

2013

## Psychological Aspects of the Polish National Team Performance at EURO 2012 Tournament in the Opinion of Students from Sports- and Humanities-Oriented Universities

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### Recommended Citation

Krokosz D, Jochimek M, Lipowski M. Psychological Aspects of the Polish National Team Performance at EURO 2012 Tournament in the Opinion of Students from Sports- and Humanities-Oriented Universities. *Balt J Health Phys Act.* 2013; 5(1): 27-36. doi: 10.2478/bjha-2013-0003

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## Psychological Aspects of the Polish National Team Performance at EURO 2012 Tournament in the Opinion of Students from Sports- and Humanities-Oriented Universities

### Authors' Contribution:

A – Study Design  
 B – Data Collection  
 C – Statistical Analysis  
 D – Data Interpretation  
 E – Manuscript Preparation  
 F – Literature Search  
 G – Funds Collection

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**Key words:** sport psychology, football, EURO 2012, sport spectators, determinants of failure

### Abstract

**Background:** *The aim of this study was to explore the perception of psychological preparation of Polish football players by the spectators possessing direct involvement with psychology and sports. Moreover, we tried to determine who was assigned the blame for the defeat.*

**Material/Methods:** *The study involved 164 psychology students from University of Gdansk and 201 students from Gdansk University of Physical Education and Sport, aged between 19 and 32 years. The participants completed EURO 2012 survey in October 2012.*

**Results:** *The students of the sports-oriented university were more interested in football on a daily basis and showed greater interest in the EURO 2012 tournament. Significant intergroup differences pertained to the responsibility scores of the coach, players, and the team of physicians, physiotherapists, and psychologists, as well as to the scores ascribed to various potential psychological determinants of the failure of the Polish Team during the competition. Among others, documented significant correlations included relationships between the satisfaction gained from the tournament and the role of pressure exerted by spectators and media.*

**Conclusions:** *In the students' opinion EURO 2012 was a great commercial and promotional success, but also a huge disappointment with regards to the performance of the Polish National Team. Although our participants acknowledged psychological aspects as potential determinants of the lack of sport success, they did not perceive the role of a psychologist as important during preparation. This may suggest a necessity of promoting the need for cooperation between athletes and specialists of various disciplines.*

Word count: 3.743

Tables: 1

Figures: 4

References: 36

Received: January 2013

Accepted: February 2013

Published: March 2013

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## **Introduction**

European Football Championships (EURO 2012) organized by Poland and Ukraine in June and July of 2012 constituted a celebration both for the fans who are interested in this discipline on a daily basis and for “fans” who did not previously pay attention to this sport. According to published statistics, a record number of 14.5 million television spectators, corresponding to 81.5% of individuals watching TV at that time, watched the Poland vs. Russia match [1]. According to other data, a new record was also set by the total number of 1.44 million spectators present at the stadiums in Poland and Ukraine [2]. Additionally, according to the estimates of PL2012 Company [3], fan zones developed for the purpose of 2012 European Championships gathered more than 3 million fans. Increased interest in sports, particularly amongst the fans watching television broadcasts, was also reported during other sport events. Olympic Games and the games of the World Football Championship gained attention of several billion spectators [4, 5].

Emotions constitute a factor which undoubtedly increases the attractiveness of a sport event [6]. They manifest during the competition and modify the feelings of fans of competing teams in a continuum between extreme joy and despair. A rich spectrum of emotional states is reflected by a specific stadium atmosphere, which constitutes one of the principal motivations behind participation in a sport event [7, 8]. Emotions associated with watching sports can also affect physiological aspects of human functioning. A study [9] conducted after the final Brazil vs. Italy game during the 1996 World Championships revealed an increase in testosterone level of the winning team fans and its marked decrease in the losers' fans. Also, a study of Spanish fans [10] conducted during the final Spain vs. Netherlands game during the 2010 World Championships, characterized as having a standard course, revealed that watching the match was associated with increased secretion of testosterone and cortisol and improved mood.

