



The importance of the quality of education of personal trainers from the perspective of personal security

Authors' Contribution:

- ✍ A Study Design
- 📁 B Data Collection
- 📊 C Statistical Analysis
- 📄 D Manuscript Preparation
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Abstract

Background & Study Aim:

It is a gross oversimplification to say that collective security is the sum total of a population's sense and actual personal security. However, this statement implicitly draws attention to the importance of education from the micro scale (family) to the macro scale (ubiquitous Internet and electronic media). The aim of this academic essay is to argue based on empirical data and a colloquial assessment of a dynamically changing social reality of increasing violence, aggression, inequality, exclusion etc.

One of the most important findings of the self-research on the professional competence of the personal trainer is the consensual declaration of professionals (n = 62) of the necessity of a high level of general knowledge and at the same time a high level of specialised knowledge. While it is legitimate to assume that general knowledge is similarly associated by the majority of people, the question of the validity of specialised knowledge is legitimate provided it is addressed to professionals (the training programme for personal trainers is in line with the Polish and European Qualification Framework). These standards, as well as media recommendations, favour the somatic sphere (proportional body build, optimal physical fitness, etc.), rational nutrition and a hygienic lifestyle of potential clients. There is a conspicuous lack of elements reinforcing the psychological and social dimension of health and elementary competencies to survival.

Such criteria are met by the multidimensional, complementary offer to declare and diagnose the profile of the sense of positive health and survival abilities indices (SPHSA questionnaire). The unique available findings of Dawid Dobosz, who applied this tool, only concern the empirical verification of the sense of somatic health indicators of female (n = 15) and male (n = 9) physiotherapy students. Compliance: female 33.3%, male 11.1%; overestimation female 46.7%, male 66.7%; underestimation female 20%, male 22.2% Statistically significant differences (between declared and diagnosed indices) concern aerobic capacity, diastolic blood pressure, flexibility. It would be interesting both cognitively and in an applied sense to see the results of research on verifying the sense of survivability of different social groups. An interesting application perspective is the education of 'innovative self-defence' professionals.

Keywords: effort safety • innovative self-defence • motor safety • SPHSA questionnaire • survival

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WHO – World Health Organization.

A **nonprofit organization** (NPO) or **non-profit organization**, also known as a **non-business** entity, or **nonprofit institution** – is a legal entity organized and operated for a collective, public or social benefit, in contrary with an entity that operates as a business aiming to generate a profit for its owners. A nonprofit is subject to the non-distribution constraint: any revenues that exceed expenses must be committed to the organization's purpose, not taken by private parties [see more: 61, 62].

Complementary health-related training – is coherent system of using such methods and means which affects body in complex way. The most valuable ones are those which stimulate all health dimensions (somatic, mental and social health), motor and strain safety, and develop wide range of motor survival competences [16].

Innovative self-defence – involves using verbal and/or behavioural methods and means along with available items in counteracting each attack on any good of an individual (honour, dignity, life, health, property, etc.), whereas a defender submits his/her actions to the criteria of prophylactic and therapeutic agonology, considering the most general directive of efficient leading of any struggles and also universal assumption of selfdefence training as absolutely paramount [17, p. 341].

Public health – noun the study of illness, health and disease in the community. è community medicine [63].

Community medicine – noun the branch of medicine devoted to the provision of public health care [63].

Health promotion – is the process of enabling people to increase control over and

INTRODUCTION

It is a gross oversimplification to say that collective security is the sum total of a population's sense and actual personal security. However, this statement *implicitly* draws attention to the importance of education from the micro scale (family) to the macro scale (ubiquitous Internet and electronic media). One of the most important findings of the self-research on the professional competence of the personal trainer is the consensual declaration of professionals (n = 62) of the necessity of a high level of general knowledge and at the same time a high level of specialised knowledge. The specialists surveyed attributed the least importance (62% of statements) to a high level of physical fitness [1].

While it is legitimate to assume that general knowledge is similarly associated by the majority of people, the question of the validity of specialised knowledge is legitimate provided it is addressed to professionals (the training programme for personal trainers is in line with the Polish and European Qualification Framework). These standards, as well as media recommendations, favour the somatic sphere (proportional body build, optimal physical fitness, etc.), rational nutrition and a hygienic lifestyle of potential clients, especially athletes [e. g. 2-14]. There is a conspicuous lack of elements reinforcing the psychological and social dimension of health (except for a few recommendations) and elementary competencies to survival. Such criteria are met by the multidimensional, complementary offer to declare and diagnose the profile of the sense of positive health and survival abilities indices [15].

