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## Abstract

Background. Rituals and superstitions are also present in sport, as a part of sport competition [1]. Rituals, usually conceived as superstitions, have survived among people. They comprise magical thinking, belief in specific sayings, ritualized behavior, specific interpretation of events [2]. They are practiced to reduce anxiety. The purpose of the study was to identify the most common pre-competitive superstition rituals among Polish and Ukrainian football players and establish the relationship between superstitions and anxiety. Material and Methods: Participants were 100 Polish and 50 Ukrainian adolescent football players. The Rituals in Sport and the Sport Anxiety Scale were used. Results: The results have shown that most common rituals used by football players are superstitions and elements of pre-performance routine. Athletes used religious and personal rituals to increase their self-confidence. Some respondents exhibit ritualized behavior which might be considered as an element of pre-performance routine. Conclusions: The study found that as the level of pre-performance anxiety increased, the level of rituals also increased.

## Keywords

rituals in sport, pre-performance anxiety, young football players

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## INTRODUCTION

Rituals, superstitions – these concepts relate to many aspects of human life. They are also present in sport, as a part of sport competition [1]. Ritualization of many areas related to sports activities is conducive to individual rituals, which can have positive as well as negative outcomes.

Rituals, usually conceived as superstitions, have survived among people. They comprise magical thinking, belief in specific sayings, ritualized behavior, specific interpretation of events as "omens", belief in lucky charms objects, dates, etc. [2]. Rigid, compulsive, stereotypical rituals that are repeated according to specific "rules" and are superstitious in nature are defined as atypical, repetitive behaviors, and are perceived by people as positively affecting action, while indeed there is no causal link between behavior and outcome of the event [3]. Superstition is "a behavior which does not have a clear technical function in the execution of skill, yet which is believed to control luck and/or other external factors" [4]. Superstition is usually unstable, irrational and unfounded, based on the belief that supernatural, magical powers have effect on the course of events. It is a belief that one's fate is in the hands of unknown, uncontrollable external forces. Due to a repetitive nature of superstitious behavior, a superstition can be perceived as a ritual.

Not only does observation of athlete's behavior, but also research reports [3, 5, 6] confirm the prevalence of pre-competitive rituals in sport. Rituals are used to reduce anxiety and increase a perceived chance for victory. In fact, superstitious rituals do not have any direct influence on athlete's preparation; however, as beliefs that help regulate emotions, they can improve effectiveness. As long as they do not result in irrational decisions, they are seen as harmless [1].

Rituals in sport have a verbal, non-verbal and a mixed form (a combination of verbal and non-verbal) [7]. There are also lucky charms, amulets, the magic, and prayers. Some football players stick to a particular order when entering the field, touch the grass, or wear the same clothes they think bring luck. Although rituals might integrate into a pre-competitive routine due to their repetitiveness, the rituals based on thoroughly external objects such as lucky t-shirts and underwear, charms, or mascots are dangerous and irrational. Athletes wear lucky clothes, sit in lucky places, eat lucky food and perform various superstitious actions before and during competitions [1]. Such rituals are credited for success – which can be detrimental in sports. At times, one performs superstitious actions consciously, but more frequently unconsciously [8]. If athletes attach magical roles to objects they somehow deprive themselves of the control over events. A charm object – in their view – influences the outcome. Athletes who forget or lose their "magic item" might experience strong anxiety, concentration disruption and in turn make more errors and become less effective.

Superstitious rituals intensify in difficult situations which involve high levels of stress, and are practiced to reduce anxiety. At times it works – thus a possible placebo effect also occurs [9]. A decrease in the anxiety level results in improved well-being and better effectiveness. Therefore, it provides a justification for using rituals [3]. Mutlu et al. [8] found that the use of rituals was associated with the perception of the importance of success in sport, and their attribution styles [10]. According to the research on Ghanaian football players, those who believed that much depends on them were less superstitious [10]. On the other hand, athletes who exhibit competitive attitudes are also more superstitious. The intensity of ritual practice in sport is situation-dependent. Rituals are the

“illusion of control” [5] - an athlete believes to be in control of the situation while actually they are not. A ritual becomes a coping strategy [6].

