

# THE DIMENSION OF MOTIVATION IN PRACTICING SPORTS IN ADULTS WITH LOCOMOTOR DISABILITY

Veronica MÎNDRESCU<sup>1</sup>

**Abstract:** *For the current research, the focus is on adults with locomotor disabilities, adults that practice a certain sporting activity, having as objective undergoing a sociological research regarding the role of motivation in the sporting activity and the reasons for which adults with disabilities practice a sport in the first place. The research has been done on a number of 30 people with diverse disabilities and as a research method one has used a questionnaire that identifies the role of motivation in practicing a certain sport in adults with locomotor disability and a scale of motivation in sport. Adults with locomotor disabilities who practice a certain sport are intrinsically motivated in the sporting activity.*

**Key words:** *motivation, practicing sport, adults with locomotor disabilities.*

## 1. Introduction

Motivation is that regulator psychological process that lies at the base of the human behavior guiding the latter to a certain purpose. With the help of motivation, the human being can select its desires in a personal hyperarchy depending on their importance. Motivation cannot be seen, heard or felt, but inferred only through behavior for it determines the strength and direction of the latter. Motivation excited the person

differently to the external influences, making it more or less permeable to them (Cox RH, 2008). One or the same external influence can produce different effects in different people or to the same person in different moments of their life. Through its propelling character, motivation settles and amplifies the psychological construction of the individual [2].

A particular definition of the term implies that motivation “entitles the internal state of necessity of the organism that orientates and guides the behavior in

---

<sup>1</sup> Professor Ph. D., Motor performance Department, Faculty of Physical Education and Mountain Sports, Transilvania University of Brasov (Brasov, Romania) [mindrescu.veronica@unitbv.ro](mailto:mindre scu.veronica@unitbv.ro)

the direction of satisfaction and thus, removing it" (Zlate M., 2007, p. 387). We infer that motivation is a activating psychological structure with a self-determined role, a motile force of the entire psychological and human development which also allows the action independently of the external factors. The proper motivation structure will fix the individual into a double connection towards the environment: first of all, a connection of independence which refers to his/her capacity of act on his/her own, without the presence of external stimuli and second of all a convention of dependence here including the need to satisfy the necessities based on the energetical alternations of the environment. Thus, the complex character of the behavior and the human preoccupations, which highlights the fact that no matter the place in which the stimulus goes (internally or externally), the accomplishment of the action will imply the interaction of the two connections (Li F, Harmer P., 1996). Satisfying a state of motivation will be done only through the specific object, the latter having certain characteristics, relations connections, attributes, etc. [5]. Motivation is the one that, in the end, is responsible for the fact that a certain behavior guides itself preferably to a certain category of objects more than another one. This process is an individual one, by excellence, while motivation can be found collectively as well. Motivation is the practical side of the motivation problematic being composed of the elements, means and actions of strengthening and stimulating motivation. These can be teste by examining types of motivation [6]. Motivation is not separate from rewards or punishments, people

feeling motivated to accomplish a certain action in obtaining a certain reward or getting out of a certain punishment. In the sporting activity, motivation does not appear as a mean of obtaining benefits, but represents a purpose, a value that mobilizes the individual's potential. Intrinsic motivation has mainly three sources of manifestation: through its nature (the human being becomes who he/she is and develops him/herself though the effectuated activity), through the social purpose (the individual establishes some achievable results which during time he/she changes, improves, etc.) and through becoming his/her own person (capitalizing the individual's possibilities and capacities). The desire to affirm and to become oneself represents an important source on intrinsic motivation. The latter is more resistant in time, has a powerful triggering force, while maintaining the activity longer than the extrinsic motivation. As such, extrinsic motivation is the motivation determined by the exterior, imposed or suggested by a norm or a person with authority. It manifests through positive or negative emotional feelings which aim obtaining certain benefits (rewards, praise, promotions, and prestige). If one refers to negative extrinsic motivation then one shall have reactions of rejection, fear of failure, critique. The external stimuli determine the commitment of a certain activity, the increase of the effort but not the attractiveness of an activity for it aims for its consequences. This type of motivation is short-termed which is why it needs to be permanently sustained. Sometimes, the two type of motivation, intrinsic and extrinsic, can combine resulting in a balanced way of living and healthy way of thinking. Thus, motivation

