

THE ISSUES OF TRAINING AND CHANGING ATTITUDES TOWARDS/FOR PHYSICAL AND SPORTS ACTIVITIES

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*Received 2024 November 25; Revised 2025 January 20; Accepted 2025 January 24;
Available online 2025.02.10; Available print 2025.02.28*

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ABSTRACT. Attitudes determine how the individual acts towards others and towards different social events, feelings, behaviors and choices becoming predictors of behavior. The sources of attitude formation are social learning, social comparison and genetic inheritance, these functioning as very influential cognitive patterns. Often, attitude establishes behavior, but there are also situations in which there are gaps between them. Knowledge and awareness of the effects of physical and sports activities, in correlation with different demographic and psycho-social variables, constitute the premises for the formation and change of the individual's attitudes. Favorable attitudes towards (practicing) physical and sports activities are positively associated with behavioral intentions in different contexts (within the school curriculum in physical education classes, in an autonomous regime, in free time, in sports clubs and associations specific to certain sports branches, etc.), producing effects on the individual, but also at the level of the community to which he belongs. Sometimes sports contexts, especially those associated with high-performance sports, can also cause negative attitudes with negative influences on the personality, behavior and mental health of the individual (athlete, coach). The attitudinal changes towards (the practice of) physical and sports activities are the result of a dynamic, staged process, sometimes assisted by specialized personnel, the effects of the change occurring at the cognitive and affective level, and, subsequently, at the psychomotor level, of action. The processes of training and attitudinal change towards practicing physical and sports activities, including performance sports, can vary throughout life.

Keywords: *attitudes, physical activity, sport, mental health.*

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REZUMAT. Problematicile formării și schimbării atitudinilor față de/ pentru practicarea activităților fizice și sportive. Atitudinile determină modul în care individul acționează față de ceilalți și față de diferite evenimente sociale, sentimentele, comportamentele și alegerile devenind predictorii ai comportamentului. Sursele formării atitudinilor sunt *învățarea socială, compararea socială și moștenirea genetică, acestea funcționând* ca niște tipare cognitive foarte influente. Adesea, atitudinea întemeiază comportamentul, dar există și situații în care există decalaje între acestea. Cunoașterea și conștientizarea efectelor activităților fizice și sportive, în corelație cu diferite variabile demografice și psiho-sociale, constituie premisele formării și schimbării atitudinilor individului. Atitudinile favorabile față de (practicarea) activităților fizice și sportive sunt asociate pozitiv cu intențiile comportamentale în contexte diferite (în cadrul curriculei școlare la orele de educație fizică, în regim autonom, în timpul liber, în cluburi și asociații sportive specifice unor ramuri sportive etc.), producând efecte asupra individului, dar și la nivelul comunității din care face parte. Uneori, contextele sportive, în special cele asociate sportului de înaltă performanță, pot determina și atitudini negative cu influențe negative asupra personalității, comportamentului și a sănătății mentale a individului (sportiv, antrenor). Schimbările atitudinale față de (practicarea) activităților fizice și sportive reprezintă rezultatul unui proces dinamic, etapizat, uneori asistat de personal specializat, efectele schimbării producându-se la nivel cognitiv și afectiv, și, ulterior, la nivel de psihomotor, de acțiune. Procesele de formare și schimbare atitudinale față de practicarea activităților și fizice și sportive, inclusiv a sportului de performanță, pot varia pe tot parcursul vieții.

Cuvinte cheie: *atitudini, activitate fizică, sport, sănătate mentală.*

INTRODUCTION

In general, attitude is seen as an individual predisposition to assess a social item (fact, event, person) considering it favorable or unfavorable and, therefore, manifesting a certain behavior towards it. Given their organization through experience, attitudes are acquired during life through single or multiple, direct or indirect experiences. In other words, attitudes are formed through a process of social learning. However, some research has shown that social comparison processes and genetic factors also intervene in the formation of attitudes.

It is known that both affective and behavioral factors, as well as cognitive factors, act in the formation of attitudes. However, the distinction between “explicit attitudes”, based on conscious evaluations, and “implicit attitudes”, spontaneous, not consciously controlled, must be taken into account.

As a rule, there is a concordance between explicit and implicit attitudes, but dissociations can sometimes appear in the assessments we make. The evaluation depends on how the person's feelings about the "object" of the attitude appear, on the beliefs that people have about those objects, on past experiences with these objects.