Superstitious-ritualized behavior in sport differs from the pre-performance routine. Pre-performance routines are learned cognitive and behavioral strategies, practiced consciously and intentionally, like relaxation, imagery or coping with stress strategies. A routine is controlled by a player [11]. According to Lidor et al. [12], a structured pre-start routine is a very important behavioral technique that helps athletes perform at a high level in sports. Superstitions and rituals are not controlled by athletes, while a routine falls within their control. A superstitious ritual differs from a routine in a way that an action has a special, magical meaning for an individual [3]. One of the key variables that determine the use of rituals by players are cultural factors [2, 9]. Kwaku et al. [10] postulated that the cultural factor should be considered in the study of athletic superstitions and rituals and systematically examined in research.

The current study aims to determine pre-performance rituals among football players from Central and Eastern Europe - Poland and Ukraine. The purpose of the study was to identify pre-competitive rituals typical of Polish and Ukrainian football players and determine the relationship between ritualized behaviors and pre-competitive anxiety. The following research questions were posed:

1. Which of the analyzed rituals occur most often before the match among football players from Poland and Ukraine?
1. What is the relationship between pre-performance anxiety and ritualized behavior among football players from Poland and Ukraine?

## MATERIAL AND METHOD

### PARTICIPANTS

A total of 150 subjects were examined. The groups consisted of young male football players. The first group consisted of 100 Polish football players (the mean age = 16.59). They were students high schools with the football profile in Cracow. The second group consisted of 50 Ukrainian football players (the mean age = 17.86). The study of this group was conducted in Ukraine. The consent had been obtained from players. The study was in accordance with ethical guidelines of the Polish Psychological Society.

### METHODS

The groups were surveyed in spring and autumn of 2017. The following research methods were used:

*Rituals in sport scale* (the author's scale). It consists of 32 questions about possible pre-performance ritualized behaviors - specific to a football match. The list of rituals is shown in Table 1. The reliability of the scale in the Polish language was  $\alpha$ Cronbach = 0.880, and the mean correlation between the items = 0.20. The reliability of the scale in the Ukrainian language was  $\alpha$ Cronbach = 0.913, and the average correlation between the items was 0.24.

*The Sport Anxiety Scale* Smith, Smoll & Schutz in the adaptation of Krawczynski. The 21-question scale (21 experienced symptoms that accompany athletes before and during sports competitions) is used to measure the level of pre-performance anxiety, conceptualized as: somatic, worry and concentration disruption.

## RESULTS

The results showed statistically significant differences in the level of rituals. The first analyses concerned pre-competitive rituals used by Polish football players. The most common rituals were “I make the sign of the cross when I enter the football field” and “I touch the grass when entering the football field”. The following rituals were identified: “I enter the football field in a specified order” and “I stick the same numbers”. The rituals which occurred the most frequently among Ukrainian players were the following: “I and my team try to go out and warm up before the opponents do”, “before the match I perform the same set of movements that help me concentrate”, “I make the sign of the cross when I enter the football field”, “I never shave before the match” (Table 1).

Table 1. Friedman analysis – a comparison of levels of all rituals – Polish and Ukrainian players