The role of jubilant audience is particularly evident at a stadium setting; their colorful uniforms and activities supervised by animators (e.g. the “Mexican wave”, or stretching a gigantic flag over the whole sector) are planned and prepared well before the event. This unambiguously confirms the statement that fans are peripheral actors, who co-produce the sports show together with the players and referees [6]. Also, specific rituals associated with each event constitute an important part of a sports show, including “opening” and “closing” ceremonies prepared by the organizers of a given event. The Dualistic Model of Passion may assist in explaining fans' behavior [11]. According to this model, preferred human activities, representing a particular value and consuming high amounts of energy, are internalized in one's identity as a passion. The authors of this concept describe two dimensions of passion: obsessive and harmonious. The functioning of an individual characterized by obsessive passion includes the component of an obligation and uncontrolled desire to be involved in a given activity, which can be reflected by negative consequences such as the burnout syndrome or conflicts, as well as by the loss of the ability to show flexible changes in the preferred activity. In contrast, the harmonious style is associated with satisfaction and positive emotions accompanying the performance of preferred activities. In reference to the passion-associated concept, self-identification as a football fan manifests satisfaction with the fact that the team with which one identifies with is successful; therefore, being a fan can constitute a form of passion [12]. Transforming the Dualistic Model of Passion to the area of fans' functioning has revealed certain phenomena associated with fans' attitude and behavior [13]. According to this concept, being a fan in the form of harmonious passion is associated with such adaptive behaviors as the satisfaction with the beloved team success. During the 2006 World Football Championships, this concept correlated with positive emotions, satisfaction with life, self-assessment, and celebrating in the streets. In contrast, being a fan in the form of obsessive passion is associated with an increased risk of such behaviors as participating in the game despite the possibility of losing employment, feeling hate towards the opposing team, and conflicts in common-law relationships. Moreover, numerous studies showed that the level of identification with the team correlates with the presence of verbal aggression during sport events [14], increases the probability of involvement in aggressive behaviors [15], representing both hostile and aggravated aggression [16], as well as the risk of participation in anonymous acts of aggression [17-19]. In this context, influencing the process of fans' socialization, their standards and values seems

particularly important; however, even the implementation of such activities will never fully prevent this type of deviations [20].

In view of the above mentioned evidence, one may ask which factors associated with a sports show can increase its attractiveness and gain attention of individuals who are not regularly interested in sports events. According to Piotrowski's hypothesis [21], modern commercialized sport perceives the fan as a consumer for whom an array of improvements is implemented (e.g. newly-built stadiums, networks of souvenir shops, dedicated mass media). Therefore, appropriate promotion of a sports show can exert a significant effect on a number of its spectators. Also, the fact that well-known individuals are often invited to comment upon important sports events seems worth mentioning as frequently, in fact, such persons have nothing in common with sport. Due to the commentary and interest of celebrities, a sports show may become a public event, and according to the principle of the validity of social proof stating that facts postulated by others are considered correct [22], gain a mass of spectators previously not interested in sport. Under such circumstances, it is not "proper" not to have an opinion on the currently fashionable phenomenon.

The principal objective of this study was the element associated with the psychological preparation of the Polish National Team players as perceived by their spectators. Consequently, we have selected two groups representing different attitudes to these aspects; namely, psychology and sports university students. Undoubtedly, mental preparation of athletes positively affects their sport achievements [23-25]; moreover, it constitutes a factor which frequently determines the success at the present level of athletes' training [26, 27]. Due to extremely high interest in football during EURO 2012, the players of the Polish National Team might have experienced an increased level of tension. This hypothesis can be inconsistent with the media stereotype of a football player, who is presented as an individual adored by the crowds and possessing huge financial resources. Football players are frequently perceived as self-centered and demanding support and interest from others [28]. Polish studies [29] revealed that the perception of football players as individuals who "love themselves" is nothing more than a stereotype.

Furthermore, it is interesting to know how students assessed other components of the preparation of the Polish National Team, and whom they blamed for its defeat. This aspect seems particularly important in the context of interest in football – both fans who show regular interest, and those who are occasionally involved in watching football have their opinions regarding the reasons why, despite optimistic prognoses of the coach and players, the National Team gained only 2 points after ties with Greece and Russia, and eventually was classified as last in its group.

## **Material and Methods**

The study involved psychology students from the University of Gdansk (UG,  $N = 164$ ) and students of Gdansk University of Physical Education and Sport (AWFiS,  $N = 201$ ) aged between 19 and 32 years ( $M = 21.24$ ;  $SD = 2.21$ ). The participants completed a survey regarding EURO 2012 in October 2012.

The survey developed for the purpose of this study included 24 questions. The participants were asked to answer them using the 5-item Likert scale (where 1 corresponds to the lowest impact, i.e. not at all/poor, and 5 to the highest impact, i.e. very much/excellent; the lack of opinion was designated as 3). The survey included statements dealing with:

- interest in football on a daily basis and during EURO 2012;
- satisfaction with the performance of the Polish National Team in EURO 2012;
- preparation of Polish players (with regards to endurance, tactic, technique, and psychology);
- composition of the National Team;
- cooperation with specialists (physician, physiotherapist, psychologist);
- individuals responsible for the result of the National Team (coach, players, physicians and physiotherapists, psychologists, activists of the Polish Football Association);
- factors determining the lack of qualification into the Finals of the European Championships (pressure from fans and media, lack of self-confidence during high-stress games, disrespect towards competitors, lack of proper concentration during crucial stages of the game, involvement in advertising contracts, ability to cope with stress, low level of motivation, high

level of stress prior to the game with the Czech Republic, pressure associated with unrest before the game with Russia).

All statistical analyses were conducted with Statistica 10.0 software package.