Attitudes, even if they are the result of learning, being acquired from direct experiences with objects and contextual situations, are also influenced by other factors: genetics, social comparison.

Attitudes change as a result of lived experiences. The cognitive side is often altered by the acquisition of up-to-the-minute information, the affective side is often altered by unpleasant experiences involving the attitude object, and the behavioral side is often altered by changes in norms or laws that force a behavioral change.

The intentionality of individual or collective behaviors is determined by the influences of an individual's attitudes towards a certain field of activity, in general, and towards the practice of physical and sports activities, in particular, in different social contexts. The development of attitudes is influenced by motivation, interests, but also by learning from socially lived experiences, producing changes in attitudes, but also at the level of the individual's personality. Behavioral change associated with physical activity and actual behaviors are premised on awareness and knowledge of behavioral recommendations, with those who are aware being more physically active than those who are not. In addition, health behavior change related to physical activity may be the result of a dynamic process carried out in stages over the life course.

In this article, we aim to highlight the issue of training and attitude change, which can also be applied to the process of forming attitudes towards and/or for practicing physical and sports activities. In order to achieve this goal, we set the following objectives: 1. defining the concept of attitude; 2. the mechanisms for the formation of attitudes, including those towards physical and sports activities; 3. identifying predictors of behavioral intentionality depending on attitudes towards physical and sports activities; 4. the influences of attitudes on the individual and on the community he/she belongs to; 5. mechanisms for producing attitudinal change towards physical and sports activities.

THE CONCEPT OF ATTITUDE

Most definitions consider *attitude* as an individual predisposition to evaluate a social item (fact, event, person) considering it favorable or unfavorable and, therefore, manifesting a certain behavior towards it (Bogardus, 1933;

Allport, 1935; Popescu-Neveanu, 1978; Barron & Byrne, 2000; Abric, 2002; quoted by Boza, 2010; Smith, 1968; Latchanna & Dagneu, 2009; Tufan & Gudek, 2008; Demirel & Un, 1987, quoted by Korkmaz et al., 2020; Katz, 1960, Ajzen, 1985, Eagly & Chaiken, 1993; Doron & Parot, 1999).

The forms of manifestation suggest that attitudes have multiple properties, depending on the evaluative and affective dimensions (positive/negative, favorable/unfavorable attitudes), polarization and power (stronger/weaker intensity), accessibility (more (re)active/less active), and the individual's identity dimension (more important/less important) (Boza, 2010). Manifested separately (just one) or concurrently (two at a time), attitudes fulfill a role of knowledge, as a result of personal evaluations of objects or events, they represent frames of reference, establish unipolar or bipolar links and associations, determining a behavioral response. Another role is that of social/utilitarian or instrumental adaptation, favorable/unfavorable attitudes, giving us the opportunity to satisfy some needs (approval/disapproval, expression of positive/negative emotions in a social context). Other roles are related to the possibility of externalizing the beliefs and values that guide us, differentiating ourselves from others (expressive role), but also of protecting or increasing our self-esteem in the face of external threats or internal conflicts (ego defense role) (Katz, 1960, quoted by Boza, 2010).

Boza (2010) summarizes the structure of attitudes, analyzing several conceptualization models from the specialized literature. The simplest model, the unidimensional one (Olson & Zanna, 1993), defines attitude as a global evaluation of the attitude object on a continuous dimension of favorable/unfavorable type, while the most widely used, the three-dimensional model of the internal structure of attitudes (Rosenberg & Hovland, 1960) claims that in the structure of attitudes there are three types of interdependent components (the "interactive trilogy") (Tapia, 1991): affective (emotions, feelings together with the physiological reactions that accompany them towards a certain object), cognitive (the evaluation of the object is based on knowledge, perceptions, beliefs, opinions, representations, memories about the attitude object and its characteristics), behavioral (intentions and predictions on how a person can act in relation to a fact or event based on his assumptions and convictions). A positive rate of one dimension of the attitude corresponds to a similar one for the other two components, with direct links and of the same intensity between the behavioral and cognitive components, between the cognitive and affective components. Other models of attitudes include: the socio-cognitive model, in which the cognitive side of attitudes and their social function are emphasized (Pratkanis, 1989); the schematic model in which information is encoded, stored, recalled, and used in attitudinal judgments; the attitude representation model (ART model) with the help of which one can answer "how a person's

behavior is influenced, in different situations relevant to the attitude, by different subjective cognitive processes” (Lord & Lepper, 1999, p. 336); the associative model (attitudes are a learned association between an object and an evaluation, an evaluation that is related to a strong affect or a cognitive inference) (Fazio, 1985), the associative-integrative model of attitudes and self-variables (attitudes are activated as a result of the cognitive consistency of the association of a social object with a concept-attribute with a certain valence, the individual’s self-concept influencing the behavioral response) (Greenwald & Banaji, 2002).