Ritual	Average Rank		Median		Measn		Std. Dev.	
	P	U	P	U	P	U	P	U
Just before the match I pray and ask God for help.	22.30	19.54	3.00	3.00	3.26	2.94	1.40	1.45
“I stick the same numbers”.	21.93	19.56	4.00	3.00	3.29	2.78	1.52	1.33
I avoid “No. 13”.	16.27	16.30	1.00	2.00	2.28	2.34	1.63	1.47
When I do something, I start with the same foot.	13.84	16.20	1.00	2.00	1.89	2.34	1.38	1.52
I have my own clothing preferences.	12.41	16.82	1.00	2.00	1.71	2.40	1.23	1.51
My tights must be stretched up to the same height.	18.81	20.53	3.00	3.00	2.80	3.02	1.64	1.33
I put one piece of my clothing on inside out.	10.40	17.05	1.00	2.00	1.34	2.44	0.86	1.49
I try to go out and warm up before the opponents do.	22.2	22.99	3.00	3.00	3.15	3.38	1.18	1.19
I try to enter the football field last.	16.71	18.00	2.00	3.00	2.31	2.54	1.35	1.31
I go out on the football field in a specified order.	22.84	19.95	4.00	3.00	3.32	2.92	1.35	1.47
I take the same place in the dressing rooms.	21.30	21.87	3.00	3.00	3.09	3.26	1.46	1.56
I touch the grass when entering the football field.	25.52	19.15	5.00	3.00	4.02	2.92	1.38	1.50
I make a sign of the cross when entering the football field.	25.96	22.01	5.00	3.00	4.08	3.36	1.33	1.51
I do not look into opponent’s eyes during penalty shot.	19.97	21.61	3.00	3.00	2.78	3.00	1.40	1.29
I listen to the same music.	21.78	18.60	3.00	3.00	3.10	2.68	1.22	1.39
Before the match I watch the same film.	12.54	13.85	1.00	1.50	1.64	2.06	1.02	1.25
I talk to the same person.	16.66	16.51	2.00	2.00	2.27	2.36	1.35	1.24
I put on “lucky clothing”.	14.03	17.32	1.00	3.00	1.88	2.56	1.22	1.43
On the day of match I never wear “unlucky” clothing.	12.20	14.45	1.00	1.50	1.65	2.16	1.21	1.40
I take “a lucky charm” with me.	14.36	15.90	1.00	2.00	1.98	2.30	1.43	1.33
I never shave before the match.	15.70	22.44	2.00	3.00	2.12	3.28	1.35	1.59
I eat or drink the same thing.	16.54	16.90	2.00	2.50	2.23	2.48	1.29	1.42
I shave my head well before each match.	11.76	7.72	1.00	1.00	1.51	1.18	1.05	0.63
A women on the coach before the match brings bad luck.	12.11	13.31	1.00	1.00	1.60	2.04	1.11	1.24
A woman in the changing room before the match brings bad luck.	12.20	14.07	1.00	2.00	1.62	2.12	1.20	1.15
I use the same place in the toilet before the match.	16.85	15.78	2.00	1.50	2.37	2.30	1.42	1.46
I take the same seat on the coach.	12.58	14.16	1.00	2.00	1.66	2.12	1.12	1.22
I read the horoscope before the match.	16.56	13.64	2.00	1.00	2.31	2.08	1.45	1.31
I do the same things before the match.	13.34	17.94	1.00	3.00	1.82	2.62	1.40	1.52
I put on two different colored shoes, because it brings good luck.	14.08	14.19	1.00	2.00	1.87	2.12	1.29	1.32
I do not talk to others before the match.	21.56	15.21	3.00	1.00	3.17	2.20	1.52	1.44
Before the match I perform the same set of movements.	14.02	23.01	1.00	4.00	1.90	3.38	1.32	1.40
I play with the bandage (I do not have any injury).	10.96	18.52	1.00	3.00	1.45	2.66	1.03	1.29

P – Polish players

U – Ukrainian players

The correlation analysis (Table 2) showed that as all types of pre-performance anxiety levels increased, the level of rituals also increased.

Table 2. Correlation analyzes (for Polish and Ukrainian football players)

	Age	Somatic anxiety	Worry	Concentration disruption	Rituals
Age	1.0000	r = -0.0065	r = -0.0823	r = 0.0893	r = -0.0943
Somatic anxiety		1.0000	r = 0.7471***	r = 0.6274***	r = 0.4206***
Worry			1.0000	r = 0.5795***	r = 0.2928***
Concentration disruption				1.0000	r = 0.5052***
Rituals					1.0000

\* P < 0.05; \*\* P < 0.01, \*\*\* P < 0.001

The moderation analyses also showed that the relationship between the level of pre-competitive rituals and somatic anxiety, worry and concentration disorders is differentiated by players country of origin. Somatic anxiety positively correlated with rituals in both groups - as the Polish ( $P = 0.007$ ) and the Ukrainian ( $P < 0.001$ ) rituals level increased, the level of anxiety increased. This relationship was strong for players from Ukraine, and moderate for Polish players. A similar relationship was found between pre-competitive rituals and concentration disruption for the Polish players ( $P < 0.001$ ) and for the Ukrainian players ( $P < 0.001$ ). Regarding worry, a strong link with the level of rituals was found for the Ukrainian group ( $P < 0.001$ ) (Table 3).

