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PERCEPTION OF THE TRANSFORMATIONAL LEADERSHIP AT ELITE ROMANIAN HANDBALL PLAYERS

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Abstract

Aim. The present study aimed to contribute to the identification of the perception of the transformational leadership depending on some specific variables and establish the relations between the personality factors and the perception of the transformational leadership, among handball players. The present study involved 82 persons aged between 18 and 43 years, $M = 30.73$, $AS = 7.20$, handball players in activity or retired.

Methods. The personality was measured with 32 items from IPIP (International Personality Item Pool) and the Transformational Leadership was measured with the Transformational Leadership Questionnaire.

Results. The data showed that the transformational leadership is perceived more positively by Romanian athletes in comparison with foreign athletes, but it is not perceived more positively by athletes with national performance in comparison with the ones without national performance, neither from the ones with international performances.

Conclusions. However, athletes who are satisfied with the personal physical training in comparison with those unsatisfied and the personality factors are, to some extent, significant predictors of the perception of the transformational leadership.

Keywords: transformational leadership; personality factors, handball players, foreign athletes.

Introduction

Transformational leadership, as a construct from organizational psychology, has been borrowed and used in sports research for over 10 years. As a concept, it has been measured in many ways and attempts have been made to define it as clearly as possible (Cheliadurai & Saleh, 1980, Clover, 1990).

A study conducted on 72 junior handball players, between 17-18 years old, investigated their personality traits, in connection with their performance on the field. There were no significant differences in performance traits, except dissimulation, thus more effective players have lower dissimulation scale scores and higher self-esteem (Rogulj et al., 2006). Although it is difficult to capture the differences in the personality of male and female athletes, at the level of a contact sport such as handball, they may be easier to capture. A study carried out on 60 Polish female players, 30 karate and 30 handball, aged 20-19, evaluated their personality profile, using the NEO-FFI questionnaire. The profile was characterized by a medium level of neuroticism, conscientiousness and openness to high experiences, and differences are captured by the type of sport, either individual or team sport (Piepiora & Petecka, 2020).

Another research was carried out on the personality of 70 handball players, aged 15, divided according to different levels of difficulty (players in the national team and those in other teams). The only significant differences were in the extraversion-introversion factor, with a higher level of introversion in goalkeepers, compared to players in other positions on the field, an aspect that may contribute to a better handball players selection and their positions in the game (Kavala et al., 2013). A study carried out on 20 elite athletes, handball and volleyball players, at professional level, tested their personality by means of two tests, namely an anxiety inventory, a personality questionnaire for athletes. The results revealed higher anxiety in handball players compared to volleyball players, and the differences also come from the energy resources required by the two sports, as well as individual personality characteristics (Filaire et al., 1999).

The Big Five was also used in another study conducted on a large sample of junior handball players ($N = 164$), aged between 14 and 18, from Hungary. The differences were highlighted according to gender, age and the position occupied on the field, thus female handball players were more characterized by openness to new things and proved to be more conscientious than boys, the younger they were, the higher the neuroticism was, but also the openness and energy, and related to the place occupied in the game, the goalkeepers can be characterized by a higher level of conscientiousness and neuroticism, compared to the players in the center and the pivots (König-Görögh et al., 2017). Another research carried out on 602 athletes, in team sports, including football, handball and water polo, from Croatia also focused on studying personality traits, measured with the help of the Big Five. Differences emerged according to their age, with junior players

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being less agreeable and conscientious than seniors, who score higher on the openness scale as well, so stability and maturity might define success more among older players (Trninić, Trninić & Penezić, 2016).