ATTITUDES TRAINING

Social learning, social comparison, and genetic inheritance are accepted as sources of attitude training. In general, psychosociologists argue that attitudes are learned socially, with affective, behavioral, and cognitive factors intervening in their formation. Baron and Byrne (2006) argue that many associative conditionings occur at a subliminal level, without awareness of the presence of stimuli and/or their association. Numerous “beliefs” are formed through the mechanism of reward and punishment, that is, instrumental conditioning. To the same extent, positive attitudes toward school or work are based on the principle of operant reinforcement through rewards, even if, over time, motivation becomes intrinsic. Bandura (1973) demonstrates that attitudes and behaviors are not learned only from direct experiences, but also by directly observing the behaviors of others and their consequences.

Rotariu and Iluț (1996) propose the concept of cognitive-complex learning according to which human individuals, as they mature, acquire knowledge, attitudes and ways of behaving through more complex ways (logical deduction, reading, other people’s stories, daily reflexivity). Mea and Hoe (2005) argue that attitudes are learned experiences and results from social experiences. Festinger (1954) believes that our points of view on social reality are evaluated as correct or not by comparing them with others. Also, through comparison we adopt attitudes identical to the people and groups we value or whose favor we want to enter. According to Iluț (2004) social comparison involves cognitive-complex learning and self-analysis, the training of attitudes being closely linked to the process of their change.

Paniș and Lungu (2020, p. 39) suggest rules for the formation of attitudes. On the one hand, attitude is an object of learning and change, and on the other hand, attitude acquisition is achieved in different ways: direct contact with the object or person, interaction with those who hold an attitude, social experience assimilated in formal and informal groups, cognitive development.

In general, it is considered that attitude establishes behavior. However, numerous experiments have demonstrated the gap that can exist between the behaviors and attitudes of individuals. This gap can be attributed to different causes: a) the influence of the immediate situation that involves numerous stimuli that act directly on behavior; b) the action of several complementary or contradictory attitudes on the behaviour; c) the gap between the moment in which we study the attitudes of a subject or a group and the moment in which the real behavior is observed. During this time frame, attitudes can change depending on certain events (Boza, 2010).

According to the studies, direct hereditary determinism represents another source of attitude formation, being analyzed on the one hand, the ways in which the genetic factor influences the adoption of specific attitudes towards certain social events or social evaluations (job satisfaction, for example), and on the other hand, the correlation between direct hereditary determinism and attitudes with a higher genetic weight that are more difficult to change and that determine actual behavior (Crealia & Tesser, 1996, quoted by Iluț, 2004, p. 52).

Triandis (1971, quoted by Owusu-Fordjour, 2021) argued that behavior could be predicted by supporting four components: attitude, norms, habits and expectations. When the four components are consistent, there is a strong link between attitude and behavior. However, when the four factors are inconsistent, the link between attitude and behavior is weak.

1. Training attitudes towards and/or for practicing physical activities and sports

Attitudes are relevant, considerably influencing the individual or collective behaviors of the social actor and functioning as highly influential cognitive patterns. They reflect a set of beliefs, feelings and behaviors related to each other, which are organized around an object or situation, which can be favorable or unfavorable (Bebetsos & Antoniou, 2008, Araújo & Dosil, 2015).

There are situations when the attitude towards others determines the attitude towards oneself or can change the mood, etc. Therefore, attitudes help us to select from the surrounding world the objects that have value for us, eliminating the insignificant ones. In this sense, we can say that attitudes, as more or less permanent dispositions of the individual, ensure stability of the personality and provide each of us with a selective perception of the world that surrounds us (Hsu and Huang, 2010). The literature confirms that attitudes are a strong predictor of behavior, which can be dynamic, built, taught, modified or even replaced (Cid et al., 2008; Feldman, 2001; Morales 2000; Zabalza, 2000; quoted by Araújo & File, 2015).

