# STUDY OF SPORTS MOTIVATION OF STUDENTS FROM THE TECHNICAL UNIVERSITY OF CLUJ-NAPOCA

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ABSTRACT. Introduction: The purpose of this article is to analyze the motivation to practice sports and physical activities among university students. **Objectives:** To identify the perceived reasons, as well as the existing differences between the students from the Technical University of Clui-Napoca, regarding the motivation to practice sports and physical activities, depending on the gender and the area of residence. Methods: To find out what motivates university students to take part in various physical sports activities, we conducted a study in the academic year 2019-2020, with 257 participants. The method of quantitative research and the technique of administering questionnaires by sociological survey was used. The research tool was the Sports Motivation Scale-6 (SMS-6; Mallett et al., 2007), which is an evaluation of contextual motivation meant to ascertain the perceived reasons for practicing sports activities. **Results:** Regarding the behavior of practicing sports among students at the Technical University of Cluj-Napoca, male students are more motivated compared to female students and intrinsic motivation is predominant compared to other types of motivation. The area of residence does not seem to influence differently the motivation of students to practice sports, the scores obtained on each type of motivation being very close between the respondents from rural and urban areas. **Conclusions**: Physical education and sports are perceived by some students as a school obligation (external motivation), by others as a recreational, compensatory or recovery activity, while for most of them it means fun, a way to meet new people and to enjoy their company (intrinsic motivation).

**Keywords:** physical activity, motivation, sport, student, university.

**REZUMAT.** *Studiul motivației sportive a studenților de la Universitatea Tehnică din Cluj-Napoca.* **Introducere:** Scopul acestui articol este de a analiza motivația de a practica sport și activități fizice în rândul studenților. **Obiective:** Identificarea motivelor percepute, precum și a diferențelor existente între studenții Universității Tehnice din Cluj-Napoca, cu privire la motivația de a practica sport și activități fizice, în funcție de sex și zona de reședință. **Metode:** Pentru a afla ce motivează studenții universitari să ia parte la diferite activități sportive, am realizat un

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studiu, în anul universitar 2019-2020, cu 257 de participanti. A fost utilizată metoda cercetării cantitative și tehnica de administrare a chestionarelor prin sondaj sociologic. Instrumentul de cercetare utilizat a fost Scala de motivare sportivă-6 (SMS-6; Mallett si colab., 2007), care este o măsură a motivatiei contextuale menită să identifice motivele percepute pentru participarea la activităti sportive. **Rezultate**: În ceea ce privește comportamentul practicării sportului în rândul studentilor de la Universitatea Tehnică din Clui-Napoca, studentii sunt mai motivati în comparație cu studențele și motivatia intrinsecă este predominantă în comparatie cu celelalte tipuri de motivatie. Zona de resedintă nu pare să influenteze diferit motivatia studentilor de a practica sport, scorurile obtinute pe fiecare tip de motivatie fiind foarte apropiate între respondentii din mediul rural și cel urban. **Concluzii:** Educația fizică și sportul sunt percepute de unii studenți ca o obligație scolară (motivație externă), de alții ca o activitate recreativă, compensatorie sau de recuperare, în timp ce, pentru cei mai multi dintre ei înseamnă distractie, un mod de a cunoaste oameni noi si de a se bucura de compania lor (motivația intrinsecă).

Cuvinte-cheie: activitate fizică, motivație sport, student, universitate.

## Introduction

Motivation is a psychological construct that occurs as a result of an individual's intention, need, interest or desire. Motivation is the basis of the most fascinating issues in the world of sports, as a consequence of the evolution of social networks, like emulation, determination, learning and performance (Vallerand, Deci & Ryan, 1987 cited in Pelletier et al., 1995).

Motivation is a topic of great interest in sports and exercise psychology, which is debated in various circumstances, such as sport, exercise, physical education, and health (Lindahl, Stenling, Lindwall & Colliander, 2015). One of the main ideas is that individuals have various motivations to practice sport and physical activities (Ryan & Deci, 2017).

Motivation it is described as: "the direction and intensity of effort" (Sage, 1977 cited in Weinberg & Gould, 2011, p.51); the state that energizes behavior and gives it direction (Atkinson & Hilgard, 2005); forces that initiate, direct and sustain behavior (Green, 1996).

Vallerand & Thrill, 1993 defines motivation as "Hypothetical construct used to describe the internal and/or external forces that produce initiation, direction, intensity and persistence of behavior". Direction refers to the choice of the objective by each individual and the intensity is the effort that the individual makes to reach his goal. In practice the two dimensions are found in a conditioning relationship, in general the choice of an objective is followed by the desire to make a considerable effort to achieve it.