## Results

We found that the sport university students showed higher ( $t = 6.02$ ;  $p = 0.001$ ) interest in football on a daily basis ( $M = 2.91$ ;  $SD = 1.44$ ) than the psychology students ( $M = 2.04$ ;  $SD = 1.26$ ). A similar difference ( $t = 2.29$ ;  $p = 0.022$ ) was documented with regards to the interest in the EURO 2012 tournament ( $M_{AWFiS} = 3.76$ ;  $SD_{AWFiS} = 1.11$ ;  $M_{UG} = 3.46$ ;  $SD_{UG} = 1.31$ ). Noticeably, in both groups the level of interest in the European Championships was significantly higher than the level of everyday interest in football ( $t_{AWFiS} = 9.22$ ;  $p_{AWFiS} = 0.001$ ;  $t_{UG} = 15.22$ ;  $p_{UG} = 0.001$ ). These differences are illustrated in Figure 1.

Subsequently, we analyzed the level of satisfaction with the performance of the Polish National Team in the tournament. This analysis revealed that the students of psychology were satisfied with this performance ( $t = 4.51$ ;  $p = 0.001$ ) more ( $M = 2.54$ ;  $SD = 0.98$ ) than the sport university students ( $M = 2.09$ ;  $SD = 0.93$ ).

An analysis of the percentage distribution of scores attributed to the performance of the National Team revealed that the highest percentage of the sport university students (47.76%) assessed this performance as poor, 26.87% as very poor, 15.92% as moderate, 7.96% as good, and only 1.49% declared that the Polish Team played very well during European Championships. Interestingly, the scores of psychology students were not as critical, as the majority of them (35.37%) assessed the performance of the Polish National Team as moderate. As many as 30.49% of psychology students assessed the performance of the Polish football players as poor, while 16.46% scored the performance as very poor. Eighteen percent of the participants assessed the start of the Polish Team as positive (17.07% of good scores, and only 0.61% of very good scores). The percentage distribution of participants' scores is presented in Figure 2.

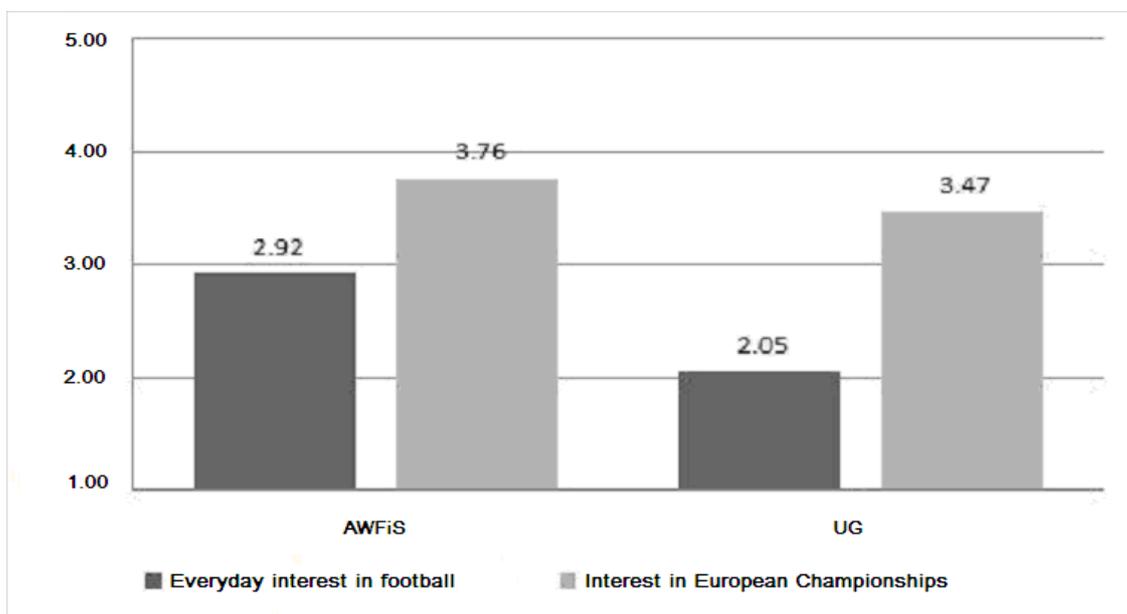


Fig. 1. The level of everyday interest in football and the level of interest during EURO 2012 in sport university students and in psychology students