There are studies that can explain positive correlations between the influences of attitudes towards physical activities and sports on behavioral intentions (to practice these activities), in different social contexts (within the school curriculum in physical education classes, autonomously, in free time, in sports clubs and associations specific to certain sports branches, etc.) (Araújo & Dosil, 2015; Zaman et al., 2018; Gu et al., 2022; Zeng et al., 2011; Kopczyński et al., 2014; Dawood, 2020; Tabussum et al., 2017).

Although the many beneficial effects of physical and sports activities are widely known, both physically and psychosocially, sedentary behavior is continuously increasing throughout the population, making physical inactivity a public health problem. Policies are being proposed and implemented to change attitudes towards physical activity, by promoting positive attitudes towards exercise, as well as through prevention and intervention strategies for health-related behaviors.

There are also studies that certify the influence of different demographic variables (gender, age, residential environment, income, health status, etc.) and psychosocial variables (education level, lifestyle, cultural factors, group, etc.) in predicting behavioral intentionality towards physical activity (Ali et al., 2015, Pular et al., 2011, Tomik et al., 2012, Dacey et al., 2014, Drum et al., 2016, cited by Zaman et al., 2018; Cid, 2010, Dosil, 2005, quoted by Araújo and Dosil, 2015, Chun and Phillips, 2002, Portman, 2003, quoted by Zeng et al., 2011, Elena and Beata, 2017, quoted by Dawood, 2020):

- ✓ Training positive attitudes towards physical activities at a young age will predict their behaviors in adulthood as well, throughout life.
- ✓ Middle school children express very favorable attitudes towards the health, fitness, enjoyment and socialization (social interactions) effects of physical activities, but do not enjoy physical activities that involve intense exercise and movements that involve risk-taking.
- ✓ Not only favorable attitudes are cultivated for practicing in the academic environment (during physical education classes or during extracurricular activities), but also outside it, as free time activities. Children who have more positive attitudes towards physical activity are more likely to participate in physical activities outside of school.
- ✓ Interest in physical activities is positively associated with the content of physical activities in the lessons included in the curriculum (which activities are practiced), with the teacher and his/her pedagogical skills, with the ways of implementing the activities (preferences for teaching content in a playful, competitive manner, team activities and sports to the detriment of individual ones, etc.), with sports facilities and equipment, etc.

- ✓ Positive attitudes towards physical activities are due to the fact that they have positive influences on the development of cognitive capacities in students and, once they are aware of them, they are given (greater) importance. Several studies highlight the existence of a relationship between motor capacity and cognitive development in children, with motor and cognitive functions being coupled at the cerebellum level, with neural connections at the pre-frontal cortex level being important in expression, and with the fact that both develop at the same time at an accelerated pace (5-10 years), with common underlying processes (Diamond, 2000; Ahnert et al., 2003; Anderson, 2002; Gabbard, 2008; Hartman et al., 2010, cited by Westendorp et al., 2011). Thus, dysfunctions at the level of the brain generate motor and cognitive difficulties, intervention programs in primary school can bring benefits. In addition, engaging in physical activities is shown to increase students' academic performance, can increase engagement with the subjects they study.
- ✓ Attitude levels towards physical activities of students fluctuate in relation to residential areas, for example, those living in cities have a higher level of attitude, and students living in metropolitan areas are involved in physical activities for aesthetic reasons (to build a beautiful and fit body).
- ✓ Attitudes towards physical and sports activities of boys are more positive compared to those of girls, being more active and physically fit. Students' attitudes towards the aesthetic influence of physical activities are positive for both sexes, but girls show a more favorable attitude compared to boys. However, boys show a stronger interest in the fitness and health aspects of physical activities.
- ✓ Attitudes towards physical activities are also positively associated with the social development and achievement (/achievement of goals) of individuals, but also with positive effects at the level of social and cultural education in schools. Children enrolled in school sports clubs have greater pro-social behavior towards sports compared to their friends who are not involved in practicing a sport. Also, a player's behavior is greatly influenced by teammates and coaches.

It has been shown that people who enjoy the benefits of physical activity have a positive and favorable attitude towards physical activity, and the acceptance of these activities at the community level leads to a high level of practice and support for them (Raslan, 2015, quoted by Zaman et al., 2018). It is beneficial to acquire positive attitudes towards movement, with cultural, economic and social effects at the institutional, community and societal levels (Tomik et al., 2012, quoted by Zaman et al., 2018). Therefore, education is a way

of civilizing and developing a healthy society (AL-Liheibi, AHN., 2008, quoted by Tabussum et al., 2017), and the means and forms of manifestation of physical and sports activities can be the vector for transmitting these values and principles to be learned and applied in different situations and social contexts.

