anti-doping rule violations set out in the World Anti-Doping Code; narrow sense: the use of banned substances or methods to enhance performance.

Values-based doping prevention — Education programs that are meant to go beyond a knowledge transfer and focus on an affective domain, including moral education. Such programs can address emotions, motives, attitudes and values and aim at developing personal attitudes and values as well as principles and moral competencies.

Information-based doping prevention — Programs that focus on a cognitive domain and aim at creating awareness and increasing knowledge about doping (e.g., forbidden substances, side effects, consequences, doping control procedure) in athletes, coaches and other support personnel in order to prevent—especially unintentional—doping.

Required Reading

- Ntoumanis, N., Ng, J., Barkoukis, V., & Backhouse, S. H. (2014). Personal and psychosocial predictors of doping use in physical activity settings: a meta-analysis. *Sports Medicine*, *44*, 1603–1624. doi:10.1007/s40279-0140240-4
- Barkoukis, V., & Elbe, A.-M. (2021). Moral Behavior and Doping. In E. Filho & I. Basevitch, *Sport, Exercise and Performance Psychology: Research Questions to Move the Field Forward*. (pp. 309–318). Oxford University Press.
- Pöppel, K. (2021). Efficient Ways to Combat Doping in a Sports Education Context!? A Systematic Review on Doping Prevention Measures Focusing on Young Age Groups. *Frontiers in Sports and Active Living*, *3*, 673452. doi:10.3389/fspor.2021.673452

Additional Reading

- Elbe, A.-M., & Brand, R. (2016). The effect of an ethical decision-making training on young athletes' attitudes toward doping. *Ethics and Behavior*, *26*, 32–44. doi:10.1080/10508422.2014.976864
- Kavussanu, M., Barkoukis, V., Hurst, P., Yurkymenko-Lescroart, M., Skoufa, L., Chirico, A., Lucidi, F., & Ring, C. (2021). A psychological intervention reduces doping likelihood in British and Greek athletes: a cluster randomized controlled trial. *Psychology of Sport and Exercise*, [102099]. <https://doi.org/10.1016/j.psychsport.2021.102099>

Review Questions

Answer all review questions using a total of 1000 words maximum.

1. Describe the shift from a detection and deterrence-oriented approach towards more “modern” approaches of doping prevention
2. Name 5–7 existing programs/interventions and compare them regarding their effectiveness
3. Explain how key variables such as moral disengagement and anticipated guilt are associated with doping proxies
4. Discuss the circumstances for implementing doping prevention (e.g., age of target group, way of delivery, setting for delivery, elite vs. recreational sport etc.)

Exercise

[expected time: 4 hours]

Write a report of 600 words.

Carefully look at the factors that are associated with doping likelihood or behavior and propose specific activities for athletes that would address and affect the respective variable in order to eventually reduce doping likelihood and behavior. In other words, design one or more intervention session(s) that are scientifically based but at the same time creative (e.g., game-like character).

TOPIC 14

Sport and Acculturation

by Eleftheria Morela

Introduction

Mobility of populations is a worldwide phenomenon occurring from the very early years of human history. In recent years, it has been estimated that more than 300 billion people live away from their home countries either because they were forced to leave their homes or because they decided to leave for social, political, or financial reasons (UN Refugee Agency, 2018). Regardless of the reason that led these people to leave their countries the phenomenon of population, mobility across borders brings important challenges at both national and international level, and successful acculturation arises as a fundamental and pressing issue.

The multicultural environment creates many opportunities for intercultural interactions. When culturally diverse individuals or groups come into contact with one another, an interchange of cultural attitudes and behaviors, known as acculturation, might occur that involves both incoming and host populations (Berry & Sam, 2013). For the acculturation process to yield desirable outcomes towards integration, ideally, the contact between members of different cultural groups should take place in environment where individuals cooperate in the pursuit of common goals (Brown, Vivian, & Hewstone, 1999); such an environment can be provided through sport. A growing body of research supports that sport, as an effective socializing agent, can play a significant social and inclusive role in society and lately many European countries have started to emphasize the role of sport as a way to promote intercultural dialogue and to actively integrate incoming groups into the host societies (Sagatun et al., 2008).