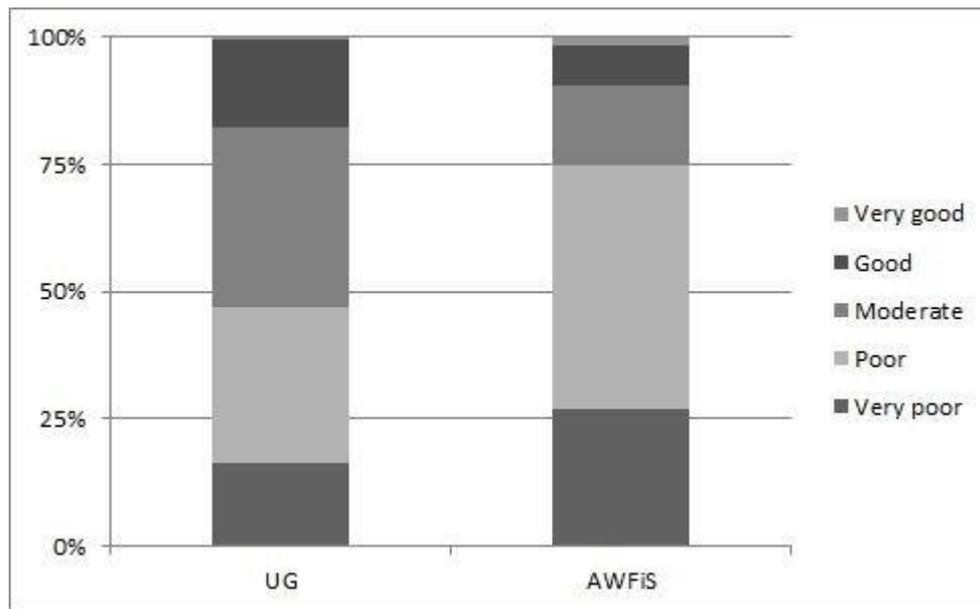


Fig. 2. The distribution of scores attributed to the performance of the Polish National Team by psychology students from the University of Gdansk (UG) and students of Gdansk University of Physical Education and Sport (AWFiS)

In the next stage we compared the subjective assessment of the responsibility of football players, coach, team of physiotherapists and physicians, individuals responsible for mental preparation, and the activists of the Polish Football Association. In the opinion of both groups, the largest responsibility for the result should be ascribed to the players themselves; however, sport university students assessed the coach's responsibility as being equally high. In the case of psychology students' scores, the responsibility of the players ( $M_{UG} = 3.33$ ;  $SD_{UG} = 0.97$ ) was significantly higher ( $t = 3.79$ ;  $p = 0.002$ ) than the responsibility of the coach (Franciszek Smuda) ( $M_{UG} = 2.96$ ;  $SD_{UG} = 0.97$ ). Another interesting difference between the analyzed groups pertained to the assessment of the responsibility of the Polish Football Association. Psychology students identified the Polish Football Association as second (after the players) responsible for the sports outcome of EURO 2012; the responsibility of the Association was assessed slightly higher than the coach's responsibility (although this difference did not prove statistically significant). Intergroup comparison of responsibility scores revealed three statistically significant differences regarding the responsibility of the coach ( $M_{AWFiS} = 3.17$ ;  $SD_{AWFiS} = 1.08$   $M_{UG} = 2.95$ ;  $SD_{UG} = 0.97$ ;  $t = 2.03$ ;  $p = 0.042$ ), psychologists ( $M_{AWFiS} = 2.65$ ;  $SD_{AWFiS} = 1.08$   $M_{UG} = 2.34$ ;  $SD_{UG} = 0.96$ ;  $t = 2.85$ ;  $p = 0.045$ ), and the activists of the Polish Football Association ( $M_{AWFiS} = 2.79$ ;  $SD_{AWFiS} = 1.25$   $M_{UG} = 3.06$ ;  $SD_{UG} = 1.15$ ;  $t = 2.08$ ;  $p = 0.037$ ). These differences are illustrated in Figure 3.

During the subsequent stage of our analysis, we verified which psychological factors in participants' opinion exerted the strongest effect on the defeat of the Polish National Team. Both groups similarly assessed the role of the factors identified by the authors of this study, e.g. an insufficient level of the players' focus during the game, as the most important determinant of their failure. In participants' opinion, other significant determinants included poor stress-coping ability, low self-confidence, and excessive stress visible during the game with the Czech Republic. Both groups consistently declared that the pressure exerted by the spectators was the least important determinant of failure from the psychological point of view. There was only one intergroup difference regarding the problem in question – in the opinion of sport university students, lack of respect towards competitors was a significantly more important determinant of the poor outcome than in psychology students' opinion ( $M_{AWFiS} = 2.88$ ;  $SD_{AWFiS} = 1.21$   $M_{UG} = 2.59$ ;  $SD_{UG} = 1.07$ ;  $t = 2.43$ ;  $p = 0.015$ ). The results of this stage of analysis are presented in Figure 4.