While the influence of positive attitudes is a much more researched topic, the role of negative attitudes towards physical activities is less studied. The beliefs of some individuals, for example, obese people, especially children, such as that physical exercise is painful, that it also has negative consequences (it takes a lot of time), that practicing involves receiving criticism, teasing, stigmatization, prejudices and stereotypes, etc. represent negative attitudes developed and with possible behavioral influences of physical inactivity, even intentional (Nelson et al., 2010; Kopczynski et al., 2014). Negative attitudes can be reinforced by previous direct experiences, but at the same time, they can be changed in a positive way, requiring a lot of determination and resources allocated by the individual directly involved, as well as by those around them.

It is accepted by the scientific community that interest, motivation and attitude in performance sport are associated psychological factors of success. The attitude represents a stable acquisition of the athlete's personality, which reflects how he is positioned in relation to the stimuli from training/competition and those from the specific environment. It has a bipolar manifestation (positive and negative) that conditions a certain behavior and its efficiency in achieving sports excellence.

As a mental process, the attitude is based on perception, thinking, affective state, determining the judgment of the situational reality and conditioning the athlete's decision to react in a certain way. The attitude depends on the interests, motivation, convictions and the aspiration towards the great performance. It manifests itself in sets of anticipation, determining the orientation and selection of the athlete's operational acts.

The attitude is expressed both through ideas, opinions, convictions, as well as through adherence to a certain behavior and a certain way of reacting to events in training and competitions. The attitude is based on the psychological factors associated with sports success, it is formed gradually and regulates the conduct of the elite athlete.

Epuran (1990) proposes a model - 4A (skills, attitudes, training, environment) which includes a complex of factors that contribute to achieving sports performance. In the author's opinion, the system of attitudes is relevant to the athlete's personality, being dynamic and complex under the influence of education and accumulated experiences, contributing to achieving success in sports activity. Thus, attitude can be considered as a premise and mediator in achieving sports performance. The athlete makes a selection of responses to

situations, phenomena, people and objects in sports contexts, giving the human personality characteristics of uniqueness and originality in action. Epuran (1990, p. 52-53) also proposes a list of attitudes specific to sports (in training and competition, towards the coach, referees, etc.), attitudes that can be considered “conditional skills of performance, but also educational objectives with the role of maximizing the athlete’s mental ability”.

Each type of attitude creates a certain type of relationship in interpersonal communication. Three categories of attitudes are identified. The first category concerns *attitudes towards oneself* that reflect the characteristics of self-image, developed on the basis of self-perception and self-evaluation, but also of the perception and evaluation of those around them. They are based on self-awareness, self-image, in other words, on the representation that each person has about themselves. Attitudes towards oneself are expressed through dignity, pride, arrogance, self-confidence, self-confidence, modesty or lack of modesty, thus marking the behavioral “style” of the individual, as well as his or her relationships with peers.

Sports situations stimulate self-knowledge, as well as self-analysis and self-evaluation skills. Self-evaluation appears in the athlete along with the desire to know oneself and to prove the limits of one’s own potential during confrontation with opponents and various other obstacles.

Sport offers multiple ways, especially for children and adolescents, to overcome their inferiority complexes, frustrations and to compete with themselves and others, to compare themselves with their idols. Thus, the athlete demonstrates, compared to the individual who does not practice any sport, a greater ability to self-evaluate their possibilities, motivations, needs and desires, a capacity that represents for them a facilitating factor of success.

The second category concerns *attitudes towards society* that differentiate and individualize, according to the situations created (towards work, towards moral norms, principles and standards, towards institutions – family, school, state, church, etc., towards political organization, towards a profession, etc.). This type of attitude is expressed through feelings of patriotism, which act as an orientation, dynamization of the athletes’ activity, determining them to defend the colors of the national flag with honor, achieving exceptional performances. The attitude towards work will be expressed through feelings of fairness, responsibility, discipline and order, in the activity carried out, and which will lead to obtaining the expected results and performances. In sports, the attitude towards work, coach, team (for team sports) is essential, decisive and conditions success.

The third category of *attitudes* are those *towards peers* that reflect the need to develop socio-affective relationships, the need for group membership and communication, adhesion and identification with the group, to be appreciated

by others, etc. Practicing physical and sports activities offers everyone the opportunity to develop communication relationships, cooperation with others, to be part of the group(s), participating in achieving the group's objective, sharing common experiences of developing oneself with the help of the group, building one's own identity, but also a social identity in relation to other groups, etc.