Another study conducted on 61 female handball players from the national teams of Ukraine used the Big Five, also, as a personality assessment tool, and openness, conscientiousness and extraversion scored above average (Popovych et al., 2021). Regarding leadership and the perception of the coach as a leader, at the level of a research carried out on 238 athletes, representatives of 15 elite teams, which aimed to highlight the differences between coaches and team leaders, significant differences were discovered between them, the former being characterized as having autocratic behaviors, while the latter, as being much more democratic (Loughead & Hardy, 2004). Another study on the qualities of coaches, in which 195 athletes, basketball players participated, highlighted the fact that athletes prefer less traditional training styles with an emphasis on increasing intrinsic motivation and task orientation and, implicitly, performance (Rieke, Hammermeister & Chase, 2008). The study of leadership in sport is a topic particularly subject to research and updating, both to replicate successful models and to avoid failure and underperformance. Many works aim to describe leadership styles, as well as the newest existing models and scales for their measurement. (Chelladurai, 2007).

The conclusion of a study conducted on 397 basketball players was that the coaches' transformational leadership style has an optimal effect in terms of coaching and athletes' satisfaction (Kao & Tsai, 2016). Perceptions about group cohesion, the coach's management style and the coach-athlete relationship were also investigated on 111 students who practice sports. The results showed that the coach's leadership style is more important than social cohesion (Jowett & Chaundy, 2004). Another study analyzed the relation between transformational leadership and the level of team cohesion and performance on 309 UK frisbee players. The research conclusions underline the attention that should be given to the conceptualization and measurement of transformational leadership, as well as its impact on teams and with the obtained performances (Turnnidge & Côté, 2018).

Method

Participants and procedure

In this research, 82 people between the ages of 18 and 43 participated in the present study, $M = 30.73$, $AS = 7.20$, of which five men (6%) and 77 women (94%), 62 (76%) being Romanian and 20 (24%) of foreign nationality. The participants are active or retired handball players, nine of them with less than 10 years of experience in performance sports (11%), and 73 with more than 10 years of experience (89%), 72 actives in the National League (88%), and 10 in Division A (12%).

The data was collected during 2021 through an online questionnaire. The participants provided their informed consent and agreement regarding the processing of personal data, which were included in the first section of the questionnaire. The sample is one of convenience, being composed of active or retired handball players.

Hypotheses

- H1. Transformational leadership is perceived more positively by Romanian athletes than foreign athletes.
- H2. Transformational leadership is perceived more positively by nationally performing athletes than non-nationally performing athletes.
- H3. Transformational leadership is perceived more positively by athletes with international performance compared to athletes without international performance.
- H4. Transformational leadership is perceived more positively by athletes satisfied with their personal physical training than those who are dissatisfied.
- H5. Transformational leadership is perceived more positively by athletes satisfied with their team's physical training than those who are dissatisfied.
- H6. Personality factors are significant predictors of the perception of transformational leadership.

Instruments

Sociodemographic data were collected through specific questions formulated in the first section of the questionnaire. The specific data were collected through a set of questions regarding the concrete activity related to the specific trainings. Their results will be presented in the descriptive analysis part of the study. Part of this data will constitute criterion variables for establishing certain differences regarding the perception of the coach as a leader.

Personality was measured with 32 items from the IPIP (International Personality Item Pool) (Goldberg et al., 2006). The instrument measures eight personality dimensions, with four items assigned to each one: Confident-Dominant, Arrogant-Calculating, Glacial, Reserved-Introverted, Insecure-Submissive, Modest-Genuine, Warm-Agreeable, Gregarious-Extravert. Answers are given on a five-point Likert scale where 1 – does not suit me at all and 5 – suits me perfectly. Scores are obtained by summing the item scores for each subscale. Example item: "In a discussion, I talk the most." Transformational leadership was measured with the Transformational Leadership Questionnaire (Rafferty & Griffin, 2004). The instrument contains 15 items and measures five dimensions of leadership, namely vision, inspirational communication, intellectual stimulation, encouraging leadership and personal recognition, each with three items. Answers are given on a five-point Likert scale, where 1 – strongly disagree and 5 – strongly agree. Example item: "Say things that make others proud to be part of this organization."

Results

Descriptive statistics

Mean scores, standard deviations, internal consistency coefficients and correlations between variables are shown in Table 1. It is observed that regarding the athletes' personality, the highest score was obtained for Warm-Agreeable, $M = 16.01$, $AS = 2.83$, and the lowest score for Arrogant-Calculating, $M = 7.24$, $AS = 3.70$.