arouses and propels, triggering the action. The latter, through the reversed connection, influences the motivational basis and its dynamics. The most important motivational theory centered on content belongs to Abraham Maslow and is called "*the theory of the need hierarchy*". This states that people have characteristic needs and that they can be motivated by giving them what they need in exchange to the effectuated effort. In other words, human beings are motivated to satisfy their most important needs. The need pyramid developed by Maslow is based on several floors incumbent of reasons depending on their importance, thus having five levels. The basis of the pyramid is given by the physiological needs or the basic ones. These ensure life and health: the need of food, water, rest, clothing, and sex. They are dominant when they are not fulfilled at an acceptable level. If satisfied, the human being can go towards other levels which have been latent in fulfilling the basic needs. The next step is represented by the needs of safety and security. The moment the physiological needs are satisfied, the human being will become preoccupied by his/her physical and psychological safety. The security needs comprise of stability, protection against diseases, accidents, the need for order and law, etc. If the human being feels in danger, then other affective disorders may arise (anxiety, depression) or psychosomatic diseases (body diseases that appear after serious psychological traumas: diabetes, ulcer, heart diseases, cancer, etc.). Usually, the need for security dominates in extreme cases such as wars, natural catastrophes, economical crises, negative situations [10].

To what the performance motivation is concerned, the latter has two

components: the necessity to obtain success and removing failure. Vallerand, Losier and Vanek [12] have studied the dynamics of motivation and have elaborated four stages: the generalizations stage (the child is motivated by movement and success), the differentiation stage in which one chooses the preferred sporting branch, the specialized preference stage (the athlete has obtained performance on this particular specialized sport for he/she has went through certain motivational roads) and the involution motivational stage (injuries, failures).

In studying motivation within sport, Crăciun [4] claims the identification of three factors: the first one refers to the specific of sport and the characteristics of the chosen branch, the second highlights the sport based on its aptitudes and attitudes, while the third one represents the program of the sporting preparation.

People with locomotor disabilities have the possibility to capitalize their potential as efficiently as the other people. One of the environments where they succeed is in sports. Nowadays, athletes with disabilities are appreciated for their athletic quality, their strength, tenacity and determination.

The physical activity gives them a way of socializing, an active lifestyle, colleagues and friends, family, all of whom appreciate them at their true professional value (not a person with disabilities), giving them confidence in their own forces. A sport, notwithstanding, offers them the chance to develop, to tend to certain purposes and to feel the need of accomplishing things.

When someone suffers from a certain physical disability, one of the negative aspects is the debut of the disease,

secondary to the handicap, and that is the psychological depression that leaves the subject totally asthenic, demotivated and without any will.

For this reason, the physical activity fulfills a fundamental role in healing and taking care of a person, allowing the regain of confidence and the recharge in the social environment and the community. Naturally, to this purpose, one needs an adequate environment, a favorable ambient that can ensure stimuli and a true motivation for trust. Thanks to the special training programs and techniques, the person with disability can regain his/her own life through training or practice. The objective is accentuating the left potential, developing the trunk and arm muscularity in order to obtain superior results in comparison to the regulate physiotherapy.

The activity done in a hall is addressed to all those people who don't necessarily want to participate in competitions or sporting manifestations, but to those who want to practice a sport that can help them physically or psychologically.

The hall activity has the purpose of remotivating the person but also developing a certain more structured self-image.

The motivation in adults with locomotor disabilities is presented in a high percentage for these people want to surpass their limits and disabilities through pleasant and practical activities. This category is oriented towards sporting activities and towards Paralympic competitions.

*Extrinsic motivation* derives from the task's external environment, in most cases being administered by the people around instead of the actual individual. One can notice, dealing with athletes, the

organization or practices, the methods of improvement and self-improvement, the ensemble of performance objectives, the coach's preparation and personality, the different supplements, the competition bonuses, the family, etc. [12].