However, there are also a series of negative attitudes associated with practicing elite sports (in training, but especially in competition) with negative influences on the personality, behavior and mental health of the athlete/coach. Sometimes athletes adopt negative attitudes towards exaggerated reactions to stressful situations, mood swings, deviant behaviors associated with injuries, burnout, overtraining syndrome associated with physiological dysfunctions, avoidance/refusal of help and support from family and specialists, the fear of the consequences of this search, the lack of time, the stigmatizing attitude, the low level of education of the athlete in relation to his mental health are barriers that can contribute to a delay in recognizing symptoms and adopting intervention measures to solve emerging mental health problems or to prevent them (Watson et al., 2021).

Pierce et al. (2021, quoted by Rusu, 2022) propose an approach to increase awareness of the importance of athlete well-being and to adopt interventions, focused on three directions: a) education (literacy of athletes, coaches, those involved in performance sports to improve understanding, reduce stigma and promote early intervention); b) development of athletes, in the development of sports careers, as well as personal and professional development outside of sports activity); c) mental health screening and feedback to athletes (multidisciplinary specialized teams or qualified mental health professionals to manage mental disorders in athletes).

Studying the features of practicing extreme/adventure sports outdoors is another theme in which several studies are found that aim, on the one hand, at the nature and characteristics of attitudes towards these forms of sporting activities, and on the other hand at changing attitudes towards this sport, highlighting the awareness of the beneficial effects on the individual (increased physical performance, personality traits and mental health – managing emotions and stress, self-knowledge and self-realization, etc.), but also on the community and the natural environment in which these activities are practiced (pro-nature attitudes and reconnection with it, ecological attitudes and sustainability of the practice areas, etc.) (Brymer et al., 2015, quoted by Rusu and Rusu, 2021, Bélanger et al., 2019, Clough et al., 2016).

CHANGING ATTITUDES/BEHAVIOR TOWARDS PHYSICAL AND SPORTS ACTIVITIES

The link between behavioral attitude and behavioral intention is scientifically proven. Attitudes determine how the individual acts toward others and toward various social events, and therefore feelings, behaviors, and choices become a powerful predictor of behavior. The development of attitudes is influenced by motivation, interests, but also by learning from socially lived experiences, producing changes in attitudes, but also at the level of the individual's personality.

Iluț (2004) suggests that education and persuasion are two vectors that can induce and produce the change of some attitudes, just as some attitudes are acquired and spontaneously transformed through direct experiences. These changes in attitudes are consequences of information received and processed from different sources, which presuppose adaptations on the part of the individual. Therefore, in order for a change to occur, the source (who issues the information - an individual, a group or an institution that transmits a credible message), the content of the message, the means of communication, the target pursued (on the one hand, the goals pursued, but also the psycho-social context - the level of education, the training environment, expectations, mentalities, the system of interpersonal relationships of the receivers, etc.), and resistance to change are important. If the source deliberately pursues the attitudinal change through more or less deceptive means we refer to persuasion, but if this change occurs in the interest of the source (the manipulator) we refer to manipulation. We can also talk about positive manipulation, not just negative, when the change takes place in the interest of the manipulated. In the case of manipulation, the target is neither the intentions of the source nor the fact that it is being influenced.

Several theoretical models have been developed to explain and study how attitudes guide behaviors, and they lead to changes in attitudes:

- *the stimulus-response theory* - between the stimulus and the response there are processes of attention, understanding, acceptance, the response requiring an attitudinal change. Attitudes change to the extent that the source, factors, and social context of the new response-requiring stimulus are more attractive than the old response stimulus (Chelcea, 2000).
- *the theory of reasoned action (TRA)*, formulated by Fishbein and Ajzen (1975), claims that individuals rationally calculate the costs and benefits of the actions they could perform, also taking into account how others will judge the respective actions. Thus, in the decision-making process, the individual deliberates consciously.

- the theory of planned behavior (TPB) (Ajzen, 1991) is an extension of the theory of rational action to which the concept of perceived control of behaviors is added. This theory supports the intention-based predictability of behavior and acting in accordance with this associated intention. Behavioral decisions are made following a process motivated by one's beliefs and values, where behavior is influenced by behavioral attitudes, subjective norms, and perceived behavioral control.