The potential of sport to positively contribute to improving a range of social challenges is widely stressed; however, research on the integrative role of sport in plural societies is limited, and findings seem ambiguous (for a review see Hatzigeorgiadis, Morela, Elbe, Kouli, & Sanchez, 2013). A number of studies have supported the role of sport in facilitating and promoting cultural interaction (e. g. Rosenberg, Feijgin, & Talmor, 2003); nonetheless, there are cases when sport has been found to hinder cultural interaction with the dominant culture, thus evoke tensions among the host and the incoming groups (Krouwel, Boostra, Duyvendak, & Veldboer, 2006).

The existence of these equivocal findings suggests that sport participation in itself does not guarantee positive acculturation outcomes; rather, sport must create appropriate environment wherein the goals of multiculturalism and integration can be reached. Preliminary studies based on Berry's acculturation model that examined the role of sport environment highlighted the importance of motivational environment for both incoming (e.g., Elbe, Hatzigeorgiadis, Morela, Ries, Kouli & Sanchez, 2016) and host populations (e.g., Morela, Hatzigeorgiadis, Sanchez, Papaioannou, & Elbe, 2017). However, acculturation throughout the social practice of sport is a complex process and to yield desirable outcomes towards integration it is important to consider the environment within which the activity takes place.

Learning Outcomes

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

- Broadly describe the conceptual model of acculturation.
- Discuss the most important results of current research regarding sport and migrants' acculturation.
- Critically evaluate the potential role of sport environment in promoting integration and multiculturalism.
- Be able to use appropriate tools and methods in research regarding sport and acculturation.

Key Concepts

Acculturation — the process of bidirectional change that occurs when two different ethno-cultural groups come in sustained contact with each other.

Cultural interaction — refers to the degree to which people seek involvement with the larger society.

Cultural maintenance — refers to the degree to which people wish to maintain their heritage culture and identity

Required Reading

Berry, J.W. (2005). Acculturation: Living successfully in two cultures. *International Journal of Intercultural Relations*, 697–712

Elbe, A.-M., Hatzigeorgiadis, A., Morela, E., Ries, F., Kouli, O., Sanchez, X. (2016). Acculturation through sport: Different contexts different meanings. *International Journal of Sport and Exercise Psychology*, 16, 178–190.

Hatzigeorgiadis, A., Morela, E., Elbe, A.M., & Sanchez, X. (2013). The integrative role of sport in Multicultural Societies. *European Psychologist*, 18, 191-202.

Morela, E., Hatzigeorgiadis, A., Sanchez, X., Papaioannou, A., & Elbe, A.M. (2017). Empowering youth sport and acculturation: Examining the hosts' perspective in Greek adolescents. *Psychology of Sport & Exercise*, 30, 226–235.

Additional Reading

Allen, J., Drane, D., Byon, K., & Mohn, R. (2010). Sport as a vehicle for socialization and maintenance of cultural identity: International students attending American universities. *Sport Management Review*, 13, 421–434.

Krouwel, A., Boostra, N., Duyvendak, J. W., & Veldboer, L. (2006). A good sport? Research into the capacity of recreational sport to integrate Dutch minorities. *International Review for the Sociology of Sport*, 41, 165–180.

Sagatun, A., Kolle, E., Anderssen, S. A., Thoresen, M., & Sogaard, A. J. (2008). Three-year follow-up of physical activity in Norwegian youth from two ethnic groups: Associations with socio-demographic factors. *BMC Public Health*, 8, 1–9.

Morela, E., Elbe, A.M., Theodorakis, Y., & Hatzigeorgiadis, A. (2019). Sport participation and acculturative stress of young migrants in Greece: The role of sport motivational environment. *International Journal of Intercultural Relations*, 71, 24–30.