*Intrinsic motivation* results from the direct relation between the athlete and the sporting activity, most of times the latter being internalized. As model of intrinsic motivation one identifies feelings of fulfillment, accomplishment, constructive emotions, interest for the sporting activity, etc.

In the sporting activity, the adults with locomotor disabilities can have minimal, medium or maximal aspirations, these being regulated by the individual's motivation and personality. The ones with minimal aspirations effectuate a sporting activity pout of pleasure, they see it as a hobby, while the adults with medium aspirations want more, thus they do sports regularly, have certain standards and work more. Last but not least, the ones with high or maximal aspirations want results, performance, medals, qualifications, Olympics, competitions., etc. the value component of the other becomes a comparison factor to oneself [1].

Motivation triggers in the people with disabilities as well the need to represent a certain value, the need to be recognized and sport supports these needs by becoming and developing the individual

The physical activity has a fundamental role in healing and taking care of a person for it helps to increase the confidence in one's own forces.

Performance in sport in people with disabilities refers to sports destined to the type of deficiency, to the trainings, regulations and adapted rules specific to

the chosen sporting branch. Sport in people with locomotor disabilities presents a wide range of opportunities based on the presented deficiency, as follows: tetraplegic or paraplegic people can practice athletic sports, basketball, fencing, powerlifting, swimming, table tennis, tennis, archery, canoeing, skydiving, sledging, etc. as long as they are under supervised medical control [13]. People with polio at the inferior limb level, in a wheelchair, can practice basketball, fencing, tennis, bowling, fishing and dancing. Swimming is not recommended. People who have amputations are directed towards sports depending on the age, cardiovascular state and the amputation level. The majority of the aforementioned sports are accessible to these persons. Sports with medium effort and skill: volleyball, jumping, and sports with high effort a skill: jogging, cycling, skiing, and swimming without prosthetics.

Within the research one has formulated the following objectives:

–Identifying the role of motivation in the sporting activity for adults with locomotor disabilities;

–Identifying the motives of practicing the sporting activities in adults with locomotor disabilities;

This research aims to highlight the role of motivation in the sporting activity for adults with locomotor disabilities, as well as identifying the motives of practicing a sporting activity specific to that particular disability. In selecting the subjects one has accounted for age, my research being based on the adults with locomotor disabilities.

Depending on the objectives of the research, one has formulated the following hypotheses:

–One assume that adults with locomotor disabilities with a high level of motivation participate to a greater extent to sporting activities;

–Adults with locomotor disabilities that practice a sport are motivated mainly intrinsically.

## 2. Material and Methods

In analyzing the two hypotheses I have used two instruments: a questionnaire identifying the role of motivation in the sporting activity and a scale of motivation in sport (The sport motivation scale SMS-28) elaborated by Pelletier, Fortier, etc. [11]. The research questionnaire has 19 questions, the majority being questions with multiple choices. The sport motivation scale, with 28 affirmations, has been a tool used in identifying the motives of practicing a sporting activity by the adults with locomotor disabilities. The general question has been “Why do you practice sport?” followed by 28 affirmations connected to the motives or reason for practicing the respective sporting activity.

The sample research has been effectuated on 30 subjects with ages between 22-50 years old, 19 males and 11 females. Based on studies, 6.7% have finished gymnasium studies, 43.3% high school studies and 33.3% university studies, considering that the age variable of practicing a sport, 10% less than a 1 year, 23.3% 2 years, 13.3% 3-4 years and 26.7% over 4 years.

## 3. The Results of the Research

The item analysis of motivation is shown as follows: to the 1<sup>st</sup> question, regarding the importance of day to day sport, one

has noticed that half of the respondents (56,7%) consider sport as being an important thing in their day to day life. On the other hand, a percentage of 13,3% consider sport as a minimal important activity.

To the 2<sup>nd</sup> question, one notices that practicing basketball is mentioned as the sport most used by adults with locomotor disabilities, (40% of the respondents), followed by table tennis with a percentage of 23,3% and dancing with 16,7%. The lowest percentage, 3,3%, has been registered to adults practicing archery, football, powerlifting and other sports.