Regarding the dimensions of leadership, the highest score was recorded for Inspirational Communication, $M = 12.28$, $AS = 2.70$, and the lowest score for Encouragement, $M = 10.11$, $AS = 3.02$. Skewness and flattening are found in the range $(-2, 2)$, which reflects a normal distribution of the data.

Table 1. Mean scores, standard deviations, internal consistency coefficients and correlations between variables

	M	AS	α	PSD	PAC	PGL	PRI	PNS	PMI	PCA	PGE	LVI	LCI	LSI	LLI	LRP
PSD	9.93	2.85	.71	1												
PAC	7.24	3.70	.90	.57**	1											
PGL	11.38	3.62	.65	.18	.35**	1										
PRI	12.05	3.17	.60	-.12	.13	.36**	1									
PNS	12.63	2.69	.52	.01	.04	-.03	.28*	1								
PMI	12.70	3.09	.60	.08	-.09	-.02	.17	.51**	1							
PCA	16.01	2.83	.73	.04	-.23*	.12	.03	.07	.49**	1						
PGE	13.61	3.64	.75	.41**	.10	-.03	-.26*	.22*	.24*	.25*	1					
LVI	11.11	2.35	.56	-.17	-.12	.19	.01	.09	-.02	.14	-.01	1				
LCI	12.28	2.70	.89	-.06	-.12	.24*	.27*	.10	.09	.25*	.0	.657**	1			
LSI	10.89	2.87	.90	.10	-.07	.21	.19	.24*	.22*	.35**	.18	.394**	.70**	1		
LLI	10.11	3.02	.87	.09	.13	.40**	.32**	.15	.08	.24*	.01	.40**	.72**	.69**	1	
LRP	11.39	2.88	.90	.01	-.02	.24*	.10	.28**	.22*	.40**	.32**	.41**	.60**	.65**	.66**	1

** $p < .01$, * $p < .05$

PSD – Confident-Dominant, PAC – Arrogant-Calculating, PGL – Glacial, PRI – Reserved-Introverted, PNS – Insecure-Submissive, PMI – Modest-Genuine, PCA – Warm-Agreeable, PGE – Gregarious-Extravert, LVI – Vision, LCI – Inspirational Communication, LSI – Intellectual Stimulation, LLI – encouragement, LRP – Professional Recognition

Inferential statistics – hypothesis testing

H1. Transformational leadership is perceived more positively by Romanian athletes than foreign athletes.

In order to test this hypothesis, the t-test was performed for independent samples with the nationality of the participants as the criterion variable.

Table 2. Average scores obtained by participants on the five dimensions of transformational leadership according to nationality

	Nationality	N	M	AS	ESM
Vision	Romanian	62	11.47	2.27	.29
	Foreign	20	10.00	2.32	.52
Inspirational Communication	Romanian	62	12.76	2.25	.29
	Foreign	20	10.80	3.41	.76
Intellectual Stimulation	Romanian	62	11.39	2.51	.32
	Foreign	20	9.35	3.41	.76
encouragement	Romanian	62	10.53	2.63	.33
	Foreign	20	8.80	3.78	.85
Personal Recognition	Romanian	62	11.79	2.75	.35
	Foreign	20	10.15	2.96	.66

Table 3. Independent samples t-test, differences in the five dimensions of transformational leadership according to nationality

		F	Sig.	t	df	p	DM	ESD	95% CI	
									Min.	Max.
Vision	Homogeneity of variance	.20	.66	2.51	80	.01	1.47	.59	.30	2.63
Inspirational communication	Homogeneity of variance	3.54	.06	2.96	80	.00	1.96	.66	.64	3.28



Intellectual stimulation	Homogeneity of variance	2.09	.15	2.89	80	.01	2.04	.71	.63	3.44
Personal recognition	Homogeneity of variance	.23	.63	2.28	80	.03	1.64	.72	.21	3.08