Review questions

[Estimated time for reading and answering 4 review questions with a maximum of 1000 words: 8 hours]

1. Briefly describe Berry's (1997) acculturation model.
2. Briefly report and describe studies that have supported the potential of sport to facilitate cultural interaction.
3. Report important findings of studies that examined the role of the sport environment in acculturation process for both migrants and hosts
4. Explain why participation in sport activities may deteriorate or even hamper integration.
5. Summarize potential explanations for the inconsistent findings regarding the integrative role of sport.
6. Discuss the characteristics of an appropriate sport environment that promotes acculturation goals

Exercise

[expected time: 4 hours; 600-word report in expected]

Interview a young migrant athlete (e.g., from your sport club, participant in a university sport class) and try to identify the reasons for participating in sport, the role of coach-created sport environment and the perceived benefits and potential barriers of his/her sport participation. Discuss the athletes' perceptions in line with the literature and include the according references.

TOPIC 15

Ethical Issues and Moral Behavior

by Athanasios Papaioannou

Introduction

Some studies imply that sport might have negative consequences for athletes' morality. On the other hand, sport programs, when deliberately designed to do so, can be used to promote athletes' moral functioning. Morality in sport has been investigated based on different theoretical approaches. Social learning theorists emphasized the internalization of cultural norms and moral behaviors through conditioning, modeling and reinforcement. Structural developmentalists emphasized the development of moral thought through a sequence of stages of moral growth, with each succeeding stage in the hierarchy of moral reasoning being more mature and more adequate. More recently, constructivists suggested that moral functioning involves effective integration of the following sets of processes: moral sensitivity, moral judgment, moral choice and implementation leading to moral action.

Sport-specific models have been also developed to investigate issues like sportpersonship, responsibility and game reasoning. Based on achievement goals and self-determination theories researchers revealed that the process of moral choice is determined by the major achievement goals and self-determination of athletes, coaches and teams. An emphasis on personal improvement and autonomy and a reduction of ego-involvement, social comparison and controlled motivation facilitates the adoption of prosocial behaviors, sportpersonship, high levels of moral functioning and low levels of aggression. These suggestions and implications stemming from social learning and structural developmental theories constitute important components of moral education and character development programs in physical activity contexts.

Learning Outcomes

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

- understand the contribution of different theoretical approaches in the explanation of moral development and behavior in sport,
- explain findings in sport morality research,
- propose some practical recommendations for moral behavior in sport stemming from each theoretical model,
- develop moral education programs in sport and physical activity contexts.

Key Definitions

Morality — the quality of being in accord with standards of right or good conduct or a system of ideas that fall into those same categories. Morality is that guide to behavior that is regarded by an individual as overriding and that he wants to be universally adopted; an informal public system applying to all rational persons, governing behavior that affects others, and has the lessening of evil or harm as its goal.

Moral reasoning — individual or collective practical reasoning about what, morally, one ought to do.

Prosocial behavior — any action that benefits others.

Sportspersonship — reflects a general or core tendency toward the respect of and concern for the sport environment, the rules, and its participants (coaches, teammates, referees and officials, and the opponent), and a concomitant avoidance of a negative win-at-all-costs approach toward participation in sports.

Required Reading

Boardley, I. D. (2020). Moral Behavior in Sport: Reviewing Recent Research and Envisioning a Possible Future. *Handbook of sport psychology*, 391-409.

Solomon, G.B. (2004). A lifespan view of moral development in physical activity. In M. Weiss (Ed.), *Developmental sport and exercise psychology: a lifespan perspective* (pp. 453–474). Morgantown: Fitness Information Technology.

Additional Reading

Kavussanu, M., & Stanger, N. (2017). Moral behavior in sport. *Current opinion in psychology*, 16, 185–192.

Shields, D.L., & Bredemeier, B.L. (2007). Advances in sport morality research. In G. Tenenbaum & R. R.C. Eklund (Eds.), *Handbook of sport psychology (3rd Ed.)* (pp. 662–684). NJ: Wiley.

