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Sport Identity – Key Incentives to Adhere to Sports-Based Prevention and Rehabilitation

Sport Identität – Schlüsselfaktoren zur Teilnahme an sportbasierter Prävention und Rehabilitation

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Summary

- › **Both for the promotion of health** and in long-term rehabilitation of various diseases, precisely shaped and individually adjusted physical exercises are an efficacious means. In this context, sustainable adherence is a crucial problem and involves psychological issues of motivation and self-concepts.
- › **Based on** spontaneous verbal messages during trainings, micro-interviews, and short-term focus groups, the present qualitative multi-centred study used data from heart patients in long-term cardiac rehabilitation in Austria (n=307) and from students of music and performing arts in Germany (n=386) who enrolled in courses for the promotion of health and the prevention of musculoskeletal problems.
- › **Investigating** individual incentives to adhere in sports and health-related physical exercises resulted in the sport psychological notion of 'sport identity' that differs from conventional 'athlete identities'. Regrouping comparable data identified four determining 'factors', i.e., (i) discipline preference, (ii) modality of exertion experience, (iii) the body-self, and (iv) the grade of domination.
- › **Being considered** a hypothesis generating study, the associated theoretical framework shall help therapists, educators, coaches in public health domains, and practitioners in rehabilitative areas to better understand the individual attachment to sports and to provide activities that are tailored to individual demands. This should enhance adherence and sustainability and avoid risks of discouragement, dependence on external incentives, and reluctance.

KEY WORDS:

Athletic Identity, Sport Identity, Motivation in Sport, Self-Concept, Health Promoting Sports

Zusammenfassung

- › **Genau strukturiertes** und individuell abgestimmtes Training hat sich sowohl zur Förderung von Gesundheit als auch in der langfristigen Rehabilitation verschiedener Erkrankungen als effiziente Maßnahme erwiesen. Dabei ist nachhaltige Teilnahme eine entscheidende Frage, die das psychologische Konstrukt der Motivation sowie des Selbstkonzepts einbindet.
- › **Daten** für die vorliegende qualitative multizentrierte Studie stammen aus Mikrointerviews, spontanen Verbaläußerungen und Kurzzeitfokusgruppen während Trainingsphasen in der Herz-Langzeitrehabilitation in Österreich (n=307) und in praxisorientierten Lehrveranstaltungen zur Gesundheitsförderung und Prävention skelettmuskulärer Probleme für Studierende der Musik und der darstellenden Künste in Deutschland (n=386).
- › **Untersuchungen** zu individuellen Anreizen an Sport und gesundheitsorientierten physischen Training führten zum Terminus „Sportidentität“, der sich in diesem Kontext vom häufig untersuchten Bereich der „Sportleridentität“ deutlich abgrenzt. Häufungspunkte nahe beieinander liegender Daten definierten in der Folge vier zentrale Identitätsfaktoren: a) disziplinspezifische Präferenz; b) Art der Erfahrung von Anstrengung; c) Körper-Selbst und d) Ausmaß von Dominanz.
- › **Im Sinne einer** Hypothesen generierende Studie will das daraus resultierende theoretische Modell Therapeuten, Pädagogen sowie Trainern im öffentlichen Gesundheitswesen und Praktikern im Bereich der Rehabilitation Hilfe stellen, individuelle Sportneigungen treffsicherer zu verorten und so gezielt sportliche Aktivitäten anzubieten, die auf individuelle Anforderungen zugeschnitten sind. Damit könnten die nachhaltige Teilnahme an spezifischem Gesundheitssport verbessert und das Risiko von Enttäuschungen, Abhängigkeit von externen Verstärkern und widerwilliger Sportausübung verringert werden.

SCHLÜSSELWÖRTER:

Sportleridentität, Sportidentität, Sportmotivation, Selbstkonzepte, Gesundheitssport

Introduction

Why Do We Play Which Sports?

The British cyclist and Olympic gold medallist Victoria Pendleton said that winning the gold medal at the Olympics had given her very little joy. Exploring reasons for this surprisingly low emotional response involves issues of intrinsic and extrinsic motivation (31) and how they act as an incentive for exercising and playing sports. Moreover, this aspect plays a crucial role for the adherence to sports for the promotion of health and preventive as well as rehabilitative purposes.