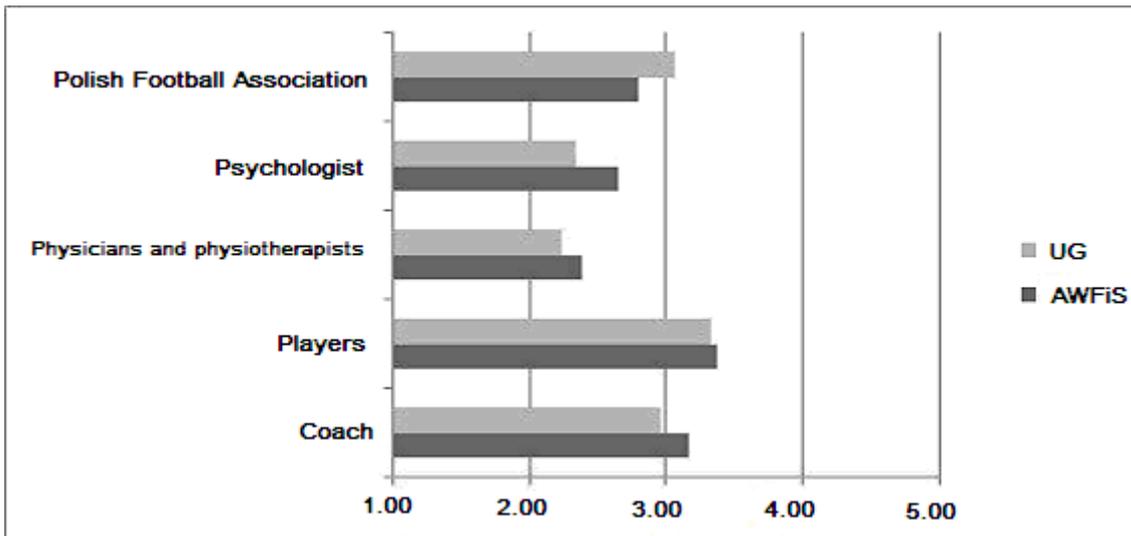


Fig. 3. Responsibility scores of various institutions for the performance of the Polish National Team during EURO 2012 in the opinion of Gdansk University of Physical Education and Sport (AWFiS) and psychology students (UG)

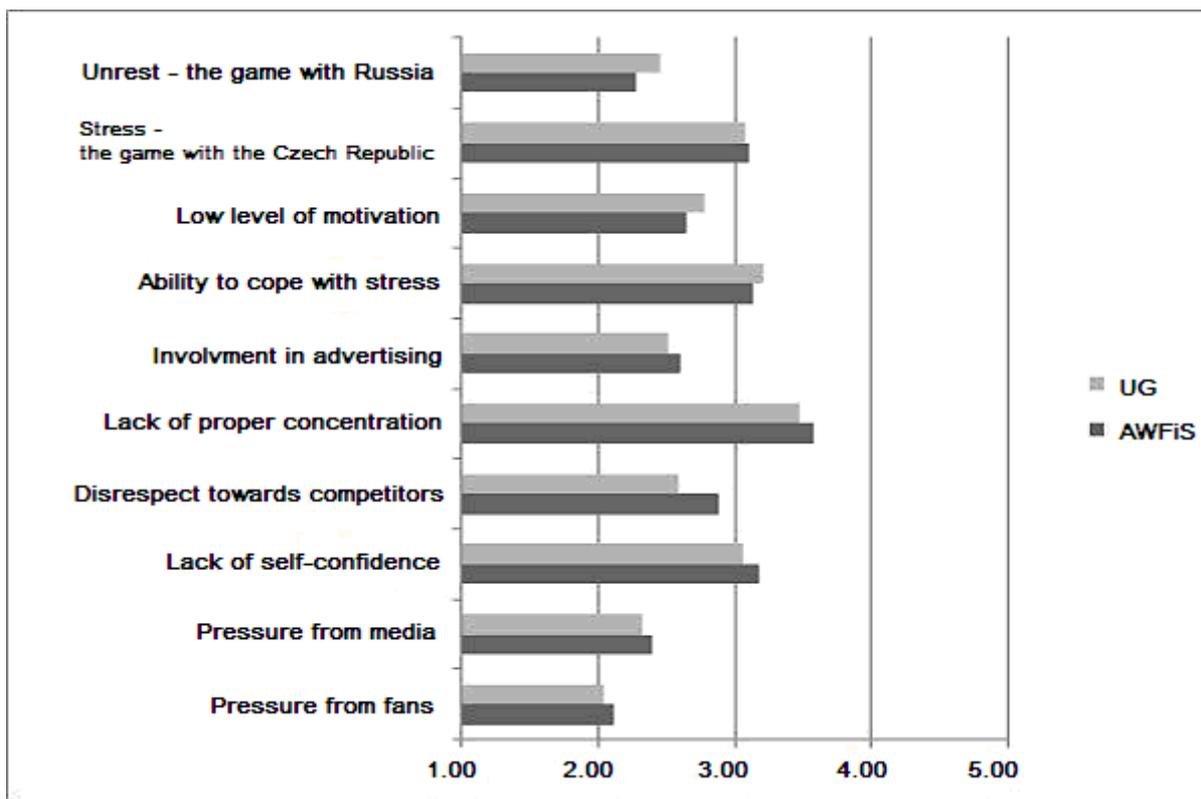


Fig 4. Assessment of psychological determinants of the failure of the Polish National Team during EURO 2012 in the opinion of Gdansk University of Physical Education and Sport (AWFiS) and psychology students (UG)

The next stage of the analysis focused on the correlations between various scores within both studied groups. The relationships between satisfaction with the performance of White and Reds and the assessment of endurance, technical, tactical, and psychological preparation of the Polish Team for the competition seem particularly interesting. While the power of all these relationships in the group of Gdansk University of Physical Education and Sport students was similar, in

the case of psychology students, the psychological preparation showed the weakest correlation with satisfaction with the performance. This latter correlation proved significantly weaker than the correlation with satisfaction with endurance preparation ( $p = 0.009$ ). All values of correlation coefficients are presented in Table 1.

