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Corona and Now?
The Consequences of the Corona Pandemic and Possibilities of Intervention of School Sport

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The text discusses the multificated consequences of the COVID-19 pandemic on children, adolescents and teachers, particularly in the areas pf psychology, physical health, social development and cognition. It highlights the challenges posed by lockdowns, social isolation and reduced physical activity. To address these issues, the text provides guidelines for educators to incorporate self-efficacy experiences, adapt physical education to individual needs, enhance social competencies and improve cognitive functions. These guidelines aim to create a more holistic approach to physical education that considers psychological, social and cognitive components alongside technical skills.

Keywords: pandemic effects, psychological consequences, physical consequences, social consequences, cognitive consequences, guidelines, physical education, holistic approach

Introduction and Problem Definition

The current world headlines report about wars, financial crises, or climate catastrophes. The Corona pandemic—which is undoubtedly on the wane—currently only arouses interest if one is personally affected. Perhaps people are also a little "pandemic tired" because of the constant media instruction. But the immediate and long-term consequences are omnipresent in many areas of life. It is not only from the mouths of doctors, teachers, or business representatives that one regularly hears indications that we are still a long way from achieving comprehensive normality. The identified limitations or defects can be found in the physical as well as in the psychological and social spheres and sometimes represent serious impairments of the well-being and quality of life for the affected person or his or her environment.

As a result, teachers are sometimes also indirectly affected to a massive extent. When one encounters these "unevennesses" in different contexts, especially in teaching-learning processes, one sometimes encounters ignorance or inability to act on how to deal with them.

These global findings—coupled with several inquiries in this regard—were the starting point for us at the Transfer Center for Applied Sport Sciences to address the topic. First of all, we had to document the current situation and include existing studies that deal with the physical, psychological, social, and cognitive deficits in children and adolescents caused by the pandemic. In addition, we developed a study ourselves that focused primarily on teachers' and coaches' assessment of corona effects. Here, quantitative interviews were conducted

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according to Mayring (2015). In a synergistic procedure using the scientifically based mixed-method method, we correlated these categorized responses with the general quantitative findings with the aim of obtaining meaningful items on limitations regarding impairments. Finally, following the analysis, guidelines were developed on how to deal with the identified deficits in the pedagogical context (physical education, training …) taking into account the deficits according to the principle of optimal fit.

The Architecture of the Study

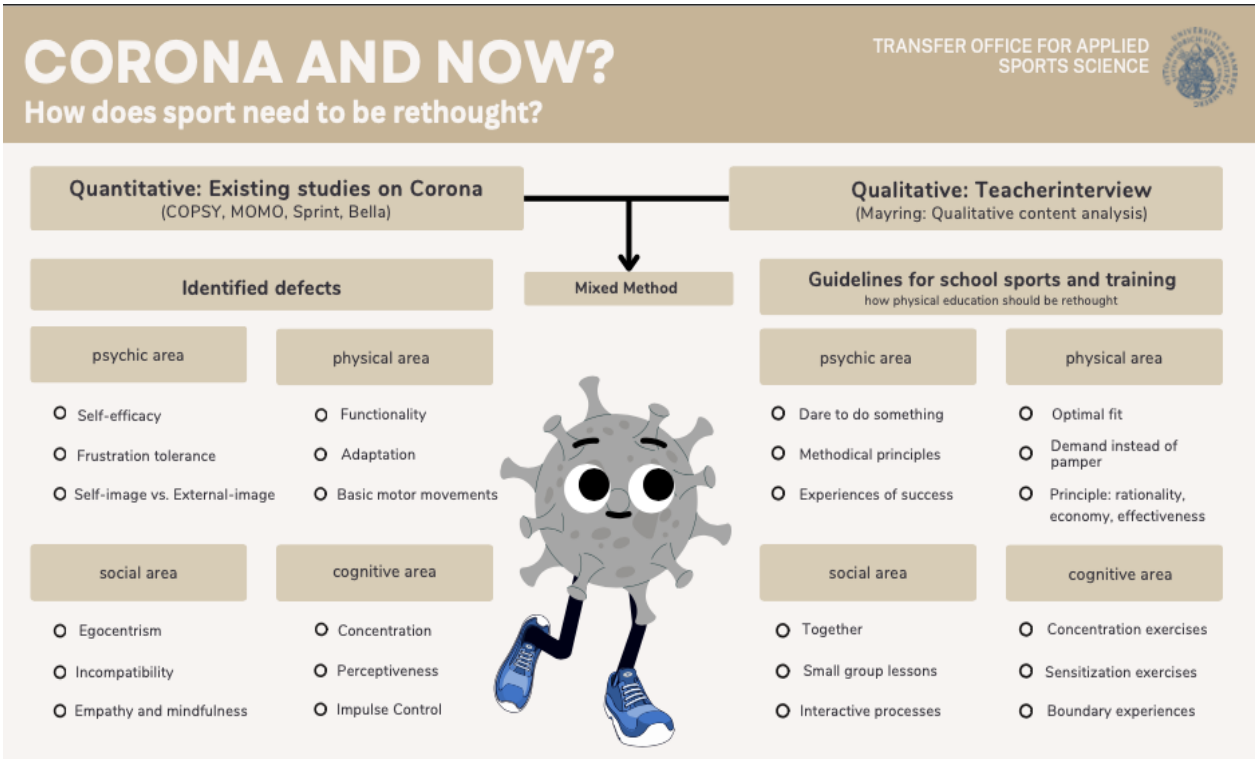

Figure 1. Corona: inventory of deficits and guidelines for remediation.