In this context, various studies highlight fun as a main factor (37) and discuss its importance in youth athletic development and as a means to keep exercises healthy and balanced (23). Such standpoints raise questions about underlying mechanisms and touch upon interdependencies between personality, self-images, and the driving force behind sports – the core issue of the present study.



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Athletic Identity and Related Theoretical Models

This paper suggests the use of the term ‘sport identity’ that is, at least in the realm of science, rather rarely used though. In contrast to a few studies, e.g., in sports educational domains (27) that allude to sport identity, the lion’s share seems to be dealing with concepts of ‘athletic identity’.

According to Brewer, Van Raalte and Linder (4) athletic identity is the degree to which an individual identifies with the athlete role and looks to others for its acknowledgement. Athletic identity involves psychological perspectives such as self-concept, self-esteem, affect, and motivation and goes hand in hand with the identification of various dimensions of athletic identity (3).

That term of ‘athletic identity’ inspired a wealth of research on a broad spectrum of topics: gender issues (18), selected disciplines such as marathon (14), interdependencies with psychological concepts such as motivation (32) and mood disturbances (38), and the identity of athletes with disabilities (19).

The multifaceted features of athletic identity eventually caused expanded constructs that allowed for perspectives such as social identity, exclusivity, negative affectivity, and self-identity. They shed light on the connection between athletic identity and a broad spectrum of personality factors and involved religious, academic, and emotional topics (7).

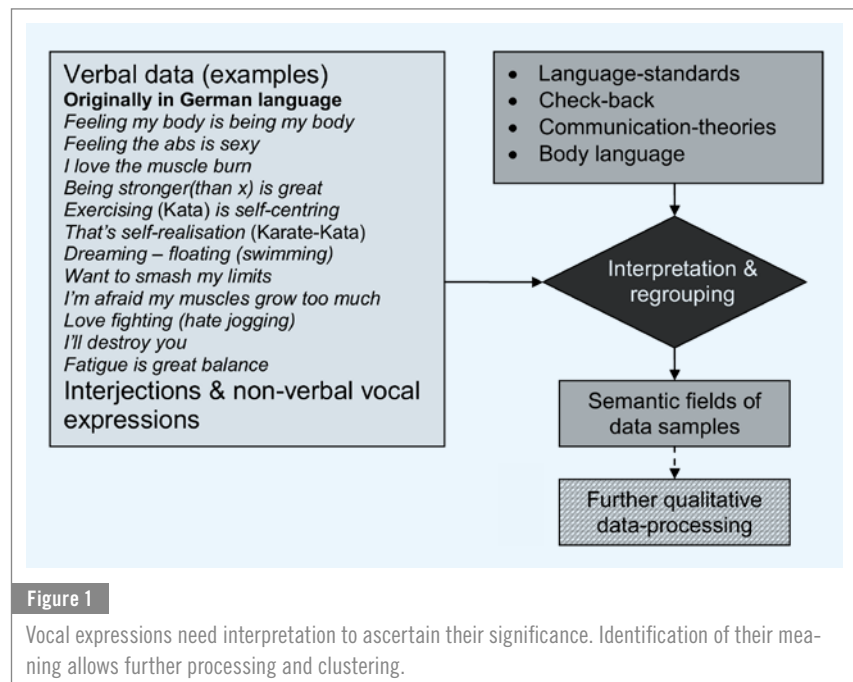
Over the years, the term and construct of ‘athletic identity’ have taken shape. Given that the referring definitions are approved, athletic identity can be assessed (1). In this context, athletic identity not only applies to elite athletes but also to participants in recreational sports (17) and greatly modulates the sustainable adherence to physical activity and organised sport participation in children and adolescents (2).

Moreover, athletic identity might be associated with pathological features. It is considered a possible risk factor for exercise dependence (24) and can cause rehabilitation overadherence of injured athletes (13). Athletic identity can even influence pathological eating (12) and alcohol consumption such as hazardous drinking among team sports players (39).