It is observed that there are significant differences in four of the five dimensions of transformational leadership according to nationality. Thus, Romanian athletes have a more positive perception of it than foreign athletes, regarding vision $M = 11.47$, $AS = 2.27$ față de $M = 10.00$, $AS = 2.32$, $DM = 1.47$, $t(80) = 2.51$, $CI95\%(.30, 2.63)$, $p < .05$, $d = 4.95$, regarding inspirational communication $M = 12.76$, $AS = 2.25$, față de $M = 10.80$, $AS = 3.41$, $DM = 1.96$, $t(80) = 2.96$, $CI95\%(.64, 3.28)$, $p < .01$, $d = .68$, regarding intellectual stimulation $M = 11.39$, $AS = 2.51$, față de $M = 9.35$, $AS = 3.41$, $DM = 2.04$, $t(80) = 2.89$, $CI95\%(.63, 3.44)$, $p < .05$, $d = .68$, and regarding personal recognition $M = 11.79$, $AS = 2.75$, as opposed to $M = 10.5$, $AS = 2.96$, $DM = 1.64$, $t(80) = 2.28$, $CI95\%(.21, 3.08)$, $p < .05$, $d = .57$.

Therefore, we can state that hypothesis H1 is supported by the analyzed data.

H2. *Transformational leadership is perceived more positively by nationally performing athletes than non-nationally performing athletes.*

In order to test this hypothesis, a one-way ANOVA analysis of variance was performed, with performance in national competitions as the criterion variable.

Table 4. The average scores obtained by the participants on the five dimensions of transformational leadership according to the performances in national competitions

		N	M	AS	ES	Min.	Max.	95% CI
Vision	Participation	25	10.20	2.02	.40	9.37	11.03	
	places 4-8	17	11.12	2.60	.63	9.78	12.45	
	places 1-3	40	11.68	2.31	.37	10.94	12.41	
	Total	82	11.11	2.35	.26	10.59	11.63	
Inspirational Communication	Participation	25	12.16	2.91	.58	10.96	13.36	
	Places 4-8	17	11.65	2.45	.59	10.39	12.91	
	places 1-3	40	12.63	2.67	.42	11.77	13.48	
	Total	82	12.28	2.70	.30	11.69	12.87	
Intellectual Stimulation	Participation	25	11.16	3.29	.66	9.80	12.52	
	places 4-8	17	10.06	2.44	.59	8.81	11.31	
	places 1-3	40	11.08	2.76	.44	10.19	11.96	
	Total	82	10.89	2.87	.32	10.26	11.52	
Encouragement	Participation	25	10.68	3.12	.62	9.39	11.97	
	places 4-8	17	8.82	2.92	.71	7.32	10.33	
	places 1-3	40	10.30	2.91	.46	9.37	11.23	
	Total	82	10.11	3.02	.33	9.45	10.77	
Personal Recognition	Participation	25	11.16	3.31	.66	9.79	12.53	
	places 4-8	17	10.59	2.15	.52	9.48	11.69	
	places 1-3	40	11.88	2.82	.45	10.97	12.78	
	Total	82	11.39	2.88	.32	10.76	12.02	

Table 5. One-way analysis of variance ANOVA for the differences of the five dimensions of transformational leadership according to performances in national competitions

		Sum of squares	df	Mean of squares	F	Sig.
Vision	Between groups	33.47	2	16.74	3.19	.04
	Within groups	414.54	79	5.25		
	Total	448.01	81			
Inspirational Communication	Between groups	11.93	2	5.97	.82	.45
	Within groups	576.62	79	7.30		
	Total	588.55	81			
Intellectual Stimulation	Between groups	14.94	2	7.47	.91	.41
	Within groups	651.08	79	8.24		
	Total	666.01	81			
Encouragement	Between groups	37.70	2	18.85	2.13	.13
	Within groups	700.31	79	8.87		
	Total	738.01	81			



