



A STUDY OF MOTIVATION IN ADOLESCENT TENNIS PLAYERS

I. Gigova*

Department of Physical Education and Sport, University of National and World Economy (UNWE), Sofia, Bulgaria

ABSTRACT

The present study aims to analyze the motivational profiles of young tennis players aged between 10 and 12, with a focus on the levels of intrinsic motivation, extrinsic motivation, and amotivation in relation to their sport qualification level. The sample includes 42 participants divided into three qualification groups. The study employed the Sport Motivation Scale by Pelletier, adapted for Bulgarian conditions. Variational, correlational, and dispersion analyses were applied. Results indicate that intrinsic motivation dominates among the most highly qualified athletes, while amotivation is more pronounced in children practicing school-level tennis. A positive relationship was found between sport qualification level and intrinsic motivation. The findings highlight the importance of targeted support for developing autonomous motivation at an early age.

Keywords: drive, adolescents, psychological component, performance

INTRODUCTION

The theoretical framework of the study is based on the Self-Determination Theory, developed by E. Deci and R. Ryan (1), who emphasize that "to be motivated means to be moved to do something." According to R. Vallerand (2), motivation is defined as "a hypothetical construct used to characterize the internal and external forces producing initiation, direction, intensity, and persistence of behavior." Depending on the level of autonomy, motivation is classified into two main types—*intrinsic* and *extrinsic*—while the absence of motivation is referred to as *amotivation*. Achieving high sports results in young athletes is unthinkable without purposeful, systematic, and multifaceted preparation, in which motivation plays a key role (3). Modern approaches to youth athlete development emphasize integrated training that includes not only physical, technical, and psychological aspects but also social and wellness components. According to Dimitrova (4), a healthy and balanced lifestyle supports emotional intelligence, which in turn strengthens intrinsic motivation and resilience when facing challenges.

Similar conclusions regarding the importance of long-term motivation in university students participating in sports activities have been drawn by Gadzhev, Stoilov, Ignatova, and Barova (5). Their research suggests that regular physical activity promotes the development of sustainable motivational attitudes. The studies of Stoyanova and Markova (6) also confirm a positive relationship between emotional intelligence and the desire to engage in physical activity, which is particularly important for forming the type of motivation in academic and sport contexts.

Several studies highlight this psychological trait's significance in the context of tennis (7). Tennis, as an individual sport with high psychological demands, requires not only excellent physical and technical preparation but also a stable motivational foundation and emotional regulation skills.

MATERIALS AND METHODS

The current study aims to analyze the levels of different components of motivation in young tennis players and to explore their impact on sports performance. Special attention is given to *intrinsic* and *extrinsic* motivation, as well as to *amotivation* as a factor limiting sports development.

*Correspondence to: Iva Gigova, Department of Physical Education and Sport, University of National and World Economy (UNWE), Sofia, Bulgaria, Email: iva.gigova@unwe.bg, Phone: +359 886 646 660

The research objectives are:

1. To describe the status of individual motivational components across different qualification groups.
2. To examine the relationships among motivational components and their influence on athletic performance.

The object of the study is the training of young tennis players, while the subject is the state of various motivational components and their impact on sports achievement. The sample consists of 42 Bulgarian tennis players (16 boys and 26 girls) aged between 10 and 12 years, with 1 to 6 years of sports experience. The participants were divided by qualification level as follows: 6 athletes in Group I, 12 in Group II, and 24 engaged in school-level tennis. Variational, correlational, and dispersion methods were used to process the empirical data.

Sport motivation was assessed using the Sport Motivation Scale developed by Pelletier, Fortier, Vallerand, and Brière (8), adapted for Bulgarian conditions by T. Mukhovski. The scale includes the following subscales: intrinsic motivation (to know, to accomplish, to experience stimulation), extrinsic motivation (integration, introjection, external regulation), and amotivation.

RESULTS ANALYSIS

The analysis of the collected data aims to identify key trends and differences in the motivational profiles of the surveyed young athletes. Mean values and variability of individual motivational constructs across gender and qualification groups are presented in **Table 1**. The results show that the coefficient of variation for all constructs ranges from 20% to 30%, indicating relative data homogeneity. The analysis found no significant gender differences, except for external regulation, which showed statistically significant differences. Regarding the intensity of motivational components, the highest mean values were recorded for intrinsic motivation ($M = 4.97$; $SD = 1.47$), and the lowest for amotivation ($M = 1.95$; $SD = 0.00$), emphasizing the leading role of intrinsic motivation. These results are illustrated in **Figure 1**. The highest levels of intrinsic motivation were recorded among tennis players with the highest qualification, while the lowest were observed among those practicing school-level tennis. Differences between the groups were also found in the “external regulation” indicator. Amotivation was most strongly expressed in the school tennis group ($M = 2.42$; $SD = 0.99$), and the lowest in Group I athletes ($M = 1.13$; $SD = 0.21$). The graphical representation of these differences is shown in **Figure 2**.