Broadly speaking, a wealth of studies highlights the strong impact of athletic identity on the practice of sports activities and involves differential psychological, pathological, and health-related perspectives. Trying to complement these approaches, the present article suggests an enlarged concept of sports-related identity that also allows for anthropological aspects of sports disciplines, exercise-related sensory incentives, depth-psychological features, and the subtle link between sports and the body-self.

Study Design

The scientific core of the present study is neither the assessment of the efficacy of a medical intervention nor a quantitative description such as statistics about typical injuries in athletes, but to explore psychological conditions to adhere to sports for the promotion of health and/or rehabilitative purposes. In this sense it is considered a hypothesis generating study to suggest a preliminary theoretical framework for orientation in practice and further research.



To allow for a wide range of different populations, the multi-centred study is based on data from two very dissimilar samples: older cardiovascular patients (n=307) in long-term cardiac rehabilitation who attend specifically tailored indoor and outdoor sports activities (Austrian Heart Association) and students of music and performing arts (n=386) who were enrolled on courses for health promoting exercises and occupational prevention of musculoskeletal issues.

The data pool encompasses spontaneous expressions during regular training phases, answers given in micro-interviews, and outcomes of short-term focus groups (Figure 1). The qualitative empirical mode of data processing was based on semantic comparison, hermeneutic modes to identify accumulations of data with similar meaning, and the construction of main trends that are in a sense comparable to factor analysis in quantitative research.

In contrast to rather homogenous distributions of different remarks, i.e. distributions that do not allow the identification of plausible accumulation points, the present analysis resulted in the identification of distinct clusters: preference of disciplines, modes of exertion, awareness of the body-self, and experience of domination (Figure 2). These clusters form a theoretical framework that suggests modes why people adhere to health- and therapy-associated sports. These results are heuristically compatible with various relevant disciplines (Figure 3). Nevertheless, both the pragmatic value and the empirical validity have still to be tested in further studies.

Four Cornerstones of Sport Identity: Discipline – Exertion – Body-Self – Domination

As this mode of data-processing adheres to principles of grounded theory and constructivism, the present four-armed-framework is not the only thinkable possibility to interpret the given empirical raw material. Nonetheless, it seems to be of pragmatic value to enhance adherence to sports, to improve life-quality, and to optimise the health benefits of physical activity. The following chapter outlines the clustered data and discusses the four cornerstones in a broader context. >

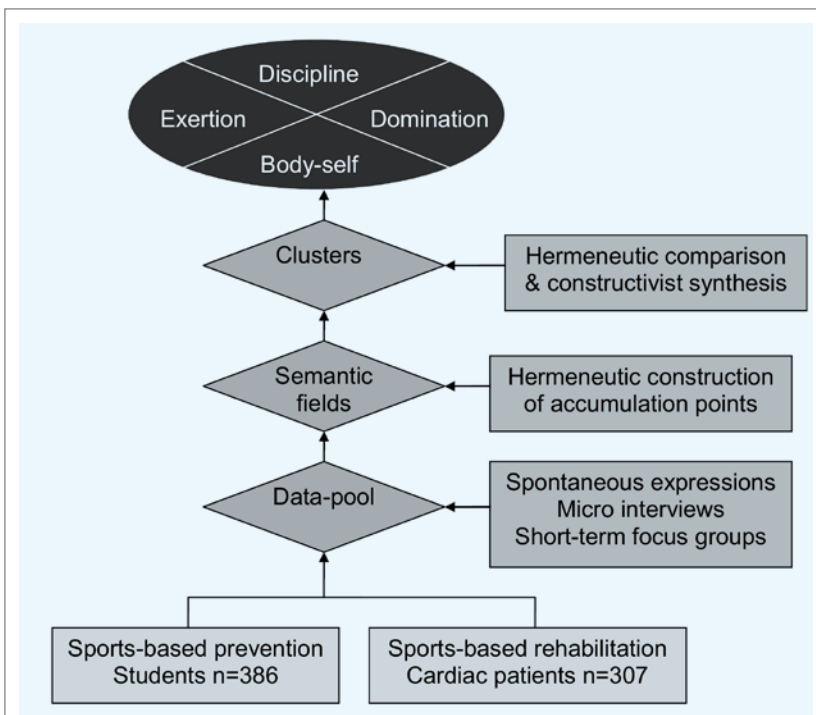


Figure 2

Hermeneutic and constructivist methods result in the generation of a theoretical framework on sport identities. The quantitative study yields a hypothesis, but does not provide a proof of its validity.

