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PERFORMANCE MOTIVATION OF BRATISLAVA UNIVERSITY STUDENTS

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Summary: The aim of the Study was to broaden the findings regarding the performance motivation of the students of the universities in Bratislava segmented according to university type. The research sample comprised 248 undergraduates (males: n = 141; 22.40 years of age ± 1.62 and females: n = 107; 21.78 years of age ± 1.49). A standardised performance motivation questionnaire (PMQ) was used to measure performance motivation (Pardel, Maršálová & Hrabovská 1992). The Kolmogorov-Smirnov test was used to evaluate data normality, while the Kruskal-Wallis test and Mann-Whitney test were used to test the significance of the differences between individual independent selections. The results revealed significant differences in performance motivation ($H_{(5)} = 76.730$, $p = .000$, $\eta^2 = .307$), anxiety inhibiting performance ($H_{(5)} = 128.270$, $p = .000$, $\eta^2 = .591$) and anxiety supporting performance ($H_{(5)} = 95.754$, $p = .000$, $\eta^2 = .331$) among undergraduates of various types of schools. The students of the Faculty of Physical Education and Sport of Comenius University in Bratislava show significant differences ($p < .001$) in all of three dimensions of performance motivation in comparison with all of the other undergraduates segmented in accordance with various school types. Our findings can be explained by the more intensive sporting activity of the students of the Faculty of Physical Education and Sport, Comenius University.

Key words: performance motivation, anxiety inhibiting/supporting performance, university students

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Introduction

The word “motivation” is from the word “motivus” derived from the verb “movere” - to move (Kábrt 1996). Thus, we can assume that our behaviour is influenced by certain driving forces which we call motives. Rheinberg (2006) confirmed that motivation represents an inner strength that drives people and their activities. Murphy et al. (2002) view motivation as a general name for the fact that an organism’s behaviour is partly determined by its own quality or internal structure. The term “motivation” interprets various psychological reasons for behaviour, its subjective importance, and explains the observed variability of behaviour - why people are oriented towards different goals (Zimbardo 1983). Performance motivation represents a personality characteristic, a sufficiently stable tendency to achieve the best possible performance (Bedrnová, Nový et al. 2007). Performance motivation is identified as an individual’s need to achieve success in various activities, especially in competition with others. According to Abramenková et al. (1987), performance motivation is based on emotional associations connected to inner survival and human behaviour. People who are encouraged to be independent by their mothers at a very early stage of their lives achieve very high levels of performance motivation. People with a low level of performance motivation may have been encouraged to be independent too, however at a later age. It was also proved that people with a high level of performance motivation were rewarded for little steps towards independence, namely by a manifestation of physical affection. The influence of upbringing on performance is also proved by comparative anthropological research: frequent training towards independence from adults leads to a high level of performance motivation (Nakonečný 1992). According to Křivohlavý (2009), success has a mostly strengthening function. It leads to the development of positive aspects of personality as well as to a better quality of life, which is substantial and determining for a person in any given situation. Šerešová (2010) states that the more frequent and intense current mental states resulting from success include a higher stabilised aspiration level among athletes, which could have a positive influence on their performance, but which could also lead to deeper and more intense conflict due to potential failure. According to Gregor (1994), peak performances can be expected from athletes whose qualities (physical, technical, tactical) are enhanced by high performance motivation. In the conclusion of their study, Šmela, Pačesová, Kraček and Hájovský (2017) is stated that the level of performance motivation is determined by the level of sporting activity. The authors show significant differences between top, high performance athletes and non-athletes in all four dimensions of performance motivation, i.e., the more

intense the sporting activity, the higher the performance motivation. The theory suggesting a direct dependence between the level of sport activity and the level of achievement motivation was also supported by the studies conducted by Rathee & Singh (2011), Ibrahim & Gwari (2011), Ali (2010), Khan et al. (2010), Unierzyski (2003). Their results proved that the relationship between performance motivation and sport activity as follows: the higher the level of sport activity, the higher the performance motivation.

Methods

The research sample comprised 248 undergraduates (males: n = 141; 22.40 years of age ± 1.62 and females: n = 107; 21.78 ± 1.49 years old) from six faculties (the Faculty of Law of Comenius University in Bratislava - FoL CU BA, the University of Economics in Bratislava - UoE BA, the Slovak University of Technology in Bratislava - SUoT BA, the Faculty of Natural Sciences of Comenius University in Bratislava - FoNS CU BA, the Faculty of Arts of Comenius University in Bratislava - FoA CU BA, and the Faculty of Physical Education and Sport of Comenius University in Bratislava - FoPEaS CU BA). We characterised the research sample segmented according to school type by the level of engagement in sporting activities, which can be seen in Figure 1