Vallerand, R.J., Deshaies, P., Cuerrier, J.P., Briere, N.M., Pelletier, L.G. (1996). Toward a multidimensional definition of sportsmanship. *Journal of Applied Sport Psychology*, 8, 89–101.

Review Questions

Answer all review questions using a total of 1000 words maximum.

1. Describe the common themes and the unique features of different theoretical approaches in moral development and behavior.
2. Describe and explain the main findings in sport morality research stemming from achievement goal theory.
3. Describe the major implications for practice in physical activity contexts stemming from each theoretical model of moral development and behavior.

Exercise

[expected time: 6 hours]

Please find 5–6 articles describing interventions aiming to promote moral functioning in physical activity contexts. Then incorporate their most important elements in a 3-week physical activity program in a summer camp, aiming to promote children’s moral functioning in sport and life.

TOPIC 16

Disordered Eating and Clinical Eating Disorders in Competitive Athletes

by Nadja Walter

Introduction

Numerous studies have highlighted elite athletes' risk for developing mental health disorders (for an overview see Reardon et al., 2019). Especially alarming are studies that indicate high prevalences of disordered eating or eating disorders in athletes. Research indicates that up to 45 % of female and 19 % of male athletes show symptoms of disordered eating or eating disorders (Bratland-Sanda & Sundgot-Borgen, 2013; Petrie & Greenleaf, 2007). Both disordered eating and clinically diagnosed eating disorders are characterized by disturbed thoughts and emotions concerning eating and by cognitive distortion of one's body image and appearance, which in turn result in unhealthy eating and weight control behaviors (Conviser et al., 2018; Petrie & Greenleaf, 2007).

In the general population, personality factors, gender-specific and sociocultural aspects have been identified as risk factors for developing an eating disorder. For athletes however, additional risk factors are observed due to sport-related pressures (Petrie & Greenleaf, 2007).

Research has shown that the prevalence of eating disorders is higher for female than male athletes (Bratland-Sanda & Sundgot-Borgen, 2013) and differs with regard to type of sport. An eating disorder or disordered eating in competitive sport is more likely in sports where aesthetics or weight play an important role (Petrie & Greenleaf, 2007).

Objectives

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

- define and differentiate different forms of disordered eating or clinical eating disorders
- reflect potential risk factors in the development of disordered eating or clinical eating disorders
- reflect assessment tools to evaluate disordered eating or clinical eating disorders

Required Reading

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5*. (5. ed.). Washington, DC: American Psychiatric Association.

Bratland-Sanda, S. & Sundgot-Borgen, J. (2013). Eating disorders in athletes: Overview of prevalence, risk factors and recommendations for prevention and treatment. *European Journal of Sport Science*, 13(5), 499–508. doi:10.1080/17461391.2012.740504

Petrie, T. A. & Greenleaf, C. A. (2007). Eating disorders in sport: From theory to research to intervention. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of sport psychology (3rd edition)*, vol. 24, (pp. 352–378). Hoboken: Wiley.
<https://doi.org/10.1002/9781118270011.ch16>

Additional Reading

Conviser, J. H., Tierney, A. S., & Nickols, R. (2018). Assessing athletes for eating disorders: Essentials for best practice. *Journal of Clinical Sport Psychology*, 1–26.
 doi:10.1123/jcsp.2018-0012

DeBate, R. D. & Thompson, S. H. (2005). Girls on the Run: Improvements in self-esteem, body size satisfaction and eating attitudes/behaviors. *Eating and Weight Disorders – Studies on Anorexia, Bulimia and Obesity*, 10(1), 25–32. doi:10.1007/bf03353416

IOC Medical Commission Working Group Women in Sport. (2005). *Position Stands – Female Athlete Triad Coalition*. <https://www.olympic.org/news/ioc-consensus-statement-on-the-female-athlete-triad>.