To the 3<sup>rd</sup> question, the majority of respondents, 26,7%, have been practicing a physical activity for more than 4 years, while 23,3% is given by the athletes practicing sporting activities for more than a year or so.

To the 4<sup>th</sup> question once can notice that most of the athletes (30%) have weekly trainings or several times per week (26,7%). A single respondent has been training daily.

To the 5<sup>th</sup> question, regarding the major purpose for which adults with locomotor disabilities practice sport, the answer has been for pleasure. A percentage of 46,7% out of the athletes go to trainings for the pleasure of the sport. The next percentage of 36,3% is given by the athletes that practice a physical activity in order to obtain performance or to surpass their own limits.

To the 6<sup>th</sup> question, through the analysis of the obtained data, one can notice the fact that the respondents appreciate the sporting activity as being part of their lives, an important component of the daily routine. Only 10% of the respondents find sport neither important nor unimportant.

To the 7<sup>th</sup> question the majority of the respondents, mainly 73,3%, have had trouble in the sporting activity. Only 23,3% have denied this.

To the 8<sup>th</sup> question, the respondents described the obstacles they encountered along the way in their sporting activity. Here, the respondents have highlighted the following: the lack of necessary equipment and features: ramps, elevators, sporting chairs; discrimination based on health; very intense body pain, operations within small amounts of time; space; family; the lack of a hall or sport field.

To the 9<sup>th</sup> question, after the analysis, one has noticed a team presence of 63,3%. A percentage of 26,7% has confirmed that it cannot find a team, having a passion for an individual sport.

To the 10<sup>th</sup> question, the respondents have defined their team in a percentage of 33,3% as having a strong ambition, the next in the hierarchic line being motivation with a percentage of 26,7%. The third term has been perseverance with a percentage of 23,3%.

To the 11<sup>th</sup> question, a percentage of 73,3% adults with locomotor disabilities have stated that their disability is not an obstacle in practicing sports and obtaining performance.

The 12<sup>th</sup> question is based on the greatest challenges faced by the adults with disabilities in the sporting world. They have enumerated the following: "to manage to get to the Paralympic games in Rio 2016"; "to win each game"; to surpass both physical and psychological limits and obstacles; to improve abilities; to participate in competitions; to obtain better results and performance.

To the 13<sup>th</sup> question one has registered the highest percentage, 90%, to the positive answer. Athletes with disabilities

consider that motivation has a self-determined role in the sporting activity.

To the 14<sup>th</sup> question, after the obtained data, one has noticed that 53,3% of the athletes are highly motivated in their practiced sport. A percentage of 13,3% have stated that they are neither motivated or unmotivated in their sporting activity. To the 15<sup>th</sup> question, the latter has been addressed out of the will to find out what exactly motivates them in the physical activity. Here, 53,3% have chosen obtaining performance, followed by the desire to be successful and the competition spirit with 40%. The third option in their hierarchy has been family, with 33,3% and the circle of friends with 26,7%. The last choice has been the adrenaline with 6,7%.

To the 16<sup>th</sup> question, the adults with locomotor disabilities appreciate practicing sport with people who have the same disabilities as theirs, this being quite motivational. A percentage of 76,7% have stated this, while only 6,7% deny this hypothesis.

The 17<sup>th</sup> question refers to the role of motivation in each respondent's sporting activity. These appreciate motivation as follows: it strengthens them every day, it sets them in motion, it is what makes them wake up in the morning; it has a very important role in any domain; it sets free wishes, aspirations, beliefs, reasons, interests; it helps them surpass their limits and personal barriers as well as the ones around them; it is the force that determines them to want more from themselves and the one which makes them move forward.

To the 18<sup>th</sup> question, I have wanted to document myself regarding the motivation in adults with locomotor disabilities within sport and thus, I have

asked them to name some personal motivational mottos. Depending on each's personality, beliefs, aspirations, etc. the athletes have been very creative and have come up with the following slogans: "Fight and you shall overcome!"; "There is no "I can't!""; "What lies in front and behind us is nothing in comparison to what lies within us!"; "A champion is one that rises when he/she cannot!"; "You've lost, keep going! You've won, keep going!"; "Surpass our limits no matter the obstacles"; "Mens sana in corpore sano!"; "Train today, win tomorrow!"; "If you fall 5 times, get up 7 times!"; "Fight today! Fight tomorrow! Fight always!"; "No limits. Just sport!"; "I practice sport, I think good thoughts and I love! This is the recipe for happiness!".