Table 3. Analyzes of the moderation for pre-competitive rituals (intensity the use of all rituals together) and the country of origin

Dependent variable	Independent variable	$\beta$	BS	t	p	Interaction
Rituals	Age	0.03	0.14	0.21	0.835	BP = -0.22 (p=0.143) BU = -0.18 (p=0.114)
	Somatic anxiety	0.29	0.09	3.20	0.002	BP = 0.24 (p=0.007) BU = 0.74 (p<0.001)
	Worry	0.32	0.09	3.52	0.001	BP = 0.11 (p=0.212) BU = 0.68 (p<0.001)
	Concentration disruption	0.18	0.09	2.01	0.046	BP = 0.39 (p<0.001) BU = 0.69 (p<0.001)

\* P < 0.05; \*\* P < 0.01, \*\*\* P < 0.001

The analysis of predictors indicated that the concentration disruption in the pre-competitive situation was a statistically significant predictor of pre-competitive rituals (Table 4).

Table 4. Regression coefficients for predictors of rituals variable

	Ritual Param.	Ritual SE	Rituals t	Rituals p	-95.00% conf. inter.	+95.00% Conf. inter.	Rituals Beta $\beta$	Rituals SE. $\beta$	-95.00% Conf. inter.	+95.00% Conf. inter.
Free word	62.44	19.45	3.21	0.002	24.00	100.89				
Age	-1.79	1.08	-1.66	0.100	-3.93	0.35	-0.12	0.07	-0.27	0.02
Country of origin	1.12	3.40	0.33	0.742	-5.60	7.85	0.02	0.08	-0.12	0.17
Somatic anxiety	0.78	0.43	1.83	0.070	-0.06	1.62	0.19	0.11	-0.02	0.40
Worry	-0.64	0.48	-1.35	0.179	-1.58	0.30	-0.14	0.10	-0.34	0.06
Concentration disruption	2.87	0.65	4.40	<0.001	1.58	4.16	0.39	0.09	0.21	0.56

\* P < 0.05; \*\* P < 0.01, \*\*\* P < 0.001

b - regression coefficient,  $\beta$  - standardized regression coefficient, t - Student's t-value, p - significance level

## DISCUSSION

The findings from the study confirmed the fact that football players practice rituals. Indeed, players from team disciplines are considered to be the most superstitious group compared to other groups of athletes [11]. In the current study, some rituals are superstitious in nature, and players attach magical significance to them, although no cause-and-effect relationship was found between ritual use and achievements. Some respondents exhibit ritualized behavior which might be considered as an element of pre-performance routine.

Poland and Ukraine are Slavic, neighboring countries. However, the results indicated the existence of differences in the of rituals. Despite the fact that a popular ritual among football players "I make a sign of the cross when entering the field" [11] was found for both Polish and Ukrainian groups, it was the most frequent among players from Poland. Perhaps, the strength of this ritual can be explained by the fact that Poland attributed an important historical role to the Catholic church during the Communist times, also because of Pope John Paul II, who came from that country. Although, the influence of the Church in Poland today is not as strong as it used to be 30 years ago, Catholicism is still a dominant religion in Poland. However, it is believed that "making the sign of the cross" is not entirely synonymous with religiosity, but players do this gesture "just in case."

The issue of religious rituals has already been the subject of scientific study [11, 13]. More religious individuals used rituals of this type. However, religious rituals are not only considered in the form of folk beliefs, superstitions, or learned gestures. Athletes used religious and personal rituals to increase their self-confidence. It can be assumed they attached a special meaning to their rituals. Maranise [14] believes that there are differences between superstitions and religious rituals because a religious ritual leads to a more holistic development of an individual than a superstition. In this view superstition and religious ritual, although sharing some similarities, are not exactly the same. In the classification of superstitions provided by Delacroix & Valérie [2], religious superstitions were not included. Religious rituals should, therefore, be considered from the emotional point of view as well as the spiritual one. Womack [15] explains that athletes often use religious rituals to feel in control over situation.