Personal Recognition	Between groups	21.66	2	10.83	1.32	.27
	Within groups	647.85	79	8.20		
	Total	669.51	81			

It is observed that although there are differences according to all levels of performance in national competitions and for all five dimensions of transformational leadership, only *vision* shows significant differences. Thus, the highest perception on the vision dimension of transformational leadership is found in the participants who occupied the 1st-3rd places in the national competitions, $M = 11.68$, $AS = 2.31$, they are followed by the participants who occupied the 4th-8th places, $M = 11.12$, $AS = 2.60$ and finally by participants who only participated in such competitions, $M = 10.20$, $AS = 2.02$. The differences are statistically significant, $F(2, 79) = 3.19$, $p < .05$. Taking into account this result, we can state that hypothesis H2 is supported to a small extent by the analyzed data.

H3. *Transformational leadership is perceived more positively by athletes with international performance compared to athletes without international performance.*

In order to test this hypothesis, a one-way ANOVA analysis of variance was performed, with performance in international competitions as the criterion variable.

Table 6. Average scores obtained by participants on the five dimensions of transformational leadership according to performances in international competitions

		95% CI					
		N	M	AS	ES	Min.	Max.
Vision	Participation	40	10.80	2.53	.40	9.99	11.61
	places 4-8	12	11.17	1.64	.47	10.12	12.21
	places 1-3	30	11.50	2.35	.43	10.62	12.38
	Total	82	11.11	2.35	.26	10.59	11.63
Inspirational Communication	Participation	40	12.05	2.88	.46	11.13	12.97
	places 4-8	12	11.92	2.28	.66	10.47	13.36
	places 1-3	30	12.73	2.61	.48	11.76	13.71
	Total	82	12.28	2.70	.30	11.69	12.87
Intellectual Stimulation	Participation	40	10.93	3.29	.52	9.87	11.98
	places 4-8	12	10.33	2.15	.62	8.97	11.70
	places 1-3	30	11.07	2.55	.47	10.12	12.02
	Total	82	10.89	2.87	.32	10.26	11.52
Encouragement	Participation	40	10.20	3.38	.54	9.12	11.28
	places 4-8	12	9.33	2.27	.66	7.89	10.78
	places 1-3	30	10.30	2.79	.51	9.26	11.34
	Total	82	10.11	3.02	.33	9.45	10.77
Personal Recognition	Participation	40	11.18	3.15	.50	10.17	12.18
	places 4-8	12	10.33	2.90	.84	8.49	12.18
	places 1-3	30	12.10	2.35	.43	11.22	12.98
	Total	82	11.39	2.88	.32	10.76	12.02

Table 7. One-way analysis of variance ANOVA for the differences of the five dimensions of transformational leadership according to performances in international competitions

		Sum of squares	df	Mean of squares	F	Sig.
Vision	Between groups	8.45	2	4.22	.76	.47
	Within groups	439.57	79	5.56		
	Total	448.01	81			
Inspirational Communication	Between groups	9.87	2	4.93	.67	.51
	Within groups	578.68	79	7.33		
	Total	588.55	81			

Intellectual Stimulation	Between groups	4.70	2	2.35	.28	.76
	Within groups	661.31	79	8.37		
	Total	666.01	81			
Encouragement	Between groups	8.65	2	4.32	.47	.63
	Within groups	729.37	79	9.23		
	Total	738.01	81			
Personal Recognition	Between groups	30.37	2	15.19	1.88	.16
	Within groups	639.14	79	8.09		
	Total	669.51	81			

It is observed that there are no significant differences regarding the five dimensions of transformational leadership depending on the athletes' participation in international competitions. Therefore, hypothesis H3 is not supported by the analyzed data.

H4. *Transformational leadership is perceived more positively by athletes satisfied with their personal physical training than those who are dissatisfied*

In order to test this hypothesis, the t-test for independent samples was performed, with the satisfaction or dissatisfaction of athletes with personal physical training as the criterion variable.