To the 19<sup>th</sup> question, after the enumerated mottos, the athletes have been asked to confirm or infirm these particular mottos in their day to day lives. A percentage of 73,3% have confirmed the fact that the personal motto motivates them in their day to day activities. A single respondent denied this and 7 respondents have avoided this question.

After the results obtained, for the assumption that adults with locomotor disabilities with a high level of motivation participate to a greater extent to sporting activities, this hypothesis is confirmed. Motivation in people with locomotor disabilities is present in a very high percentage and this is due to the will of surpassing their own limits and disabilities through pleasant and practical activities. In the sporting activity, they can have minimal, medium or maximal aspirations, based on the individual's personality and motivation.

Based on the questionnaire with the motivational affirmations, one has noticed the following:

- Regarding the pleasure to live or to have interesting experiences during the sporting activity, a number of ten people gave 6 points (33,3%), eight people have offered a maximum score (26,7%), ten people gave four points and five points equally (16,7%) and two people have said that the affirmation does not correspond at all (6,7%). Scores of two and three have not been given at all by the respondents.
- Most of the respondents (36,7%) practice a sport for the pleasure of knowing more about it. Two of them (6,7%) have said that this affirmation does not correspond at all. The maximum score has been given by nine people (30%).
- 73,3% of the respondents consider the sporting activity must be pursued, while 10% consider that this affirmation does not correspond at all.
- After the analysis one can notice that 40% of the respondents consider sport as one the environments in which one can discover new techniques of shaping, while 3% do not agree with their fellow respondents.
- After the analysis one has noticed that 73,3% of respondents are capable to succeed and only 3% stated the contrary.
- Most of the respondents, 43,3%, have evaluated this affirmation moderately, while 20% stated that it corresponds to some extent. Only one subject appreciated this affirmation as inadequate.
- A percentage of 33,3% have had medium answers, 23,3% have had answers to a smaller extent, while two respondents have considered that sport is not the best way of meeting people.
- Through the analysis of the obtained data, one can notice that most of the subjects, 70%, have been practicing a sport because they feel a personal satisfaction when doing certain techniques.
- Out of the total number of respondents, 40% have said that sport is absolutely necessary to be in shape. 10% have said that this affirmation only corresponds moderately.
- 26,7% of the respondents have stated that this corresponds moderately, 23,3% confirmed that this affirmation corresponds to a greater extent. Three subjects consider this affirmation do not correspond to their beliefs and opinions.
- The majority of subjects, 36,7%, have considered this phrase adequate to the sports they are practicing. They consider the sporting activity as a way of developing certain individual aspects. A single person, 3,3%, does not agree with this affirmation.
- A percentage of 63,3% consider sport as a way of improving weak points. 6,7% have stated that this affirmation does not correspond at all, corresponds moderately or to a certain extent.
- Once has noticed that 33,3% of the subjects experience certain emotions when they involved in a certain sport. No negative answers have been registered here.
- 36,7% of the subjects have said that they practice sport to feel better. 30% have considered this affirmation adequate to a greater extent while 20% have said that it corresponds precisely.
- One can notice that 30% of the subjects consider sport as a good way to learn a lot of useful things in other domains, as well. The rest of the subjects have had different answers, 26,7% having had a maximum correspondence to the affirmation, while 6,7% having a minimal correspondence.

–Even though the subjects are adults with locomotor disabilities and the training is done with a higher effort than in the people without disabilities, 60% of them execute difficult movements with pleasure.

–43,3% of the respondents have considered that the affirmation corresponds to a certain extent, sport being one of the best ways of maintaining good relationships with the people around.