Table 1. Status of motivational components across gender and qualification groups.

Motivational Components	Overall		Gender						Sports Qualification								
			Boys		Girls		F	a	Athletes Level I		Athletes Level II		School tennis		F	a	Eta
	X-X-n	SD	X-X-n	SD	X-X-n	SD			X-X-n	SD	X-X-n	SD	X-X-n	SD			
IM Knowledge	4,79	1,58	5,02	1,29	4,65	1,75	0,51	0,479	5,63	1,37	5,23	1,42	4,36	1,62	2,29	0,11	0,32
IM Participation	4,98	1,57	5,42	1,09	4,71	1,77	2,07	0,158	6,17	0,7	5,21	1,53	4,57	1,62	2,88	0,07	0,36
IM Stimulation	5,15	1,58	5,41	1,36	4,99	1,7	0,68	0,413	6,42	0,52	5,75	1,24	4,53	1,62	5,73	0,01	0,48
EM Identification	4,38	1,39	4,56	1,52	4,26	1,32	0,47	0,498	5,04	1,43	4,06	1,12	4,36	1,49	1	0,38	0,22
EM Introjection	5,13	1,34	5,56	1,03	4,86	1,46	2,86	0,099	6,08	0,92	4,73	1,56	5,08	1,25	2,17	0,13	0,32
EM External Regulation	4,19	1,29	4,78	1,12	3,83	1,28	6,06	0,018	5,21	1,73	3,38	0,86	4,34	1,16	5,35	0,01	0,46
Amotivation	1,95	1	2,27	1,05	1,76	0,94	2,64	0,112	1,13	0,21	1,44	0,72	2,42	0,99	8,51	0,00	0,55
Intrinsic Motivation	4,97	1,47	5,28	1,08	4,79	1,66	1,13	0,294	6,07	0,83	5,4	1,26	4,49	1,513	3,97	0,03	0,41
Extrinsic Motivation	4,56	1,06	4,97	0,92	4,31	1,09	4,02	0,052	5,44	1,08	4,06	0,8	4,6	1,058	3,92	0,03	0,41