The psychology of sport provides several tools for evaluating motivation. Sport Motivation Scale (SMS – 28 Pelletier et al., 1995) is the most widely used questionnaire, which demonstrates sound validity for athletes of both sexes and is appropriate to use when translated into other languages (Taylor, 2018, p. 87).

Self-determination theory SDT (Deci & Ryan, 1985; Ryan & Deci, 2017) underlies the assessment of motivation in SMS. From the SDT perspective, we can speak about several types of motivation that evolves from amotivation to intrinsic motivation, all in direct relation to self-determination (Cox, 2002).

Intrinsic motivation is the prototype of the autonomous activity and involves the active engagement of a person in a task that he/she considers interesting, without needing a reward, other than carrying out the activity itself. By intrinsic motivation it is understood that a person likes to practice a certain sport without thinking about how it could be rewarded. Students can participate in various physical sporting activities for internal reasons, such as the joy of movement, rather than focusing on the benefits that can arise from practicing them (Thogersen-Ntoumani & Ntoumanis, 2006). It is more likely that intrinsically motivated people to get involved in sport activities and, at the same time, to persevere to improve their sports skills.

Extrinsic motivation refers to the motivation that comes from outside. It appears in different forms, the common examples being the material benefits, the trophies, the medals, the social approval, but also the fear or the punishment. Most students practice various physical sports activities not only because are interesting or enjoyable to them, but rather because they have something to gain from practicing these activities, for example, by improving their health, shape and body appearance.

In fact, in most sports physical activities we find a combination of these two types of motivation, even the most enjoyable sports activities require periods of external motivation for learning and improving certain specific skills. Motivation is present regardless of our favorite sport and sometimes the two types of motivation combine or, why not, intrinsic motivation can be transformed into extrinsic motivation and vice versa.

The individual characterized by amotivation or relative absence of motivation does not establish any connection between results and actions, and the level of motivational impulse is very low. Demotivated individuals perceive their behavior as being determined by forces beyond their control. There are several reasons why a person lacks motivation. A major reason would be that the person does not feel competent, this may result from the lack of necessary knowledge and/or specific skills, another reason is that the person does not see any connection between the action and the desired results, and in the end, the person simply does not want to act (Ryan, Patrick & Deci, 2009).

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#### Material and methods

The aim of the study:

- analysis of the perceived reasons that determine the students of the Technical University of Cluj-Napoca to practice sports and physical activities.

## Objectives:

- identifying the reasons perceived by students for participating in sports;
- evaluating the various motivational orientations of university students regarding the practice of sports;
- identification of the existing differences, depending on the gender and the area of residence, between the students of Technical University of Cluj-Napoca, regarding the sports motivation.

*Methods, techniques, and research tools:* 

- the method of quantitative research and the technique of administering the questionnaire by sociological survey were used.

The research tool used was the Sport Motivation Scale-6 (SMS-6; Mallett et al., 2007), which is a measure of contextual motivation meant to identify the perceived reasons for taking part in sports activities. SMS-6 measures six forms of motivation that reflect varying degrees of self-determination along a continuum of motivation. Students are asked to answer the question "Why do you practice sport? Participants respond using a five-point Likert scale ranging from 1=does not match at all to; 2=corresponds a little; 3=corresponds moderately; 4=corresponds a lot and 5=corresponds exactly.

*Participants:* The research was conducted in the academic year 2019-2020 and involved 257 students from the Technical University of Cluj-Napoca.

Descriptive statistics on respondents in the sample highlights the following:

The gender distribution of the sample shows that, out of a total of 257 students who participated in this study, 137 (53.3%) are male students and 120 (46.7%) are female students.

The distribution of respondents by area of residence shows that most of them, namely 110 (42.8%) of the students surveyed come from a village. The number of students who stated that they grew up in a small town is 74 (28.8%), and those they come from a big city is 73 (28.4%).

The survey participants were involved in various sports activities at least twice a week.