Tab. 1. Correlation coefficients between the level of satisfaction with the performance of the Polish Team and the scores of preparation to the competition

Scores of preparation	University	Satisfaction with the performance
endurance	UG	$r = 0.54$
	AWFiS	$r = 0.44$
tactics	UG	$r = 0.43$
	AWFiS	$r = 0.49$
technique	UG	$r = 0.41$
	AWFiS	$r = 0.47$
psychology	UG	$r = 0.29$
	AWFiS	$r = 0.41$

All correlations significant at  $p < 0.000$

UG – University of Gdansk, AWFiS – Gdansk University of Physical Education and Sport

Only two of the correlations between the scores of satisfaction with the performance of the Polish Team and psychological determinants of failure proved significant (with no differences between the analyzed universities), albeit weak. The significant relationships included the correlation between satisfaction and the role of excessively high pressure from spectators ( $r = 0.23$ ;  $p = 0.000$ ) or excessively high media pressure ( $r = 0.27$ ;  $p = 0.000$ ). An analysis of the correlation between the responsibilities of various entities for the result of the Polish National Team and the psychological determinants of failure showed only one significant difference between sport university and psychology students. This difference pertained to the relationship between the responsibility of players and the role of lack of concentration. This correlation was stronger ( $p = 0.025$ ) in the group of psychology students ( $r = 0.38$ ;  $p = 0.000$ ) than amongst sports university students ( $r = 0.19$ ;  $p = 0.007$ ).

## Discussion

A significant increase in the interest in football during the tournament held at Polish and Ukrainian stadiums constitutes an unquestioned fact, which was confirmed by the results of our study. While such an increase was easily predictable in the group interested in sport, and particularly football, on a daily basis, the relatively large increase in the interest of those students who previously presented a neutral attitude to the results of football games seems particularly important. Undoubtedly, this finding suggests that EURO 2012 can be considered a media success and an event characterized as an outstanding promotion of football.

This finding is consistent with widely presented positive opinions regarding preparation and atmosphere during EURO 2012 as well as with the pride associated with building new stadiums and fans' behavior [30]. While a marked increase in the interest in the discussed discipline during the tournament can be considered as an advantage, the satisfaction associated with the participation of Polish footballers (or rather its lack), represents evident disappointment. Mean scores presented by both groups point to, at best, average assessment of the participation of Polish players, with a marked tendency towards negative scores. Also, a survey conducted by the Public Opinion Research Center in July 2012 revealed that the fans were disappointed with the result of the Polish team during the EURO 2012 competition, and shame (experienced by 49% of the responders) was a predominant feeling associated with the participation of the Polish National Team [30].

Interestingly, there were no significant correlations between the declared interest in football and the level of satisfaction with the result of our national team. Furthermore, it is interesting that the students of sports university scored the performance of White and Reds significantly worse than the students of social sciences. Undoubtedly, a closer relationship with sport can be associated with higher expectations regarding a positive result of our team, and was reflected by greater disappointment when this was not achieved. Furthermore, such a situation could result from the con-

viction of sports university students that they possess greater knowledge on sport competition, and therefore are more competent to express opinion regarding the performance of Poles. This hypothesis was confirmed by a greater interest of this group in football, both on a daily basis and during the football competition. The opinions on the responsibility of various institutions and individuals with regards to the result of the Polish National Team during the European Championships Finals seem particularly interesting in the context of differences documented between the analyzed groups. The assessment of coach's responsibility is particularly interesting; sport university students assessed it as equally important as that of the players. This can be interpreted in terms of the fact that as they are recognized as being more devoted to sport and organized physical activity, they pay more attention to both sides of coach-player interaction; moreover, by possessing the knowledge (or at least essentials) of coaching methodology, they are more prone to critical opinions regarding this job. A similar conclusion can be formulated on the basis of the assessment of the Polish Football Association (PZPN) responsibility. Although one can hardly formulate any serious accusations against the association's activities related to EURO 2012 preparations, and satisfying the logistic or organizational needs of the National Team, this study reflected the negative image of PZPN activists, which is presented by the mass media. Compared to psychology students, sport university students, who have contact with organization of sport events in their everyday practice, were less critical of those activities and their possible impact on the eventual lack of the success of the Polish team. However, it cannot be excluded that the students of psychology, who are less interested in football on a daily basis, formulated their assessments on the basis of the media-disseminated opinion and a certain stereotype, according to which PZPN activists are discredited in so many disciplines, that probably they can be accused of all the unfortunate events suffered by the National Team.