The aim of this academic essay is to argue based on empirical data and a colloquial assessment of a dynamically changing social reality of increasing violence, aggression, inequality, exclusion etc.

PRESUMPTION BASED ON EVIDENCE

'Personal security', 'personal safety', 'personal trainer' are names that not only share a common word, but also a relationship that can, however, raise controversies of a logical and common

sense nature. Since the problem of personal security (safety) is gaining importance almost every day, why not educate personal trainers specializing in this very issue. After all, cyclical WHO statistics, reports of scientific associations and non-profit organizations, many scientific review papers, etc. provide evidence that, contrary to the progress of science, medicine (as a field of practicality) and technology, the probability – in the global sense – of losing health, life and other legally protected goods is increasing. These data question not only the effectiveness of traditional education models in many countries around the world, but also the competence of those responsible for coordinating public health and security issues.

However, the demand for radical change would be utopian also because the scale of potential threats is so vast (effort safety, motor safety, etc.) that mastering only the core competencies of a hypothetical 'personal security personal trainer' would exceed the capabilities of even the most talented candidates. Figuratively speaking, a set of such competencies should include knowledge of methodologies and motor skills at least: self-defence, safe fall, avoiding collision, swimming and water rescue, basic medical assistance, physical training, mental training. We abstract from 'complementary health-related training' [16], 'innovative self-defence' [17], the use of other methods recommended by the innovative agonology gaining recognition in the scientific and educational communities [18-24]. Since experienced personal trainers themselves claim that a high level of physical fitness is not important [1], how to reconcile the necessity of combining extensive knowledge from many disciplines, including many of motor skills, after all, such a specialist should be both a motor role model of many useful motor skills (techniques).

Aware of alarming statistics about increasing threats and their variety, which on an individual level always affect specific people, it makes sense to implement new educational formulas of personal trainers. The very name of the

profession ‘personal trainer’ indicates the elite availability of such services. This is not necessarily a debilitating factor for social impact. On the contrary, with the apparent difficulty of breaking many paradigms of education, but also of science [25-28], such elitism can bring unexpected positive effects – most quickly in the areas of health promotion and prevention.

We believe that a good starting point (elementary presumption) is to point out the events that global statistics show to be the most common cases of loss of life or health (the most valuable of personal property), which are not causes of disease and which can be avoided with proper prevention. The infamous leaders are aggression and violence. According to a 2002 WHO report [29], 1.6 million people worldwide die every year from these very incidents. The latest WHO reports, based on data collected between 2000 and 2018 on violence against women, show that one in three women worldwide becomes a victim of physical or sexual violence during her lifetime. Of the approximately 736 million victims, as many as 641 million have experienced physical or sexual violence by an intimate partner [30].

Meanwhile, from a seemingly trivial cause, unintentional falls, an estimated 695,771 people die annually worldwide, and 19,252,699 is the number of people years lived with a disability [31, 32]. In the comparative period 1990-2019, falling, as a cause of premature death, has risen from 4th to 3rd position with a simultaneous almost 30% increase in such events, when among other causes a significant reduction was found – drowning by as much as 64.39% (Figure 1).

These examples, simply for their vividness, serve in this essay to illustrate the opinion expressed above about the low effectiveness of traditional education models, as well as the questionable competence of those responsible for coordinating public health and security issues. The sensible implication of these evidence-based premises is that a personal trainer is expected to have more useful competencies than caring for a shapely figure, muscularity, physical fitness equated with impressing muscular strength or locomotor endurance, and a diet subordinated primarily to these goals.

EMPIRICAL ARGUMENTATIONS FOR NEW PERSPECTIVES

Attention is drawn to the concept and method of measuring the sense of positive health (of three dimensions: somatic, mental, social) and survival abilities, published relatively recently (2012 [15]). The first stage is a subjective assessment, and the second stage is verified by comparing the correspondence of the declared indicators of a five-point scale (from 1 to 5, and in the case of skills, when survival abilities are diagnosed, there is a “0”, which is equivalent to the absence of specific motor skills) with empirically diagnosed indicators. The surveyed person is asked about the severity of a particular indicator, and therefore it is necessary to decompose some of the declared raw score into diagnostic values – for example, very low HR (1 point) is evidence of a very high level of somatic health (5 points). The results of declarations and empirically verified indicators are documented in the SPHSA questionnaire [15].

to improve their health (...) Health promotion represents a comprehensive social and political process, it not only embraces actions directed at strengthening the skills and capabilities of individuals, but also action directed towards changing social, environmental and economic conditions so as to alleviate their impact on public and individual health. Health promotion is the process of enabling people to increase control over the **determinants of health** and thereby improve their **health**. Participation is essential to sustain health promotion action [64, p. 1-2].