Walter, N., Heinen, T., & Elbe, A. M. (2022). Factors associated with disordered eating and eating disorder symptoms in adolescent elite athletes. *Sports Psychiatry: Journal of Sports and Exercise Psychiatry*, 1–10. <https://doi.org/10.1024/2674-0052/a000012>

Review Questions

Answer 3 review questions using a total of 1000 words maximum.

1. Please describe the different forms of clinical eating disorders according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2013) and give an overview of the prevalence rates in the general and athletic population.
2. Please describe the disordered eating behavior continuum (Bratland-Sanda & Sundgot-Borgen, 2013) which explains the difference between clinical eating disorders and disordered eating.
3. Please explain potential risk factors for the development of disordered eating and clinical eating disorders for competitive athletes.
4. Please summarize current approaches to prevent disordered eating and clinical eating disorders for competitive athletes.

Exercise

[expected time: 4 hours]

Please search for two validated questionnaires to assess disordered eating and clinical eating disorders (two for each form). Briefly describe the questionnaires (e.g., structure, items, psychometric criteria, scoring, etc.) and reflect on practical implications that can be derived from applying the questionnaires in the competitive sport setting. Please also consider potential limitations.

TOPIC 17

Performance Enhancement

by Sidonio Serpa

Introduction

Performance enhancement using psychological tools and strategies has been a main goal of researchers and practitioners interested in sport psychology. It evolved from the study of motor behavior focused on very simple laboratory tasks to broader sports activities aiming at exploring the performance potential of elite athletes in regard to highly competitive settings.

To help athletes to improve their potential with psychological enhancement tools and strategies, is one of the most important working areas in applied sport psychology in a modern, pedagogical rather than therapeutic understanding. Moreover, modern sports psychological preparation must consider athletes' mental health, and apply methods that join performance enhancement with mental health care.

For some years, the enhancement techniques were used without integrating them into general and consistent intervention frameworks, adapted to the specific contexts where the athlete's performance took place. Nowadays, it should be conducted following the most current developments of theoretical knowledge in sport psychology.

Therefore, applied sport psychologists should be supported by scientific research and have clear ideas regarding their professional approach (philosophy). Then, it is possible to conceptualize an intervention model, which will generate adapted strategies and specific techniques.

Learning Outcomes

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

- distinguish different objectives, forms, and methods of psychological training;
- understand psychological training included in the general training process;
- distinguish among different performance enhancement skills; and
- relate performance enhancement with athletes' mental health.

Key concepts

Psychological training — a systematic, thus regular, planned and controlled psychological strategy for the enhancement of the psychological prerequisites of performance.

Mental training — development of sports participants' mental skills in order to achieve performance success and personal well-being

Skills training — psychological training aimed at the improvement of sport specific technical and/or tactical skills, thus improving the repertoire of an athlete.

Mental health — “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community” (WHO, 2024)

Required Reading

[Expected time for reading and reflection: 6 hours]

Blumenstein, B. & Orbach, I. (2020). Periodization of psychological preparation within the training process. *International Journal of Sport and Exercise Psychology*, 18:1, 13–23, DOI: 10.1080/1612197X.2018.1478872

Fogaca, J. L. (2021). Combining Mental Health and Performance Interventions: Coping and Social Support for Student-Athletes. *Journal of Applied Sport Psychology*, 33:1, 4–19, DOI: 10.1080/10413200.2019.1648326

Additional reading

Eccles, D. W., Balk, Y., Gretton, T. W., & Harris, N. (2022). “The forgotten session”: Advancing research and practice concerning the psychology of rest in athletes. *Journal of Applied Sport Psychology*, 34:1, 3-24, DOI: 10.1080/10413200.2020.1756526

Lochbaum M., Stoner E., Hefner T., Cooper S., Lane A. M., & Terry P. C. (2022). Sport psychology and performance meta-analyses: A systematic review of the literature. *PLoS ONE* 17(2): e0263408. <https://doi.org/10.1371/journal.pone.0263408>