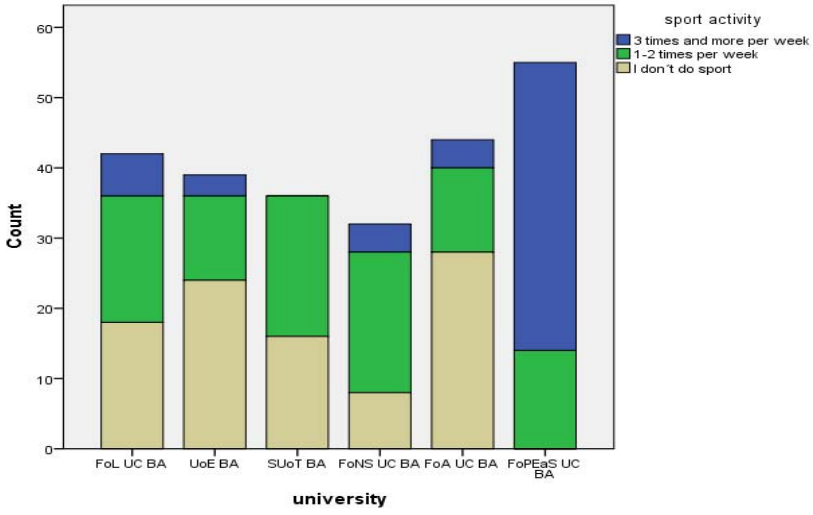

Figure 1
The level of engagement in sporting activities

Legend

FoL CU BA – Faculty of Law Comenius University in Bratislava
UoE BA - University of Economics in Bratislava
SUoT BA – Slovak University of Technology in Bratislava
FoNS CU BA – Faculty of Natural Sciences Comenius University in Bratislava
FoA CU BA – Faculty of Arts Comenius University in Bratislava
FoPEaS CU BA – Faculty of Physical Education and Sport Comenius University in Bratislava

Performance Motivation Questionnaire (DMV)

The performance motivation questionnaire contains 52 items, where the respondent evaluates the level of consent to the statement on the Likert scale. The questionnaire consists of three scales: the performance motives scale, the anxiety (weakening) inhibiting performance scale and the anxiety (facilitating) supporting performance scale.

1. The performance motives scale corresponds with the complex and multifaceted nature of the performance motives and consists of four aspects: the aspect of performance behavior, the aspiration aspect, the aspect of endurance at work, the aspect of time orientation in the future.
2. The anxiety inhibiting performance scale can be described as recognition of the weakening performance, loss of speed and activation in the states that cause tension in stressful, new and critical situations. In other words, the anxiety inhibiting performance can be characterized as a certain tendency to avoid situations that require a high performance in order not to experience the feeling of failure.
3. The anxiety supporting performance scale is characterized by a link between an average, in other words optimal sense of tension and the mobilization of activity as a favorable condition for a quality performance. In other words, we can define it as an effort to avoid failure (Pardel, Maršálová, Hrabovská 1992).

Statistical Methods

We used basic mathematical-statistical methods to process the results. We detected normality by using the Kolmogorov-Smirnov test. The Kruskal-Wallis test was used to test the significance of differences between the individual scales of the sample divided into groups according type of university. The significance of the differences between individual independent samples was tested using the Mann-Whitney U test. The significance level was set at $\alpha \leq .05$ and $\alpha \leq .01$. The importance of the relationship or dependence between two groups was expressed using the coefficient r., Pett (1997). Effect size, the coefficient η^2, effect size, expresses the effect of the independent variable (sport activity) on the dependent variable (performance motivation). The magnitude of coefficient $\eta 2$ is evaluated according Morse (1999) in the following ranges: $\eta 2 \geq .14$ (large effect), $\eta 2 = .06 - .14$ (medium effect), $\eta 2 = .01 - .06$ (small effect). For better interpretation, we have presented the results in box-plots.