This theory predicts the intentionality of behaviors in several areas of activity: consumer choices, environmental protection, health promotion, tourism development, driving behavior, etc. (Hsu & Huang, 2010). There are studies that can explain positive correlations between the influences of attitudes towards physical activities and sports on behavioral intentions (to practice these activities), in different social contexts (within the school curriculum in physical education classes, in an autonomous regime, in free time, in sports clubs and associations specific to certain sports branches, etc.) (Araújo & Dosil, 2015; Zaman et al., 2018; Gu et al., 2022; Zeng et al., 2011; Kopczynski et al., 2014; Dawood, 2020; Tabussum et al., 2017).

- *the health belief model (HBM)* is a psychological model of health behavior change, also related to physical activity. Proposed in the 1950s, with adaptations in the 1980s by the US Public Health Service, the model includes several constructs: perceived susceptibility (a person's subjective perception of the disease or risk of acquiring a disease), perceived severity (a person's feelings about the seriousness of contracting or not treating a disease, taking into account both medical and social consequences), perceived benefits (a person's perception of the effectiveness of different actions available to reduce the threat of the disease or to cure the disease), self-efficacy (a person's level of confidence in their ability to successfully perform a behavior), and cues to action (stimuli needed to trigger the decision-making process for to accept an action recommended for health, stimuli that can be internal and/or external to the individual). The model has been used to prevent or detect disease, with several psychosocial and demographic variables (gender, age, race, area of residence, education level, income, etc.) influencing perceived barriers and motivators (Rosenstock, 1974).

According to the application of this model in explaining behaviors related to physical activity, studies show that the most frequent perceived barriers to physical activity are lack of time (Spinney & Millward, 2010, cited by Marashi et al., 2021) and lack of motivation (Justin et al. al., 2013, cited by Marashi et al., 2021). Other studies focus on the influences that motivational factors have on the intentionality of physical activity behaviors: benefits for

brain health (Martinsen, 2008, Moutao et al., 2014; Rebar et al., 2015; McMahon et al., 2017; Kleppang et al., 2018; Schuch et al., 2018; Siefken et al., 2019; Murphy et al., 2020; Bastemeyer and Kleinert, 2021; Luiz José Frota Solon Júnior et al., 2021; Wolf et al., 2021), stress management (McEwen & Sapolsky, 2006; Rimmele et al., 2009; Redondo-Flórez et al., 2020; Bastemeyer & Kleinert, 2021; Luiz José Frota Solon Júnior et al., 2021) and sleep quality (Kredlow et al., 201; Antunes & Frontini, 2020; Gilchrist et al., 2021; Khan et al., 2021). The context of the COVID-19 pandemic has made it possible to emerge unique obstacles and motivations for physical activity: even if the lack of time was perceived less, the motivation of individuals to be physically active increased greatly, feeling the state of anxiety and the absence of social support. The motivation for well-being and mental health increased, rather than for health, in general and for physical appearance. Other motivators that emerged during the pandemic period were the improvement of stress and sleep, the reduction of anxiety and the quality of sleep (Marashi et al., 2021).

1. Stages of change in physical activity-related behavior

Behavioral change associated with physical activity and actual behaviors are premised on awareness and knowledge of behavioral recommendations, with those who are aware being more physically active than those who are not (Cameron et al., 2007; Plotnikoff et al., 2007, quoted by Abula et al., 2018; van Sluijs et al., 2007). There are also studies that do not support direct associations between knowledge of recommendations and increased awareness and actual levels of physical activity (Loughlan & Mutrie, 1997; Morrow et al., 2004; Plotnikoff et al., 2007; quoted by Abula et al., 2018), this aspect being attributed to the lack of development of intentions to be physically active.

Health behavior change related to physical activity may be the result of a dynamic process, carried out in stages (Marcus et. al., 1992), with the effects of change occurring at the cognitive and affective levels, and subsequently at the psychomotor, action level. The authors identified *a five-stage model*: 1. precontemplation stage – characterized by physically inactive behavior and no intention to become physically active; 2. contemplation stage – the individual is physically inactive, but the intention to become active is present, yet without concrete action to change; 3. preparation stage – the individual becomes physically active, but not at the recommended level; 4. action stage – the individual is physically active at the recommended level, but this level of activity has been present for less than 6 months; 5. maintenance stage – the individual is physically active at the recommended level and for a period of 6 months or more.