## Results

The SPSS program was used for the interpretation of the collected data. In order to determine the degree of motivation of the students, in the analysis of the obtained data, we took into account only the values that correspond a lot or correspond exactly, which are presented in the table below:

**Table 1.** Independent variables on each type of motivation

Type of motivation Why do you practice sport?	Independent variable		Corres- ponds a lot	Corres- ponds exactly
Amotivation  I don't think I'm able to do sports anymore.  I don't want to do sport anymore.  I don't find myself in sport.  I don't like sports anymore.	Gender	Male	3,25%	2,30%
		Female	5,63%	1,50%
	Area of Resi- dence	Urban	4,58%	1,97%
		Rural	3,98%	1,87%
External Regulation	Gender	Male	15,43%	10,13%
Because I can be appreciated by other people For the reputation of being an athlete. For other benefits offered by the practice of sports (material, social). To show others that I am a valuable athlete.		Female	7,85%	4,20%
	Area of Resi- dence	Urban	12,90%	8,00%
		Rural	10,60%	7,53%
Introjected Regulation  You have to do sports to be fit.  Playing sports makes me feel good.  I wouldn't feel good without sports.  Because sport has to be part of the daily routine.	Gender	Male	26,55%	31,10%
		Female	22,55%	22,17%
	Area of Resi- dence	Urban	26,98%	26,67%
		Rural	21,85%	27,87%

Type of motivation Why do you practice sport?	Independent variable		Corres- ponds a lot	Corres- ponds exactly
Identified Regulation	Gender  Area of Residence	Male	23,73%	22,23%
		Female	17,80%	11,93%
Sport prepares me for other areas of life.  Because sport is very helpful in other activities of daily life.		Urban	21,55%	19,90%
It helps me have a good relation- ship with my friends. Because only through sustained train- ing can I increase my performance.		Rural	20,10%	14,63%
Integrated Regulation  Because for me, sport is a way of life.  Because sport is an extension of me.	Gender	Male	23,25%	18,23%
		Female	16,13%	11,00%
	Area of Resi- dence	Urban	21,75%	18,40%
Because playing sport corresponds to my life principles. Because sport is a part of my lifestyle.		Rural	18,03%	10,57%
Intrinsic Motivation	Gender	Male	30,60%	35,40%
		Female	23,73%	20,57%
For the excitement of playing sport Because knowing some elaborate training techniques makes me very happy. Because improving my own skills gives me a sense of satisfaction. For the good feeling offered by learning new strategies.	Area of Resi- dence	Urban	27,50%	33,23%
		Rural	27,13%	23,33%

The table shows the data obtained after calculating the average value for each type of motivation. The 28 questions in the questionnaire are grouped into six groups of 4 questions, each group corresponds to a type of motivation.



Figure 1. Amotivation

Amotivation. The results from Figure 1 shows that a very small percentage of respondents declared that are amotivated. For the independent variables, female students and those who grew up in urban areas are more demotivated. This shows that the vast majority of respondents are interested in sport and attach great importance to it.

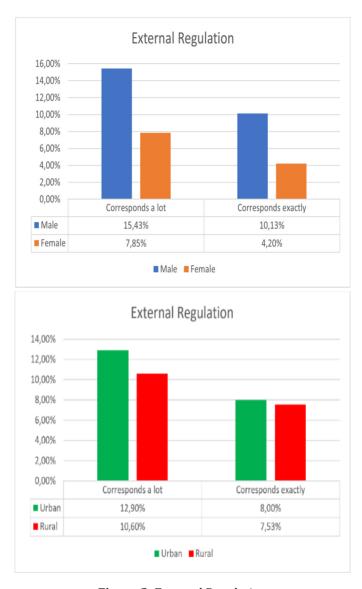
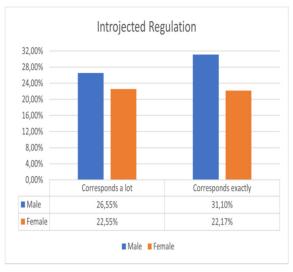


Figure 2. External Regulation

External Regulation. In Figure 2 we notice that a small number of students are externally motivated, the percentage being higher among male students (approximately 25%) and those who grew up in urban areas (approximately 20%). A small number of surveyed students participate in sports activities with the intention of being rewarded or to escape a possible sanction.

Some students attend physical education classes not because they are really interested in the subject, they do it with the desire to get a reward, more precisely to pass the exam.



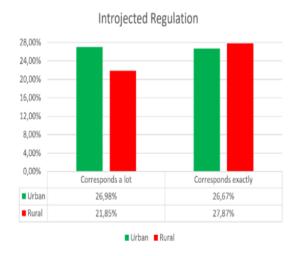


Figure 3. Introjected Regulation

Introjected Regulation. Female students are less motivated compared to male students. Students participate in sports activities to avoid external sources of disapproval or to obtain external approval from colleagues, friends, parents of coaches and teachers.





Figure 4. Identified Regulation

Identified Regulation. Students practice sports activities on their own initiative, with the desire to learn new sports skills, to be better prepared physically and to look better.