Effort safety is consciousness of the person who starts physical effort or consciousness of the subject who has the right to encourage or even enforce from this person the physical effort of a certain intensity and duration, who it is able to do so without risking life or health [16].

Motor safety is consciousness of the person undertaking to solve a motor task or consciousness the subject who has the right to encourage and even enforce from this person that would perform the motor activity, who is able to do it without the risk of the loss of life, injuries or other adverse health effects [16].

Motor skills – plural noun the ability of a person to make movements to achieve a goal, with stages including processing the information in the brain, transmitting neural signals and coordinating the relevant muscles to achieve the desired effect [63].

Technique – noun a way of performing an action [63].

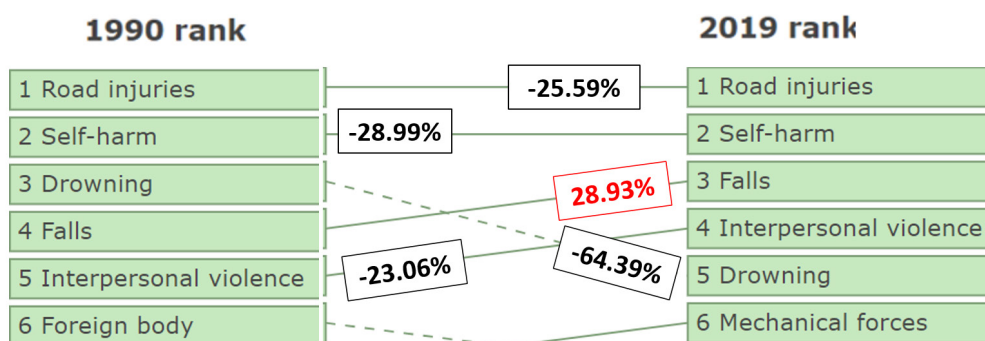


Figure 1. Migration of ranking position (global dimension) causes of death per 100,000 in the period 1990-2019 and trends of change with both sexes, all ages [33].

Relatively well-documented is the sense of positive health and survival abilities (subjective assessment) of students of educational courses that have a relationship with health promotion and prevention or physiotherapy and nursing [15, 34-37], and top powerlifters [38]. However, before the method and the SPHSA questionnaire were published, the authors of several promotional works of the faculty of tourism and recreation (bachelor level) verified the correspondence of the indicators of positive somatic health declared by students of the fifth semester with empirically diagnosed indicators. Magdalena Markiewicz [39] found a concordance of results (based on the arithmetic mean of 7 indicators) in only one of the 20 male students: overestimation of results was 60%, and underestimation was 35%. Jerzy Romanowski [40] studied 15 female students and found 21.5% concordance of results, overestimation 46.66% and underestimation 40% (based also on 7 indicators).

The unique available findings of Dawid Dobosz [41, 42], who applied SPHSA questionnaire [15], only concern also only the empirical verification of the sense of somatic health indicators of female (n = 15) and male (n = 9) physiotherapy students. Compliance: female 33.3%, male 11.1%; overestimation female 46.7%, male 66.7%; underestimation female 20%, male 22.2%. However, Dobosz based his study on the complete 8 indicators [15, 43], according to the SPHSA questionnaire criteria. Statistically significant differences (between declared and diagnosed indices) concern aerobic capacity, diastolic blood pressure, flexibility.

CONCLUSIONS

It would be interesting both cognitively and in an applied sense to see the results of research on verifying the sense of survivability of different social groups. This observation is important for at least three reasons. First, since the publication of the SPHSA questionnaire methodology, new and unique diagnostic tools have been validated against standards of methodological correctness. Some related to the sphere of human motor skills and qualify either in the category of non-apparatus or quasi-apparatus [44], or a new methodological innovation – the application in diagnostics for the use of prevention, therapy and rehabilitation exercises and sets of exercises, which formally are not tests [45, 46]. Others with the mental sphere and fall into the category of simulation studies [47-52]. Common to all of them is the connection with survivability in the broadest sense. Secondly, the latest research results based on the complementary application of the tools mentioned above [53-56] show the as yet undisclosed possibilities of strengthening all dimensions of an individual's health and survivability by combining into one complex also with Chinese health exercise systems characterized, moreover, by defensive qualities [57-60]. They also reveal the real prospect of a change in the approach to the profession of personal trainer. This change has to do with the need to increase the responsibility of science also for personal security matters. Progressive varieties of violence make an interesting application perspective is the education of 'innovative self-defence' professionals.

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