Siekańska, M., Bondár, R. Z., di Fronso, S., Blecharz, J., & Bertollo, M. (2021). Integrating technology in psychological skills training for performance optimization in elite athletes: A systematic review. *Psychology of Sport and Exercise*, 57, 102008. <https://doi.org/10.1016/j.psychsport.2021.102008>

Review Questions

Answer all review questions using a total of 1000 words maximum

1. Explain the concept of psychological training and refer to their objectives and targets;
2. Summarize how psychological training may be included in the general training process;
3. Discuss how competitive sports participation may become a source of mental health issues;
4. Summarize how mental skills training in sport may enhance performance and improve mental health outcomes.

Exercise

[expected time: 4 hours]

Choose one and write a 500-words report.

1. Describe a specific case and design an intervention plan aiming at enhancing an athlete's performance according to the general training periodization, following Blumenstein and Orbach's approach.
2. Interview an athlete about his/her experience concerning a personal problematic sport situation and its relation with mental issues. Elaborate on the psychological processes concerning that situation and suggest a specific psychological approach integrated in the general sports training process.

TOPIC 18

Talent Selection and Talent Identification

by Simon Knöbel

Introduction

In high-performance sports, researchers and practitioners alike are constantly searching for strategies and methods to select and promote the most promising talents. With regard to modern infrastructure and increasing professionalization of sports systems, early specialization is becoming more and more decisive (Baker et al., 2018). Although research in the context of talent identification has been able to demonstrate many associated problems and imprecisions in recent years, the consideration of empirical findings in established systems is difficult to implement (e.g., Collins et al., 2019). One of the biggest challenges that comes with early specialization is the selection of talented athletes based on subjective ratings or juvenile performance whose suitability as predictors of long-term success has not been proven (e.g., Güllich & Emrich, 2014). These criteria of selection favor the occurrence of the so-called relative age effect (for review see: Musch & Grondin, 2001). This effect is frequently observed in various sports and describes a systematic bias of the birth dates of promoted youth athletes towards the beginning of the year (e.g. Baker et al., 2018; Lames & Werninger, 2011). Due to the organization of sports participants into annual age groups during the youth phase accompanied by the use of cut-off dates, there are differences in chronological age (Cobley et al., 2009). Those born in the earlier months (especially 1st quarter) of the year have a developmental advantage over those born in the later months. This advantage can be enhanced by the different biological development (e.g., acceleration) and is noticeable in the early athletic performance leading to a higher probability for the early born to be selected and promoted (e.g., Baker et al., 2018; Lames et al., 2008). This results in an overrepresentation of early-born athletes in elite youth teams, where late-born athletes, although they may have greater potential, are not selected. Due to this bias of physical and physiological characteristics, current research increasingly aims to consider psychological factors (Elbe & Wikman, 2017). In this context, cognitive skills are considered as a potential additional feature to assess developmental potential (Sakamoto et al., 2018). At the same time, new models for the organization of sports participation in the youth stage are emphasized and evaluated (e.g., Bio-Banding, Malina et al., 2019).

Learning Outcomes

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

- Critically evaluate the advantages and disadvantages of early and late specialization.
- Understand the problems of juvenile performance and subjective assessments in the context of talent identification and selection.
- Know and discuss alternatives to established procedures and criteria for talent selection.

Key Definitions

Early specialization — “Early sport participation has been defined as intensive training or competition in organized sport by prepubescent children (< 12 years of age) for more than 8 months per year, with focus on a single sport to the exclusion of other sport and free play.” (Popkin et al., 2019)

Relative age effect — “Within many sport contexts, the youth stages of participation are often organized into annual age-groups using specific cut-off dates. [...] such a policy remains insensitive to the subtle chronological age differences (referred to as ‘relative age’ differences) between members within an annual cohort. These differences are associated with immediate and long-term consequences, commonly known as ‘relative age effects’ (RAEs).” (Cobley et al., 2009, p.236)