Figure 5. Integrated Regulation

Integrated Regulation. And in this case, male students and those who grew up in an urban area are more motivated (Fig. 5). For these students, the behavior of playing sports responds to the psychological needs, more precisely the need to exercise.

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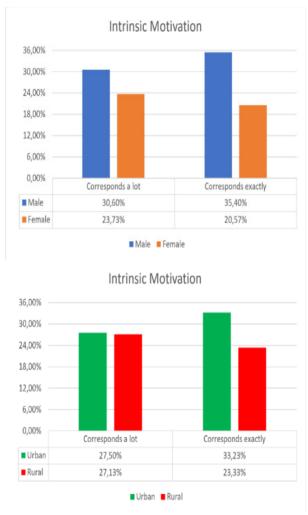


Figure 6. Intrinsic Motivation

Intrinsic Motivation. Male students are more intrinsically motivated than female students. Students who grew up in urban areas are more intrinsically motivated than those who grew up in rural areas. The highest percentage of answers that correspond exactly or a lot are found in the type of intrinsic motivation (Fig. 6). This shows the fact that most of the students are intrinsically motivated, they practice sports voluntary, for enjoyment, movement and fun, without external obligations or rewards. The intrinsic motivation for playing sports is given by the pleasure of participating and the increased interest in such activities.

#### Conclusions

In conclusion, we must emphasize that the students from the Technical University of Cluj-Napoca have a higher intrinsic than extrinsic motivation and there is an even higher motivation among male students than among female students.

The average results of the answers that correspond exactly or more show us that the highest percentages are found among male students and those who grew up in a city.

The area of residence does not have a significant influence on the behavior of students' sports activities, the differences between the scores that correspond exactly or very much of the respondents from urban and rural areas being very small. Those from rural areas may be more motivated to play sports, probably due to the small number of places available for sports in those areas and the limited access to them.

Physical education and sport are specific activities based on physical exercises performed by people of different ages, of both sexes and for different reasons. Physical education and sports are perceived by some students as a school obligation (external motivation), by others as a recreational, compensatory or recovery activity, while for most of them it means fun, a way to meet new people and to enjoy their company (intrinsic motivation).

### REFERENCES

- Atkinson, R., & Hilgard, E. (2005). *Introducere în psihologie*. Ediția a XIV. București: Ed. Tehnică. p. 507.
- Cox, R.H. (2002). *Sport psychology: Concepts and applications* (5th Edition). New York: McGraw-Hill.
- Deci, E.,& Ryan, R. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. New York, NY: Plenum Publishing Co.
- Green, R. G. (1996). *Social Motivation, Companion Encyclopedia of Psychology* (Volume 1). London: Routledge.
- Lindahl, J., Stenling, A., Lindwall, M., & Colliander, C. (2015). Trends and knowledge base in sport and exercise psychology research: a bibliometric review study. *International Review of Sport and Exercise Psychology*, 1-24, https://doi.org/10.1080/1750984X.2015.1019540
- Mallett, C., Kawabata, M., Newcombe, P., Otero-Forero, A., & Jackson, S. (2007). Sport Motivation Scale-6 (SMS-6): A revised six-factor sport motivation scale. *Psychology of Sport and Exercise*, 8, 600-614.

- Pelletier, L. G., Fortier, M. S., Vallerand, R. J., Tuson, K. M., Brière, N. M., & Blais, M. R. (1995). Toward a new measure of intrinsic motivation, extrinsic motivation, and amotivation in sports: The Sport Motivation Scale (SMS). *Journal of Sport & Exercise Psychology*, 17, 35-53.
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: basic psychological needs in motivation, development, and wellness.* New York: The Guilford Press.
- Ryan, R. M., Williams, G. C., Patrick, H., & Deci, E. L. (2009). Self-determination theory and physical activity: The dynamics of motivation in development and wellness. *Hellenic Journal of Psychology*, 6(2), 107–124.
- Taylor, J. (2018). *Assessment in Applied Sport Psychology*, Champaign, IL: Human Kinetics. Thøgersen-Ntoumani, C. & Ntoumanis, N. (2006). The role of self-determined motivation in the understanding of exercise-related behaviours, cognitions and physical self-evaluations. *Journal of Sports Sciences*, *24* (4), 393-404, https://doi.org/10.1080/02640410500131670
- Vallerand, R.J. & Thill, E. (Éds), (1993). *Introduction à la psychologie de la motivation*. Laval, QC: Études Vivantes.
- Weinberg, R. S. & Gould, D. (2011). *Foundations of sport and exercise psychology* (5th Edition). Champaign, IL: Human Kinetics.