Table 8. The average scores obtained by the participants on the five dimensions of transformational leadership according to the athletes' satisfaction or dissatisfaction with personal physical training

	MPFP	N	M	AS	ESM
Vision	No	13	10.00	2.86	.79
	Yes	69	11.32	2.21	.27
Inspirational Communication	No	13	11.00	3.19	.88
	Yes	69	12.52	2.55	.31
Intellectual Stimulation	No	13	9.85	2.67	.74
	Yes	69	11.09	2.88	.35
Encouragement	No	13	8.38	3.15	.87
	Yes	69	10.43	2.90	.35
Personal Recognition	No	13	9.38	3.33	.92
	Yes	69	11.77	2.64	.32

MPFP – satisfaction with personal physical training

Table 9. Independent samples t-test, differences in the five dimensions of transformational leadership according to athletes' satisfaction or dissatisfaction with personal physical training

		F	Sig.	t	df	p	DM	ESD	95% CI	
									Min.	Max.
Encouragement	Homogeneity of variance	.33	.57	-2.31	80	.02	-2.05	.89	-3.82	-.28
Personal Recognition	Homogeneity of variance	1.38	.24	-2.86	80	.01	-2.38	.83	-4.04	-.73

It is observed that there are significant differences in two of the five dimensions of transformational leadership depending on the satisfaction or dissatisfaction of athletes with personal physical training. Thus, athletes satisfied with their physical training have a more positive perception of it than unsatisfied athletes, for encouragement $M = 10.43$, $AS = 2.90$ versus $M = 8.38$, $AS = 3.15$, $DM = -2.05$, $t(80) = -2.31$, $CI95\%(-3.82, -.28)$, $p < .05$, $d = .68$, and for personal recognition $M = 11.77$, $AS = 2.64$, versus $M = 9.38$, $AS = 3.33$, $DM = -2.38$, $t(80) = -2.86$, $CI95\%(-4.04, -.73)$, $p < .05$, $d = .80$. We can say, therefore, that hypothesis H4 is only partially supported by the analyzed data.

H5. *Transformational leadership is perceived more positively by athletes satisfied with their team's physical training than those who are dissatisfied.*

In order to test this hypothesis, the t-test for independent samples was performed, with the satisfaction or dissatisfaction of the athletes with the physical training of the team as the criterion variable.

Table 10. The average scores obtained by the participants on the five dimensions of transformational leadership according to the athletes' satisfaction or dissatisfaction with the team's physical training

	MPFE	N	M	AS	ESM
Vision	No	16	10.00	3.12	.78

	Yes	66	11.38	2.07	.25
Inspirational Communication	No	16	10.81	3.35	.84
	Yes	66	12.64	2.41	.30
Intellectual Stimulation	No	16	9.94	3.13	.78
	Yes	66	11.12	2.78	.34
Encouragement Encouragement	No	16	7.94	3.07	.77
	Yes	66	10.64	2.78	.34
Personal Recognition	No	16	10.75	2.82	.70
	Yes	66	11.55	2.89	.36

MPFE – Satisfaction with the team's physical training

Table 11. Independent samples t-test, differences in the five dimensions of transformational leadership according to athletes' satisfaction or dissatisfaction with team physical training

		F	Sig.	t	df	p	DM	ESD	95% CI	
									Min.	Max.
Inspirational Communication	Homogeneity of variance	.45	.51	-2.51	80	.01	-1.82	.73	-3.27	-.38
Encouragement	Homogeneity of variance	.32	.57	-3.41	80	.00	-2.70	.79	-4.27	-1.13

It is observed that there are significant differences in two of the five dimensions of transformational leadership according to the athletes' satisfaction or dissatisfaction with the team's physical training. Thus, athletes satisfied with team training have a more positive perception of it than unsatisfied athletes, for inspirational communication $M = 12.64$, $AS = 2.41$ versus $M = 10.81$, $AS = 3.35$, $DM = -1.82$, $t(80) = -2.51$, $CI95\%(-3.27, -.38)$, $p < .05$, $d = .63$, and for encouragement $M = 10.64$, $AS = 2.78$, versus $M = 7.94$, $AS = 3.07$, $DM = -2.70$, $t(80) = -3.41$, $CI95\%(-4.27, -1.13)$, $p < .05$, $d = .92$. We can say, therefore, that hypothesis H5 is only partially supported by the analyzed data.