Apparently, it happens that the display of religious rituals in sport does not result from the players' system of values. These are often learned gestures of utilitarian importance. As Hoffman [16] points out, for example, if the gesture of the cross is repeated in all contexts, then it is justified to treat it as the key gesture. These types of rituals are recognized in sport psychology as signals for better concentration. They become an integral element of cognitive behavioral pre-performance routines in sports and contribute to the athlete's performance improvement [17]. Wood et al. [18] showed that rituals, provided they were symbolic ones (such as religious rituals), could reduce anxiety and thereby improve performance. The border line should be marked between a ritualized gesture and belief that such a gesture was the only warrant of success in sport. Such a ritual should be considered irrational and maladaptive.

In addition to religious rituals, other rituals were found in the studied populations. Some football players attached magical meaning to the numbers, or a specified order of entering the football field. Polish player tended to touch the grass with their hands when going into the field. It is a popular ritual but also having other variations - as reported by Živanović and colleagues [7] "footballers kiss the grass



on the field.” It is a repetitive gesture, and as in the case of the sign of the cross – if it is part of the routine and helps concentrate, it can be beneficial for players. The problem might develop when athletes explain their worse achievement by omitting the ritual. The other observed rituals in the Polish group of players related to the order leaving the dressing room, and choice of numbers. These rituals are superstitious in nature and cannot be considered as pre-performance routines.

In turn, the Ukrainian football players go out to warm up earlier than the opponent – it was the most common ritual, with rationality difficult to explain. The following ritual found in the players from Eastern Europe was “before the match I perform the same set of movements that help me concentrate.” This ritual is part of the pre-performance routine and can actually be helpful in getting ready for the match. However, other rituals noticed among the Ukrainian football players were examples of magical thinking e.g., “I never shave before the match”, or “I take the same place in the dressing room.” The observation of Bleak & Frederick [11] that the most common rituals were those related to clothing, meaningful words, or sentences was not conformed in the current study. Thus, it can be concluded that cultural factor influenced rituals practiced by the athletes. The respondents chose rituals that were both irrational and having capacity to benefit the athlete.

It was not surprising, however, that the links between the intensity of rituals and the level of pre-competitive anxiety were found in the current study. Individuals use rituals to reduce the level of anxiety. Certainly, competitive contexts are anxiety-triggering for many players. Competitors, therefore, resort to ritualized behaviors to mitigate their anxious feelings; otherwise, they would consider such actions as absurd and improbable. Nonetheless, athletes in stressful conditions perceive rituals useful or even rational. Individuals with higher levels of anxiety tend to use ritualized behaviors more often. This tendency was confirmed in the current study, and is in line with other research [1, 9, 11]. In order to explain the differences in intensity of rituals practiced by Poles and Ukrainians, the political and economic factors in both countries should be taken into consideration. Currently, Ukraine is struggling with economic and political problems. Maybe people feel insecure. Contemporary Poland is a member country of the European Union, and more economically and financially stable than Ukraine. Certainly, average Poles – such as football players in the study – live better and more comfortably than their peers from Ukraine. Perhaps these factors affect the general level of anxiety among Ukrainians, which in turn translates into anxiety in sport.

The purpose of the current study was also to identify predictor of pre-performance rituals – pre-competitive concentration disruption. Cognitive anxiety affects ritualized behaviors. One of the elements of cognitive anxiety is concentration disruption. A player, who commits errors, due to concentration disruption, might suffer from cognitive anxiety. Thus, the only “rescue” is a well-known, repeated behavior – the ritual. However, effective rituals pertain to a conscious routine, not superstitious beliefs.