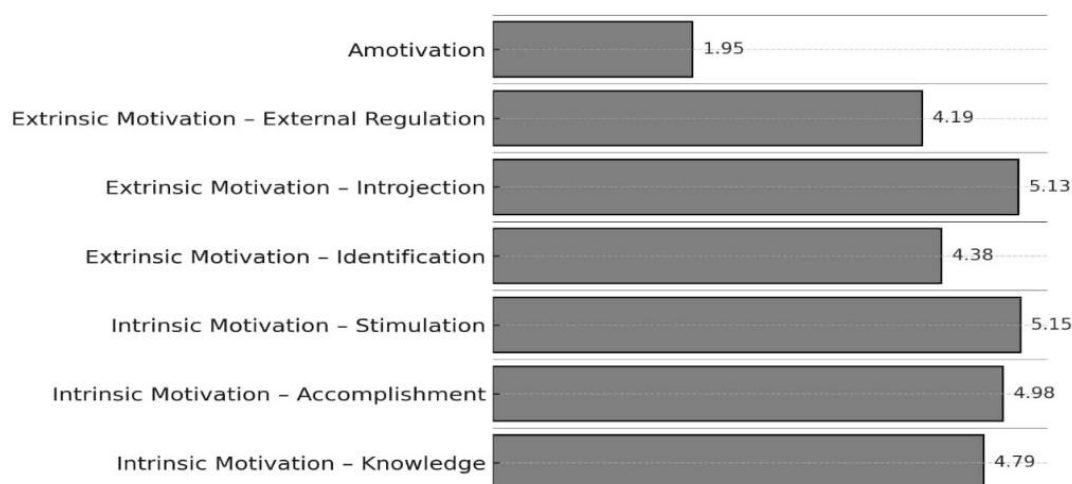


Figure 1. Degree of expression of the individual components of motivation

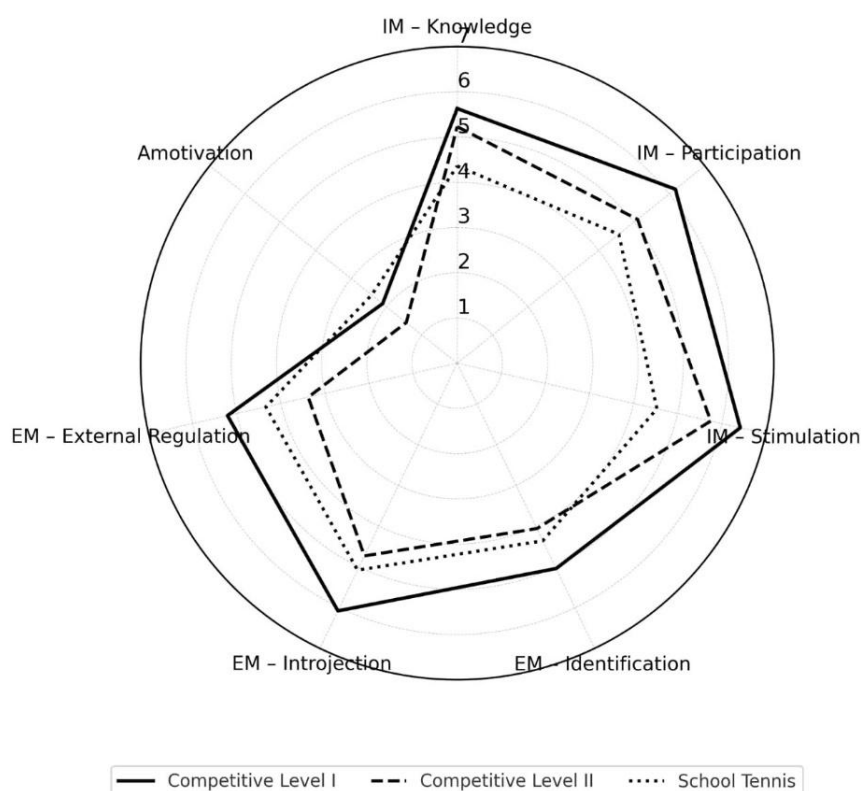


Figure 2. Comparative analysis of motivational components across qualification groups

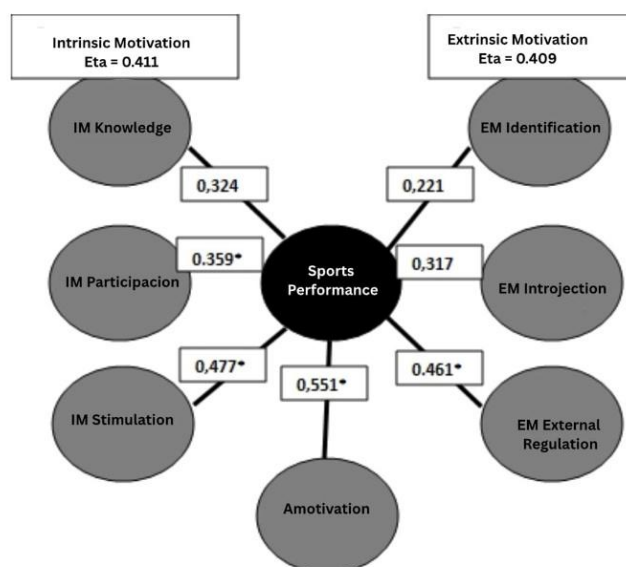
The correlations between the different forms of intrinsic motivation ($r = 0.839$ to $r = 0.855$) indicate that they reinforce each other. Detailed correlations between the components are presented in **Table 2**. In contrast, extrinsic motivation is less stable and shows weaker internal consistency (e.g., $r = 0.508$). Amotivation demonstrates a negative correlation with intrinsic motivation ($r = -$

0.451), indicating that positive experiences and internal engagement suppress the lack of motivation. The Eta correlation coefficient ($\text{Eta} = 0.551$) indicates that the highest levels of amotivation are observed in participants from the third qualification group. A visual representation of this relationship is shown in **Figure 3**.