H6. Personality factors are significant predictors of the perception of transformational leadership.

In order to test these hypotheses, a multiple linear regression analysis was performed, with warm and cold personality types as predictors, and transformational leadership as the dependent variable. It should be mentioned that the warm personality type was made up of the facets: Insecure-Submissive, Modest-Ingenuous, Warm-Agreeable, Gregarious-Extravert, the cold personality type was made up of the facets: Secure-Dominant, Arrogant-Calculating, Glacial, Reserved-Introverted, and transformational leadership was constituted by its five summed dimensions.

Table 12. Multiple linear regression analysis for personality types as predictors of perception of transformational leadership

		Unstandardized coefficients		Standardized coefficients	t	p
Model		B	ES	β		
1	(Constant)	26.13	9.36		2.79	.01
	Cold Personality	.87	.54	.17	1.60	.11
	Warm Personality	1.52	.57	.28	2.64	.01

a. Dependant Variable: Transformational Leadership

b. $R^2 = .12$

It is observed that the two personality types are responsible for 12% of the variation in the perception of transformational leadership, the regression equation being statistically significant, $F(2, 79) = 5.11$, $p < .01$. Of the two personality types, only warm personality is a significant predictor of transformational leadership, $\beta = .28$, $p < .05$. Therefore, hypothesis H6 is only partially supported by the analyzed data.

Discussions

In our study, transformational leadership was measured with the help of a self-report instrument, namely the Transformational Leadership Questionnaire (Rafferty & Griffin, 2004) and it measures five dimensions of leadership, namely vision, inspirational communication, intellectual stimulation, encouraging leadership and personal recognition.

A study investigating transformational and transactional management styles of 98 athletic directors found no differences by coach gender, but among the management styles, the one with the best effects was found to be the transformational one, especially in the direction of satisfaction and additional effort (Burton & Peachey, 2009). Among the conclusions we found regarding transformational leadership, it turned out to be perceived more positively by Romanian handball players ($N = 62$) compared to foreign handball players ($N = 20$).

This aspect can also be interpreted through the dimensions by which transformational leadership is measured and which may be more important for Romanian athletes, compared to foreigners. Transformational leadership was not perceived more positively by athletes with national or international performances compared to athletes without national or international performances, an aspect that can be translated by the fact that the performance level of athletes is not a function of the dimensions of transformational leadership.

Another study examined the relationship between transformational leadership and youth sport experience by assessing competence, confidence, connection, character and caring.

The sample (N = 203) consisted of athletes on 28 elite basketball teams. The conclusions showed that a coach who has a high level of transformational leadership also develops high qualities and positive experiences in the athletes (Newland et al., 2023).

Regarding personality factors, in our study, only warm personality is a significant predictor of transformational leadership, not cold personality. These results also support the emphasis that should be given to personality factors when sports performance is studied. In another research, data was collected from a ten-month round-the-world sailing race with ten identical boats. Data were recorded on participants' personality, their perceptions of transformational leadership, and boat performance. Results showed that transformational leadership was associated with leadership effectiveness and performance, and athletes' personality influenced perceptions of leadership (Soane, Butler & Stanton, 2015). Another paper attempted to identify indicators for transformational leadership of students at the National Sports University of Thailand. The research was based on a semi-structured interview, which was applied to 450 students. Among the indicators of transformational leadership, idealized influence, inspiration motivation, intellectual motivation was found (Sukdee, 2021).

The obtained results could be implemented in the psychological motivation regarding the pre-competitive training of young athletes in team sports in order to increase the level of performance.

Directions that could be discussed are coach education and training and sport psychology.

Therefore, the analysis of the application of transformational leadership in sports contexts becomes important (Gomes, 2014).

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