Sporting Discipline

There is afresh the crucial question: Why do people play tennis or exercise Judo or are fond of swimming or horse riding? Interdisciplinary perspectives allow us to assume at least three main reasons: (i) external influences from parents, idols, cultural traditions, and reinforcement mechanisms; (ii) captivating symbolic experiences such as flying or being merged with the element of water; (iii) movements that match genetically determined patterns and a Gestalt-psychological tendency to clear-cut physical activities.

Identity with a sports discipline is more than a mere 'like'. It is considered the counterpart of personality-immanent entities. Sport identity can be understood as a certain iso-principle that links the self and its behaviour and is closely associated with the intrinsic joy and satisfaction of performance and achievement. Sport identity involves the gestalt of movements and their individual significance.

The feeling of being one with the performed sport gains momentum. The discipline-based factor of sport identity relates to social and environmental conditions such as individual or team sports, exercises with or without animals, and indoor/outdoor activities.

Exertion

Exertion can create fantastic feelings. It causes elevated endorphin levels, hence the 'runner's high', and involves a sort of sports-based psychosomatic rebalancing. It goes hand in hand with the perception of burning muscles that yet do not cause pain and is often associated with the experience of energetic pulsations and the sensation of lived strength.

Nevertheless, different people tend to prefer different modes of exertion: the perception of cardiovascular stimulation, the typical fatigue that follows hard endurance trainings, the feeling of muscle contraction and peaks of maximal strength such as in weight lifting and in several Judo throws or ground

techniques, for instance. Although we assume that preferences of exertion-based sensations closely interact with the central nervous reward system, they also seem to derive from a genuine personal predisposition that belongs to this novel construction of sport identity. It even touches upon erotic feelings and exertion-based modes of self-esteem and the experience of life in a most intensive quality.

Body-Self

Body-oriented therapies highlight the 'body I am' that differs from the concept of the 'body I have' and shed, in consequence, light on the enormous impact of the so called 'body-self' on the entire personality. Thus the body-self forms a multifaceted dimension of sport identity. It comprises the body shape, idealises muscularity or slimness, and relates to stretchability and flexibility. Moreover, it is relevant to skills and capacities such as general motor-coordination, to body-images such as the growing body, and to a broad spectrum of body fantasies.

These factors greatly influence the acceptance of one's body, subclinical body-dysmorphic deviations, obsessive-compulsive exercising, eating disorders (which are alarmingly frequent among athletes), and body-dependent discomfort. The body-self seems to be a core criterion for selecting

appropriate sports activities. Vice versa it can help to modify pathological states and to re-integrate one's personality.

Domination

The issue why people are motivated by contest is as old as sports competitions. Already in the year 1995 Franken and Brown (11) identified three possible reasons: to satisfy the need to win, to improve their performance, and the motivation to put forth greater effort. The need to win and the experienced satisfaction in sports competitions, however, raise multiple questions and challenge interdisciplinary research.

Fighting and winning not only constitute the essence of sport games, they also involve most elementary perspectives of the human evolution, biological selection, and dominance. Ethical norms of social behaviour and inner incentives are likely to conflict. They can cause identity crises and require educational efforts and environments that allow for symbolic fights and help to conquer aggressive relics of former evolutionary phases.

Explanations shed light on the role of winning to maintain or enhance self-esteem, to defend a certain, even just fictitious position, to eliminate virtual rivals, and to work out aggressive tendencies in a controlled way. In terms of depth psychology, subconsciously determined drives to dominate are impetuous. These can be considered a robust personality factor that creates a strong sport identity and differs considerably from what conventional concepts of athletic identity describe.