Also, the low scores ascribed to psychologists' responsibility can be considered surprising, particularly in view of the participants' opinions on the lack of psychological skills required to succeed at the highest level of sport competition in our players. Perhaps this suggests that our participants undervalued the role of psychologists in the preparation of the Polish National Team, or assumed that the players are themselves responsible for building their psychological skills in accordance with a popular motivational phrase: "pull yourself together". Systematic modulation of the mental sphere of athletes (i.e. emotional sphere, concentration, and self-confidence) plays an important role in the training process in countries with superior sports achievements, such as the United States, Canada, Germany, Great Britain, Russia, or Sweden [31]. Therefore, the societal perception of the role of the psychologist in athletes' training is interesting. Certainly, the role of the psychologist, as a consultant and an individual responsible for mental training during the preparatory phase, is acknowledged by specialists and athletes themselves [32]. There were cases in which an elevated level of stress associated with pressure was reflected by a decrease in the ability to perform familiar and well-trained activity, e.g. missing a penalty. According to our participants, an increased level of manifested anxiety exerts a particular effect on an athlete's concentration, and in consequence on his performance [33]. This suggests that the role of psychologists should be more emphasized, particularly at universities educating the future opinion-making authorities in this field. Undoubtedly, sport psychologists implement innovative methods in their practice in order to influence athletes' mental preparation. Interesting studies analyzing the influence of music on athletes' motivation [34], or the role of biofeedback training in sportspersons [35] have been performed.

Particularly interesting conclusions can be drawn from the analysis of correlation; its findings refer to the theory of failure attribution. Participants who gave a positive score for the performance of our players more frequently attributed the last position in the group to external factors, such as pressure of the mass media or fans, and therefore somehow released the players from the responsibility for failure. In contrast, individuals who ascribed the entire responsibility to the players, more frequently used an internal attribution, identifying insufficient focus on the game as a reason for failure [36].

## Conclusions

EURO 2012 was reflected by increased popularity of football, both in the group of sports university students and in the students of psychology.

Most participants showed evident disappointment with the performance of the Polish National Team.

The participants acknowledged potential psychological reasons for failure, which can be reflected by greater concentration on these factors in the future, as well as by the pressure of the public opinion for cooperation of the Polish representatives with psychological training specialists.

Although the participants acknowledged the role of potential psychological determinants of failure, they did not perceive the role of psychologists during preparation as important.

## References

1. Mistrzostwa w piłce nożnej EURO 2012. Widownia transmisji oraz udziały programów TVP1, TVP2, TVP HD oraz TVP Sport od 8 czerwca do 1 lipca 2012 – podsumowanie [in Polish] [European Football Championships EURO 2012. Audience and the contribution of the TVP1, TVP2, TVP HD and TVP Sport channels between June 8<sup>th</sup> and July 1<sup>st</sup> 2012 – a windup]. [[http://www.krrit.gov.pl/Data/Files/\\_public/pliki/publikacje/mistrzostwa-europy-w-pilce-noznej---podsumowanie.pdf](http://www.krrit.gov.pl/Data/Files/_public/pliki/publikacje/mistrzostwa-europy-w-pilce-noznej---podsumowanie.pdf)] [accessed on 24.11.12]
2. EURO 2012: polsko-ukraiński rekord potwierdzony [In Polish] [EURO 2012 – the Polish-Ukrainian record acknowledged] [[http://stadiony.net/aktualnosci/2012/07/euro\\_2012\\_polskoukraiński\\_rekord\\_potwierdzony](http://stadiony.net/aktualnosci/2012/07/euro_2012_polskoukraiński_rekord_potwierdzony)] [accessed on 24.11.12]
3. Rekordowe strefy kibica. Serwis Polskiego Radia [in Polish] [Record Fan Zones. Newsletter of the Polish Radio] [<http://www.polskieradio.pl/114/1985/Artykul/637130,Rekordowe-Strefy-Kibica>] [accessed on 24.11.12]
4. Bryant J, Raney AA. Sports on the screen. In: Zillmann D, Vorderer P, editors. *Media entertainment: The psychology of its appeal*. Hillsdale, NJ: Lawrence Erlbaum Associates Inc; 2000, 53-174.
5. Real MR. Media Sports: Technology and the commodification of postmodern sport. In: Wenner LA, editor. *Media Sport*. London: Routledge; 1998, 14-26.
6. Sahaj T. Fani futbolowi. Historyczno-społeczne stadium zjawiska kibicowania [In Polish] [Fans of football. Historical and social study of the phenomenon of rooting]. Poznań: AWF; 2000, 42.
7. Bauer HH, Sauer NE, Exler S. The loyalty of German soccer fans: does a team's brand image matter? *Int J Sports Mark Sponsorship* 2005;7:14-22.
8. Holt DB. How consumers consume: a typology of consumption practices. *J Consum Res* 1995;22:1-16.
9. Bernhardt PC, Dabbs JM Jr., Fielden JA, Lutter CD. Testosterone changes during vicarious experiences of winning and losing among fans at sporting events. *Physiol Behav* 1998;65:59-62.
10. van der Meij L, Almela M, Hidalgo V, et al. Testosterone and cortisol release among Spanish soccer fans watching the 2010 World Cup Final. *PLoS ONE* 2012;7:34814. DOI: 10.1371/journal.pone.0034814.
11. Vallerand RJ, Houliort N. Passion at work: Toward a new conceptualization. In: Skarlicki D, Gilliland D, Steiner D, editors. *Social issues in management*. Greenwich, CT: Information Age Publishing; 2003, 175-204.
12. Vass JS. Cheering for self: An ethnography of the basketball event. New York: Universe Inc; 2003.
13. Vallerand RJ, Ntoumanis N, Philippe FL, et al. On passion and sportsfans: A look at football. *J Sports Sci* 2008;26:1279-1293.
14. Rocca KA, Vogl-Bauer S. Trait verbal aggression, sports fan identification, and perceptions of appropriate sports fan communication. *Commun Res Rep* 1999;16:239-248.
15. Branscombe NR, Wann DL. Collective self-esteem consequences of outgroup derogation when a valued social identity is on trial. *Eur J Soc Psychol* 1994;24:641-657.
16. Wann DL, Carlson JD, Schrader MP. The impact of team identification on the hostile and instrumental verbal aggression of sports spectators. *J Soc Behav Pers* 1999;14:279-286.
17. Wann DL, Culver Z, Akanda R, Daglar M, De Divitiis C, Smith A. The effects of team identification and game outcome on willingness to consider anonymous acts of hostile aggression. *J Sport Behav* 2005;28:282-294.
18. Wann DL, Haynes G, McLean B, Pullen P. Sport team identification and willingness to consider anonymous acts of hostile aggression. *Aggressive Behav* 2003;29:406-413.
19. Wann DL, Peterson RR, Cothran C, Dykes M. Sport fan aggression and anonymity: The importance of team identification. *J Soc Behav Pers* 1999;27:597-602.
20. Dziubiński Z. A sociological attempt at explaining aggression in sport. *Baltic Journal of Health and Physical Activity* 2007;13:204-208.
21. Piotrowski P. Szalikowcy. O zachowaniach dewiacyjnych kibiców sportowych [In Polish] [Football hooligans. The deviant behavior of sports fans]. Toruń: Wydawnictwo "Adam Marszałek"; 2000, 9.