## **CONCLUSIONS**

The research has confirmed that cultural factors should be included in the discussion of pre-performance rituals. As predicted, the use of rituals is linked to the level of pre-competitive anxiety. Future research should further explore the issues related to preparation of athletes to perform in sports, including both rituals and cultural factors.

## REFERENCES

- [1] Kose H, Argan M, Cimen İ. The dimensions of superstitious beliefs and behaviors: A descriptive quantitative study on soccer fans in Turkey. *Int J Global Bus.* 2015;8(1):27-33.
- [2] Delacroix E, Valérie G, Understanding, defining and measuring the trait of superstition. Selected Proceedings of the IAREP/SABE 2008 Conference at LUISS. 2008, Rome.
- [3] Schippers M, van Lange P. The psychological benefit of superstitious rituals in top sport: A study among top sportspersons. *J Appl Soc Psychol.* 2006;36(10):2532-2533. <https://doi.org/10.1111/j.0021-9029.2006.00116.x>
- [4] Foster D, Weigand D, Baines D. The effect of removing superstitious behavior and introducing a pre-performance routine on basketball free-throw performance. *J Appl Sport Psychol.* 2006; 18(2): 167-171, p.167. <https://doi.org/10.1080/10413200500471343>
- [5] Brevers D, Dan B, Noel X, Nils F. Sport superstition: Mediation of psychological tension on non-professional sportsmen's superstitious rituals. *J Sport Behav.* 2011;34(1):3-24.
- [6] Kwaku Ofori P, Tod D, Lavallee D. An exploratory investigation of superstitious behaviours, coping, control strategies, and personal control in Ghanaian and British student-athletes. *Int J Sport Exercise Psychol.* 2018;16(1):3-19. <https://doi.org/10.1080/1612197X.2016.1142460>
- [7] Živanović N, Randelović N, Savić Z. Superstitions and rituals in modern sport. *APES.* 2012;2(2):220-224. UDC: 796.034.2:398.3.
- [8] Mutlu O, Önturk Y, Zorba E, Karafil AY, Yildiz M, Kartal R. Analysis on some superstitious behaviors of university students engaging in tennis. *J Life Sci.* 2016;6(1):317-330.
- [9] Dömötör Z, Ruiz R, Szabo A. Superstitious behavior in sport: A literature review. *Scand J of Psychol.* 2016;57(4):368-382. <https://doi.org/10.1111/sjop.12301>
- [10] Kwaku Ofori P, Biddle S, Lavallee D. The role of superstition among professional footballers in Ghana. *Athl Ins.* 2012;4(2):115-126.
- [11] Bleak J, Frederick C. Superstitious behavior in sport: Levels of effectiveness and determinants of use in three collegiate sports. *J Sport Behav.* 1998;21(1):1-15.
- [12] Cotterill S. Pre-performance routines in sport: Current understanding and future directions. *Int Rev Sport Exerc Psychol.* 2010;3(2):132-153. <https://doi.org/10.1080/1750984X.2010.488269>
- [13] Buhmann HG, Zaugg MK. Religion and superstition in the sport of basketball. *J Sport Behav.* 1983;6(3):146-157.
- [14] Maranise A. Superstition & Religious Ritual: An Examination of Their Effects and Utilization in Sport. *Sport Psychol.* 2013; 27(1): 83-91. <https://doi.org/10.1123/tsp.27.1.83>
- [15] Jona IN, Okou FT. Sports and Religion. *Asian J Manage Sci Educ.* 2013;2(1):46-54.
- [16] Hoffman SJ. Recovering the sacred in sport. In: Hoffman SJ, editor. *Sport And Religion*, Champaign, Illinois; 1992,157-158.
- [17] Cohn PJ. Pre-performance routines in sport: Theoretical support and practical applications. *Sport Psychol.* 1990;4:301-312. <https://doi.org/10.1123/tsp.4.3.301>
- [18] Wood BA, Schroeder J, Risen JL, Gino F, Galinsky AD, Norton MI, Schweitzer ME. Don't stop believing: Rituals improve performance by decreasing anxiety. *Organ Behav Hum Dec.* 2016;137:71-85. <https://doi.org/10.1016/j.obhdp.2016.07.004>

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