Spectrum of Applications: Education, Public Health, and Rehabilitation

Sustainability of adherence to sports plays a decisive role both for high achievements and for the promotion of health. This study focuses particularly on sports for public health purposes, secondary prevention of epidemiological threats, and active lifestyles. These issues involve sports based

health education, occupational medicine, adult disease risk management, and long-term rehabilitation.

Physical Education and School Sports

From 4 to 7 April 2016, researchers from eight countries met in Denmark to reach evidence-based consensus about physical activity in children and youth. The agreement resulted in a 21-item consensus statement that highlights the manifold benefits of physical activity and sports on children and youth, explicitly fitness and health, cognitive functioning, engagement, motivation, psychological well-being, and social inclusion.

The consensus paper points out that 'engagement in physical activity has the potential to positively influence psychological and social outcomes for children and youth, such as self-esteem and relationships with peers, parents and coaches'. Emphasising that 'participation of children and youth in physical activity and sport is influenced by socioeconomic status, gender, ethnicity, sexual orientation, skill level and disabilities', it still ignores motivational facets of adherence and fails to take self-identity with sports into account. Nonetheless, this aspect turns out to be of high importance to self-images and life-styles that allow for sports activities and the promotion of health.

And yet, the consensus paper matches epidemiology findings that emphatically advocate health education. Given that physical activity has a positive effect on the musculoskeletal, metabolic, cardiovascular, and mental system, school sports can be regarded as a viable contribution to the solution of these pressing challenges.

For the last few decades, obesity and type 2 diabetes in children have dramatically increased and the prevalence of the metabolic syndrome calls for relevant programmes. These medical conditions often coincide with cardiovascular diseases in the younger generation and form a high risk constellation (16, 28). Musculoskeletal issues are similarly frequent in children and go hand in hand with overweight (35) and excessive sedentary behaviour (5). Additionally, psychiatric disorders are a severe problem in paediatric care and cover a broad spectrum of issues such as the impact of the mother's depression on the child (21) and the psychosocial disadvantages of childhood obesity (8).

In many countries, physical education belongs to the compulsory curriculum which makes adherence a minor problem. Nevertheless, school sports that also address less motivated pupils face the problem of simulated effort and of how to support the development of healthy and active life-styles. Sports facilities that match the students' sport identity might facilitate the solution of this dilemma.

Public Health

'Sports for all' has become a global movement to enhance social inclusion, life quality and overall fitness, hence their importance to health promotion in the sense of the WHO. And yet, participation and adherence greatly depend on athletic (!) identities, positive experiences with sports and associated reinforcement, social incentives, and local sports facilities.

To bridge the gap between athletes and non-athletes is difficult and calls for joint efforts of school sports, occupational