Research (Marcus & Forsyth, 2003; Spencer et al., 2006; Abula et al., 2018) supports the validity of physical activity behavior stages, identifying cognitive and behavioral strategies used during the stages of change. A peak of cognitive strategies (e.g., knowledge acquisition, risk awareness, or understanding benefits) is reached in the preparation stage, while behavioral strategies (such as obtaining social support, self-rewarding, or self-reminding) usually reach their highest level in the action phase. Therefore, for successful behavior change, i.e., an increase in awareness of physical activity recommendations, it can only be applied in the precontemplation, contemplation, and preparation stages. Knowledge of physical activity recommendations could lead to an increase in intentions to participate in physical activity regularly. In terms of actual behavior, it is possible that an automatic increase in awareness of recommendations may not automatically produce an increase in physical activity levels, as behavioral strategies have greater relevance in the action and maintenance stages (Abula et al., 2018).

Because physical inactivity has become an important public health issue, the World Health Organization has established a series of recommendations to promote regular physical exercise among the general population, without considering daily physical activities, but taking into account biological and psychosocial maturation, as well as existing pathologies. Intensity, duration, and frequency are the components of interest in physical activities. Thus, light physical activities include activities that do not cause a noticeable increase in the functioning of the cardio-respiratory system (for example, light walking). Those with moderate intensity produce a noticeable increase, but do not stop, for example, a conversation (the heart beats faster than normal, and breathing is faster than normal). Vigorous physical activities cause a stronger than normal increase in heart and respiratory rates to a point where, for example, a conversation can no longer be maintained. The general recommendations (WHO 2018, www.who.int) include: a) for children and young people (2-18 years) – moderate to vigorous physical activity of at least 60 minutes per day; b) for adults (18-64 years) – physical activity of at least 30 minutes per day, of moderate intensity (5 days per week or 150 minutes per week at moderate intensity or at least 75 minutes per week at vigorous intensity); c) older people (over 65 years) – at least 30 minutes per day of moderate activity, 5 days per week or 150 minutes per week, with a focus on aerobic activity, improving muscle strength and balance.

Also, as a policy to promote physical activity, WHO (2010) recommends that primary health care be consistent. In a study developed by Carroll et al. (2012), the effectiveness of a *5A intervention model*, successfully used in combating smoking, is presented, which clinicians should be trained to use in behavioral counseling in primary care regarding the physical activity of the population.

The 5A intervention model involves a step-by-step approach to effective counseling of clinicians in their relationship with patients in order to change their behavior towards physical activity: a) ask or assess current behavior, the desire to change and to enroll in a community program that supports physical activity (ask/assess); b) advise on a possible change, taking into account in recommendations existing health issues (if there are pathologies associated with the current condition) and the life context that can maximize motivation for change (advise); c) accept and agree on a work plan that promotes the benefits of participating in physical activities (agree); d) provide assistance by providing additional resources, referral options or practical problem-solving strategies, helping the patient to ensure the necessary support for changing physical activity (assist); e) organize the treatment/intervention plan, providing the opportunity to follow up and reevaluate behavior change efforts, with the possibility of adjusting the change plan (arrange). In addition to this model that seems to be effective, the approach of patient-centered communication of the medical staff in the relationship with the patient, can lead to a behavioral change towards engaging in physical activity. Clinicians can receive useful information related to facilitators and barriers in the development and implementation of an intervention plan, if they consider and support the patient's perspective of approach (values, desires, expectations, beliefs towards the targeted behavior), his socio-cultural context towards the employability in physical activity (when, if, how, where to get involved). The application of this model has demonstrated an increase in the level and quality of the communication relationship between clinicians and patients, but also the fact that it can be considered a tool for promoting physical activities and changing behavior towards them, of disadvantaged patients, in particular, knowing the inequalities in access to medical care and assistance services (Carroll et al., 2012, 2013, 2014; Wattanapisit et al., 2018; Jones et al., 2021).

CONCLUSIONS

The attitude of a social actor represents an individual predisposition to evaluate a social item (fact, event, person) considering it favorable or unfavorable and, therefore, manifesting a certain behavior towards it. Depending on the lived experiences, training and changing attitudes towards /for practicing physical and sports activities are staged processes, starting from knowledge and awareness of the beneficial effects of physical activities and, therefore, by adopting favorable attitudes towards their practice, in according to socio-demographic and psychological variables. Also, attitudes towards sports take into account specific situational contexts, the training of attitudes towards this type of activity having specific particularities.

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