The results have shown that more than half of the number of these persons is intrinsically motivated. The predominant motivation for this category is that of becoming, the subjects being focused on the success and the competition to their highest standards. Intrinsic motivation based on becoming can be defined as the commitment to an activity for the pleasure and the satisfaction of experimenting, accomplishing or creating. The attempt to hold on to certain techniques of difficult shaping with the purpose of experimenting personal satisfaction represents an example of intrinsic motivation within sport.

Intrinsic motivation based on knowledge refers to several concepts such as exploration, curiosity, learning objectives, the epistemic need for understanding and knowing. For example, the athletes are intrinsically motivated when they try to discover new techniques of instruction out of pure curiosity or the pleasure of learning something new.

#### 4. Conclusions

After obtaining the results from the tools used, one has reached the conclusion that adults with locomotor disabilities are highly motivated in the

sporting activity; one has also enumerated different accessible sports based on the respective deficiencies and one has also enunciated a multitude of personal motivational mottos that activate their lives on a regular basis.

The most practiced sport is basketball, followed by table tennis. The athletes' trainings take place weekly or several times per week, having been done for more than 4 years. A single athlete confirmed that he trains daily.

The domain of this disability is quite vast and interesting, its characteristics having a large frame of information, curiosities and specific practices.

Adults with this disability need more attention and more support from the people around the society they live in, they need specific equipment, trainings and Paralympic competitions. In this sense, one recommends the future research and study in meeting the needs and supports of the adults with locomotor disabilities that go and practice a sporting activity.

#### References

1. Bull, J. Stephen: *Psihologia sportului, ghid pentru optimizarea performanțelor (The psychology of sport, guide for improving performances)*. București, Editura trei, 2011.
2. Cohen, S., Kamarck, T., Mermelstein, R.: *A global measure of perceived stress*. In: *J Health Soc.Beh.*, 1983; 24, p. 385-396.
3. Cox, R.H.: *Sport psychology: Concepts and applications*, Fifth edition. New York, McGraw-Hill, 2002.
4. Crăciun, M.: *Psihologia sportului*. Ed. Risoprint, 2008, p. 15-70.

5. Deci, E.L., Ryan, R.M.: *Intrinsic motivation and self-determination in human behaviour*. New York, Plenum, 1985.
6. Deci, E.L., Vallerand, R.J., Pelletier, L.G., Ryan, R.M.: *Motivation and education: the self-determination perspective*. In: *Educ Psychol*, 1991; 26, p. 325-346.
7. Li, F., Harmer, P.: *Confirmatory factor analysis to the Group Environment Questionnaire with an intercollegiate sample*. In: *J Sport & Exercise Psychol*. 1996; 18, p. 49-63.
8. Locke, E., A. & Latham, G., P.: *Building a Practically Useful Theory of Goal Setting and Task Motivation*. In: *American Psychologist*, 2002, Vol. 57, No. 9, p. 705–717.
9. Lombardo, M., Padua, E., Campoli, F., Panzarino, M., Mîndrescu, V., Annino, G., Iellamo, F., Bellia, A.: *Relative handgrip strength is inversely associated with the presence of type 2 diabetes in overweight elderly women with varying nutritional status*. In: *Acta Diabetologica*, 2020, 581, p.3.
10. Maslow, A.H.: *A Theory of Human Motivation*. In: *Psychological Review*, 1943, p. 370-396.
11. Pelletier, L.G., Fortier, M. S., Vallerand, R. J., Tuson, K. M., Brière, N. M., Blais, M. R.: *Toward a new measure of intrinsic motivation, extrinsic motivation, and amotivation in sports: The Sport Motivation Scale (SMS)*. In: *Journal of Sport & Exercise Psychology*, 1995, 17, p. 35-53.
12. Vallerand, R.J., Losier, J.F.: *An integrative analysis of intrinsic and extrinsic motivation in sport*. In: *J Appl Sport Psychol.*, 1999; 11, p. 142-169.
13. Weinberg, R.S., Gould, D.: *Foundations of Sport and Exercise Psychology*. Champaign, Illinois, Human Kinetics, 1995.
14. Zlate, M.: *Treatise on organizational-managerial psychology*, Volume II. Iaşi, Polirom Publishing House, 2007.