Bio-banding — “Bio-Banding is a recent effort at grouping youth athletes within a chronological age (CA) range, thus far 11 to 15 years, into “bands” or groups based on a characteristic(s) other than CA for specific competitions and training.” (Malina et al., p. 5)

Required Reading

- Baker, J., Schorer, J., & Wattie, N. (2018). Compromising Talent: Issues in Identifying and Selecting Talent in Sport. *Quest*, 70 (1), 48–63.
<https://doi.org/10.1080/00336297.2017.1333438>
- Cobley, S., Baker, J., Wattie, N., & McKenna, J. (2009). Annual age-grouping and athlete development: A meta-analytical review of relative age effects in sport. *Sports Medicine*, 39(3), 235–256. <https://doi.org/10.2165/00007256-200939030-00005>
- Collins, D., MacNamara, Á., & Cruickshank, A. (2019). Research and Practice in Talent Identification and Development—Some Thoughts on the State of Play. *Journal of Applied Sport Psychology*, 31(3), 340–351. <https://doi.org/10.1080/10413200.2018.1475430>
- Elbe, A. M., & Wikman, J. M. (2017). Psychological factors in developing high performance athletes. *Routledge Handbook of Talent Identification and Development in Sport*, 169–180. <https://doi.org/10.4324/9781315668017>
- Güllich, A., & Emrich, E. (2014). Considering long-term sustainability in the development of world class success. *European Journal of Sport Science*, 14(SUPPL.1).
<https://doi.org/10.1080/17461391.2012.706320>

Additional Reading

- Gonçalves, E., Noce, F., Barbosa, M. A. M., Figueiredo, A. J., & Teoldo, I. (2021). Maturation, signal detection, and tactical behavior of young soccer players in the game context. *Science and Medicine in Football*, 5(4), 272–279.
- Lames, M., & Werninger, L. (2011). *A Mathematical Model of the Relative Age Effect (RAE)*. July.

- Malina, R. M., Cumming, S. P., Rogol, A. D., Coelho-e-Silva, M. J., Figueiredo, A. J., Konarski, J. M., & Kozieł, S. M. (2019). Bio-Banding in Youth Sports: Background, Concept, and Application. *Sports Medicine*, *49*(11), 1671–1685.
<https://doi.org/10.1007/s40279-019-01166-x>
- Musch, J., & Grondin, S. (2001). Unequal competition as an impediment to personal development: A review of the relative age effect in sport. *Developmental review*, *21*(2), 147–167.
- Popkin, C. A., Bayomy, A. F., & Ahmad, C. S. (2019). Early sport specialization. *JAAOS-Journal of the American Academy of Orthopaedic Surgeons*, *27*(22), e995-e1000.
- Sakamoto, S., Takeuchi, H., Ihara, N., Ligao, B., & Suzukawa, K. (2018). Possible requirement of executive functions for high performance in soccer. *PLoS ONE*, *13*(8), 1–11.
<https://doi.org/10.1371/journal.pone.0201871>

Review Questions

Answer 4 review questions using a total of 1000 words maximum.

1. Briefly summarize the risks of early specialization with regard to talent selection and talent development. (e.g., Collins et al., 2019; Güllich & Emrich, 2014)
2. What challenge do coaches and others involved in the selection process face when it comes to identifying and selecting talent (e.g., Baker et al., 2018)?
3. Which psychological characteristics could be additionally assessed and provide information about the suitability for a career in competitive sports? (e.g., Elbe & Wikman, 2017)
4. Briefly describe the advantages of Bio-banding over the previous method of grouping birth cohorts (e.g., Malina et al., 2019).

Exercise

[expected time: 4 hours]

Write a report of 600 words maximum.

Choose a sport. Describe how an optimal talent selection and promotion process could look like. Which criteria (psychological, physiological, etc.) would you rate as crucial to the sport and why? How could these criteria be assessed? Try to address aspects that could help to reduce systematic biases such as the relative age effect.