22. Lun J, Sinclair S, Whitchurch ER, Glenn C. (Why) do I think what you think? Epistemic social tuning and implicit prejudice. *J Pers Soc Psychol* 2007;10:257-274.
23. Henschen KP, Gordin RD. Self-regulation techniques contributing to success in sport. In: *Proceedings of the 1996 International Pre-Olympic Scientific Congress*. Dallas: Cooper Center for Aerobics Research; 1996, 94.
24. Murphy SM. The achievement zone. New York, NY: G.P Putnam's Son; 1996.
25. Blecharz J. Jak motywować mistrzów? [in Polish] [How to motivate champions?]. *Sport Wyczynowy* 2002;9-10/453-454:109-111.
26. Blecharz J. Psychologiczne wspomaganie – zakres i skuteczność [in Polish] [Psychological support – the extent and effectiveness]. *Sport Wyczynowy* 2002;3-4/447-448:115-123.
27. Robazza C, Bortoli L. Mental preparation strategies of Olympic archers during competition: An exploratory investigation. *High Abil Stud* 1998;9:219-235.
28. Elman W, McKelvie S. Narcissism in football players: Stereotype or reality? *J Sport Psychol* 2003;5:1-9.
29. Lipowski M. Piłkarz – idol czy narcyz? Perspektywa psychologiczna [In Polish] [Football player – idol or narcissist? Psychological perspective]. In: Ciechowicz J, Moska W, editors. *Futbol w świecie sztuki [In Polish] [Football in the art world]*. Gdańsk: Wydawnictwo Uniwersytetu Gdańskiego; 2004, 347-353.
30. Centrum Badań Opinii Społecznej. Komunikat z badań, lipiec 2012: Sukces EURO 2012 [in Polish] [Public Opinion Research Center. Research report, June 2012: Success of EURO 2012] [[http://www.cbos.pl/SPISKOM.POL/2012/K\\_099\\_12.PDF](http://www.cbos.pl/SPISKOM.POL/2012/K_099_12.PDF)] [accessed on 12.01.13]
31. Nowicki D. Umiejętności psychologiczne trenera oraz ich wykorzystanie w procesie treningowym i startowym [In Polish] [Psychological skills trainer and their use in the process of training and the start]. *Sport Wyczynowy* 2010;2/534:104-113.
32. Hacker CM. Women's World Cup: Performance enhancement through mental skills training. *Prof Psychol-Res Pr* 2000;31:363-364.
33. Behan M, Wilson M. State anxiety and visual attention: The role of the quiet eye period in aiming at a far target. *J Sports Sci* 2008;26:207-215.
34. Szczepan S, Kulmatycki L. Psychophysical motivational effects of music on competitive swimming. *Baltic Journal of Health and Physical Activity* 2012;4:197-204.
35. Blumenstein B, Weinstein Y. Biofeedback training: enhancing athletic performance. *Biofeedback* 2011;39:101-104.
36. McFarland C, Ross M. Impact of causal attributions on affective reactions to success and failure. *J Pers Soc Psychol* 1982;43:937-946.