Consequences

The Psychological Consequences

As a result of the significantly reduced physical activity times due to homeschooling and the club closures, the children and adolescents lacked experiences of self-efficacy and thus there were also no opportunities for experiencing victory and defeat. This also led to a drifting apart of self-image and the image of others, and there was also no way of dealing with loss, which resulted in reduced frustration tolerance.

Other deficits identified were a lack of social compatibility, strong egocentrism, deficient concentration, impatience and impulsivity, and a lack of willingness to perform.

The Physical Consequences

A rolling stone gathers no moss! This old saying has current relevance. Due to home office and movement restrictions, the daily sitting time increased to more than 10 hours (DKV-Report, 2023), so that there were hardly any demands on the organism, from which the functional capacity suffered measurably (Manz & Krug, 2022). The body was only challenged to a limited extent, so that there were hardly any biopositive adaptations in the

cardiovascular system, but also in the active and passive musculoskeletal system. The number of overweight children and adolescents increased measurably and the usual age-appropriate performance goals could not be nearly achieved.

The Social Consequences

Because social contact was limited by the various lockdowns, only reduced encounters occurred. Many saw themselves as being on their own, which in many cases led to egocentrism. People not only lost sight of the worries and needs of others, but also tried to find their own way through the jungle of regulations. As a result, self-interest came first and empathy and attentiveness took second place. Because there were hardly any interpersonal interactions in this respect, learning fields for the acquisition of social compatibility opened up only to a limited extent (UKE, n.d.).

The Cognitive Consequences

After the lockdowns, interviewed teachers not only complain about deficits in the students' concentration and attention span. Here, the periods of cognitive resilience have been significantly reduced. The performance of so-called executive cognitive functions such as perceptual ability, impulse control, or decision-making ability has also declined significantly. These subjective everyday experiences, also paraphrased as "brain fog", are based on studies demonstrating cognitive impairment after surviving COVID-19 infection (Hartung et al., 2022; Hampshire et al., 2021).

Physical Education-Specific Consequences

The responses of the surveyed physical education teachers largely coincide with the findings identified by the scientific studies (e.g., MoMo study) (Scholz, 2021).

In addition, there were deficits in commitment, frequent excuses due to illness, lack of resistance to "crisis situations", lack of social compatibility, and the fact that the variable availability of the learned sports techniques has decreased.

Guidelines

From these identified main deficits, causal-logical proposals oriented to the elimination of the limitations were generated.

Guidelines Psyche

Since there were hardly any self-efficacy experiences in the lockdowns, opportunities for self-reassurance should be increasingly included in the physical education classes according to the methodological principles from the easy to the difficult or from the known to the unknown. In this way, the children and young people experience themselves as a "successful person" and can also build up self-assurance and self-confidence from small experiences of success, as well as develop a realistic self-image.

Example: Especially in cat jumping with its special psychological demand profile, self-efficacy experiences can take place in a differentiated teaching process step by step approaches to the target exercise with different heights and box alleys.

Guidelines Physique

Here, the training planning should take into account the different individual and local conditions. According to the principle of optimal individual fit, students should be picked up in physical education where they are

psychologically and physically. Subsequently, according to the postulate “Challenge instead of spoil!”, slightly supra-threshold stimuli could be used, which are to be adjusted consciously the space-time relations of the exercise forms according to the respective conditions and can lead thereby to adaptation phenomena (and improvements).

Example: The well-known levelling run shows the students directly their current performance level and also offers (after a training unit) the identification of the performance growth in a re-test.

Guidelines Social

The social, educational, and health scientist Hurrelmann generated the term “egotactics” as a classification for the developmental tendencies of adolescents (https://izi.br.de/text/hurrel.htm), thus signaling unequivocally that social competencies can only be developed with the inclusion of various ones (to, with, for, and against each other). Since there are more and more social learning opportunities in small groups, it is important to integrate more interactive processes in physical education that there are many social points of contact that demand prosocial behavior.

Example: In a group of two, one player in badminton could be given the task of passing the balls to his partner in such a way that the partner can practice a specific technique (for example, the overhead ball). This would be an exercise that promotes mutual understanding. With complementary exercises from the areas of togetherness and against each other, the self-image and the image of others can be brought more into harmony with each other in a playful way.

Guidelines Cognition

Since players are only partially able to keep their concentration at a high level for a longer period of time, forms of exercise should increasingly find their way into sports lessons that focus the exerciser on a task for a longer period of time and demand a high level of concentration under time and opponent pressure. This can lead to important borderline experiences and create a “new sensibility”. This procedure not only promotes one’s own “being involved” in a task, but also improves the respective situational feedback.

Example: Color jumping in different variations to improve the so-called executive cognitive functions such as perceptiveness, concentration, impulse control, or decision-making ability.

Of course, these surveys and examples are only *pars pro toto* (part from the whole) and do not claim to be complete. Corresponding evaluation studies would have to follow. In addition, it seems advisable to adapt the forms of exercise to the respective local conditions of physical education and to modify them if necessary.

A Tip for the End

Up to now, it has been the case that for physical education teachers, when preparing a physical education unit, a question in the form of “How do I improve the overhead ball in badminton in my players?” was action-guiding. Now, from the post-Corona knowledge gained, the modified and concept-guiding question could be: How do I achieve an increase in social compatibility through overhead training? Or else: How do I create self-efficacy experiences through circuit training? The mere technique training is extended by psychological, social, and cognitive components. This represents a modified way of thinking and acting, which, however, can be a successful reflex to the defects of the coronal pandemic and could at least partially find its way into physical education.

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