Table 2. Relationships Between the Components of Motivation

Motivational Component	IM Knowledge	IM Participation	IM Stimulation	EM Identification	EM Introjection	EM External Regulation	Amotivation	Intrinsic Motivation
IM Knowledge	1							
IM Participation	,839*	1						
IM Stimulation	,855*	,708*	1					
EM Identification	,555*	,367*	,598*	1				
EM Introjection	,335*	,426*	,335*	,392*	1			
EM External Regulation	0,243	,391*	0,241	,508*	,435*	1		
Amotivation	-,386*	-,390*	-,451*	-0,222	0,015	0,047	1	
Intrinsic Motivation	,965*	,911*	,917*	,545*	,392*	,313*	-,439*	1
Extrinsic Motivation	,480*	,496*	,498*	,805*	,767*	,808*	-0,071	,528*

Note: Statistically significant correlation coefficients are marked with * ($p < 0.05$).

**Figure 3.** Correlation between motivation components and sports performance

DISCUSSION

The results of the study clearly outline the role of intrinsic motivation as a "driving force" in the development of young tennis players. The highest levels were observed among athletes with higher qualifications, confirming that the pursuit of improvement and the enjoyment of the game go hand in hand with achievement. The strong interconnection between the components of intrinsic motivation suggests that when young athletes learn with interest, participate willingly, and feel inspired, they become more resilient and engaged in the process. On the other hand, lower levels of intrinsic motivation and increased amotivation among less experienced participants indicate the need for more targeted support. This finding is fully consistent with Self-Determination Theory (Deci & Ryan, 1985), which posits that

intrinsic motivation is associated with autonomy, meaning, and personal relevance of the activity. According to Dimitrova (10), the observed relationship between intrinsic motivation and sports performance in youth aligns with contemporary concepts of sustainable development in other sectors such as niche tourism, where the focus is placed on the quality of human capital.

CONCLUSION

Based on the conducted study, the following practical conclusions and insights can be drawn:

- Motivation among young tennis players is not significantly influenced by gender or age, redirecting attention to other, more decisive factors—such as the level of sports training and the developmental environment.

- Intrinsic motivation is the most pronounced component in the motivational profiles of young athletes and stands out as the main driver of sports activity, perseverance, and personal commitment.
- Athletes with high sports qualifications demonstrate a clear dominance of intrinsic motivation and low levels of amotivation, confirming the importance of autonomous motivation for achieving sustainable progress in tennis.
- Participants with lower qualifications, particularly those practicing school tennis, are characterized by predominant extrinsic motivation and increased amotivation—a profile that suggests risk of dropout and weaker sports performance.
- The established positive relationship between motivational characteristics and sports qualification level indicates that motivation is not a static trait, but one that can be developed through targeted pedagogical and psychological interventions.

REFERENCES

1. Ryan, R. M. and Deci, E. L., Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1):54–67, 2000.
2. Vallerand, R. J., On the assessment of intrinsic, extrinsic, and amotivation in education: Evidence on the concurrent and construct validity of the Academic Motivation Scale. *Educational and Psychological Measurement*, 53(1):159–172, 1993.
3. Brunzova, A. and Mutafova, Y., Motivation in sport as a socio-psychological phenomenon. *Lichnost, Motivatsia, Sport*, (13), 2008.
4. Dimitrova, B., A wellness lifestyle enhances emotional intelligence. Proceedings of the International Scientific Conference: Expanding Knowledge Through Interdisciplinary Research, 92–98, Sydney, Australia, 2025.
5. Gadzhev, M., Stoilov, I., Ignatova, M., and Barova, I., Study of long-term motivation of students practicing football and aerobics in physical education classes at UNWE. *Nauchni Trudove na UNSS*, 4:67–79, 2020.
6. Stoyanova, S. and Markova, Z., Emotional intelligence and physical activity among students at UNWE. *Nauchni Trudove na UNSS*, 3:27–40, 2023.
7. Crespo, M. and Reid, M., Motivation in tennis. *British Journal of Sports Medicine*, 41(11):769–770, 2007.
8. Pelletier, L. G., Fortier, M. S., Vallerand, R. J., and Brière, N. M., Toward a new measure of intrinsic motivation, extrinsic motivation, and amotivation in sports: The Sport Motivation Scale (SMS). *Journal of Sport and Exercise Psychology*, 17(1):35–53, 1995.
9. Dimitrova, B., Brain drain's economic impact on the development of wellness and spa tourism in Bulgaria. *Trakia Journal of Sciences*, 19(Suppl. 1, *Series Social Sciences*):9–14, 2023.
10. Dimitrova, B., Niche tourism – innovations and quality culture in specialized workforce development. *German International Journal of Modern Science*, 100:24–30, 2025.