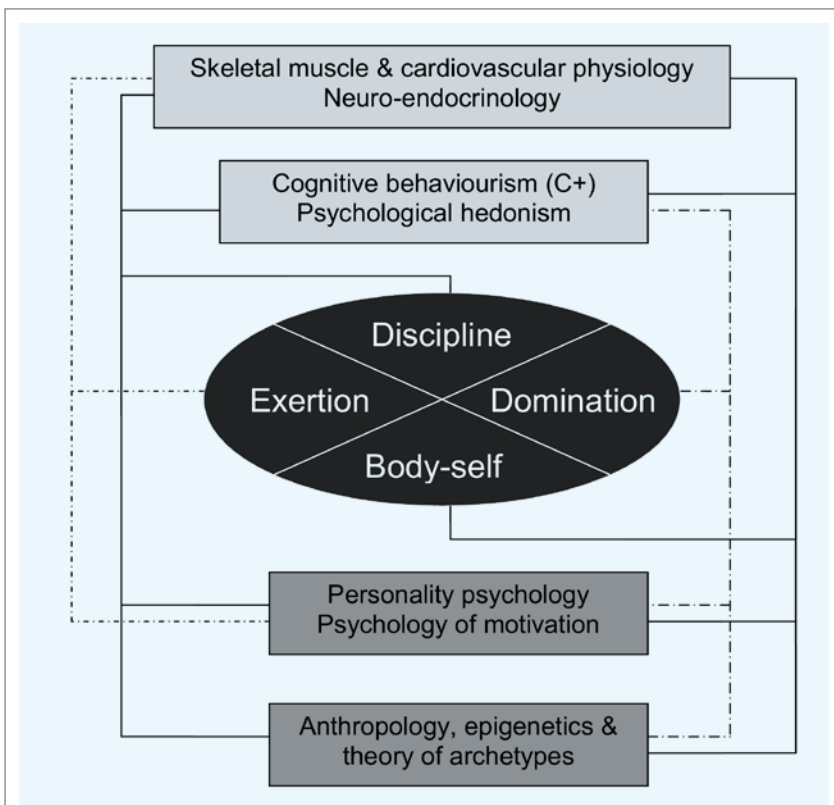


Figure 3

The sport identity theory's heuristic compatibility is high and suggests subsequent interdisciplinary in-depth investigations. The indicated interrelationships are qualitatively dissimilar and generic.

medicine, rehabilitation, and communities that provide suitable facilities. This requires appropriate management, viable strategies, and winning facilities. In this context, attractiveness seems to be closely linked to sport identity.

Rehabilitation

Physical exercise and sports are of paramount importance to long-term rehabilitation, health promotion and prevention in individuals with various risk profiles, and the maintenance of psychomotor functioning. This concerns exercise programmes in cardiac (29) and cancer rehabilitation (22), relates to attempts to retain the healthy self in patients with Parkinson's disease (10), and tries to boost neuroplasticity and motor recovery after stroke (26). Physical activity also has advantageous neurobiological effects on major depression (33), it supports cognitive functioning (6) and helps to reduce neuropathic pain (9).

Broadly speaking, physical exercise is a perfect panacea in rehabilitation medicine. And yet, there is the crucial problem of adherence and sustainability. Although sports medicine knows about the manifold benefits of physical activity, active participation of patients is still the decisive point. Adherence, however, is one of the most critical issues in rehabilitative medicine and challenges long-term cardiac rehabilitation (20, 30) as well as the whole spectrum of medical rehabilitation.

As adherence to physical activity for rehabilitation purposes greatly depends on motivation and involves various psychological factors, research focuses on relevant determinants such as the positive correlation between one's exercise history and exercise adherence in oncological patients (15). Adherence to exercise programs also depends on various psychological factors such as cognitive ability, positive attitudes, and depressive symptoms (25).

In this context, motivation and self efficacy play a crucial role (34). Nevertheless, because of the high amount of unsolved questions, many studies underscore that further research on the motivational factors for sustainable physical activity is needed (36) and cut hence to the chase.

Most scientific studies on movement and exertion for rehabilitative purposes speak about physical exercise, but not about sports. In fact, many of them use a very restricted repertoire and are often just based on walking, jogging, and formal resistance training with weights and rubber bands. They focus on the physiologically adequate quantum of exertion, but ignore the individual's sport identity which might greatly enhance satisfaction with related activities. This, however, needs sports medical research on relevant factors of various sport disciplines and requires institutions providing facilities that match the participants' sports-selves.

Practical Value and Limitations

The presented model should help sport coaches, educators, and therapists to tailor exercises to identity profiles and to encourage athletes at all levels of performance to explore their specific affinity to sports. This might enhance sports-based well-being and personal growth and ought to avoid frustration and disappointment.

From the perspective of the theory of science, however, this construct cannot be considered the only theoretical representation of what we call 'sport identity'. It is rather an evidence-based model of practical value and shall therefore complement other comparable approaches such as motivation theory in sports psychology and concepts of athletic identity.

Further research on combinations of these dimensions is needed to more deeply understand sport identities. In contrast to multi-dimensional constructs that comprise strictly separated sub-entities, this model allows for interdependencies and blends, and involves the factor of personal developments. Finally, research on system-compatibility with other sports-medical and psychological theories is needed. ■

Conflict of Interest

The author has no conflict of interest.

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