Results

Performance motives scale

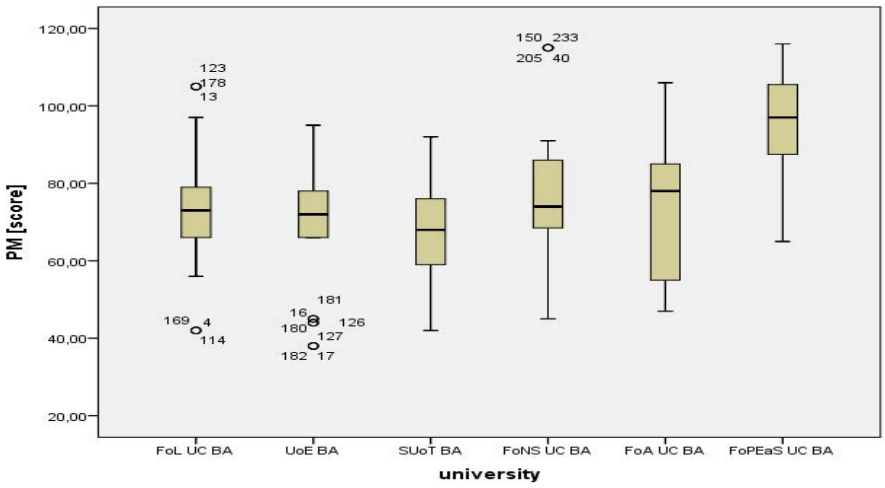

Figure 2
Score of the performance motives scale of undergraduates

Statistically significant differences were detected among the median values of subjects segmented according to school type: $H_{(5)} = 76.730$, $p = .000$, $\eta 2 = .307$. The effect size expressed by eta square is large. Statistically significant differences ($p < .01$) were detected between the FoPEaS CU BA student group and other student groups. In the dimension of performance motivation the students of FoPEaS CU BA scored a mean value of 96.27 ± 11.99 compared to the students of FoL CU BA 72.43 ± 15.44 points, UoE BA 68.92 ± 16.83 points, SUoT BA 68.22 ± 15.33 points, FoNS CU BA 77.13 ± 19.21 points and FoA CU BA 71.45 ± 18.76 points (Figure 2). The significance of the differences in performance motivation between individual school types can be seen in Table 1.

Table 1
Statistical significance of the differences between undergraduates in the performance motives scale dimension

	FoL CU BA	**UoE BA**	**SUoT BA**	**FoNS CU BA**	**FoA CU BA**	**FoPEaS CU BA**
FoL CU BA						
UoE BA	n.s.					
SUoT BA	n.s.	n.s.				
FoNS CU BA	n.s.	n.s.	n.s.			
FoA CU BA	n.s.	n.s.	n.s.	n.s.		
FoPEaS CU	**	**	**	**	**	

BA						

Anxiety inhibiting performance

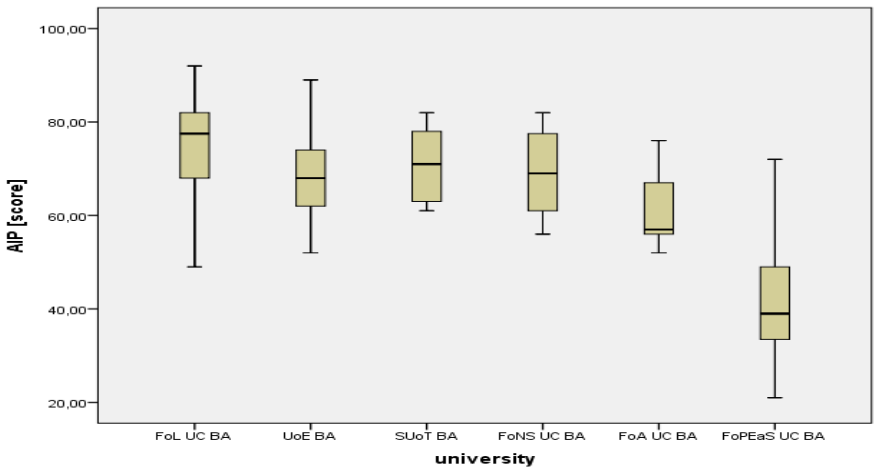

Figure 3
Score of the anxiety inhibiting performance of undergraduates

Statistically significant differences were detected among the mean values of subjects segmented according to school type: $H_{(5)} = 128.270$, $p = .000$, $\eta^2 = .591$. Effect size corresponds with large effect. Statistically significant differences ($p < .01$) were detected between the FoPEaS CU BA student group and other student groups. Statistically significant differences ($p < .05$) were also detected between FoA CU BA students and the students of FoL CU BA and SUoT BA. The lowest value was scored by the FoPEaS CU BA students: 41.18 ± 11.53 points. On the other hand, the students of FoL UC BA scored the highest value of 73.43 ± 12.00 points (Figure 3). The significance of the differences in anxiety inhibiting performance between individual school types can be seen in Table 2.

Table 2
Statistical significance of the differences between undergraduates in anxiety inhibiting the performance dimension

	FoL CU BA	**UoE BA**	**SUoT BA**	**FoNS CU BA**	**FoA CU BA**	**FoPEaS CU BA**
FoL CU BA						
UoE BA	n.s.					
SUoT BA	n.s.	n.s.				
FoNS CU BA	n.s.	n.s.	n.s.			
FoA CU BA	*	n.s.	*	n.s.		
FoPEaS CU BA	**	**	**	**	**	

Anxiety supporting performance

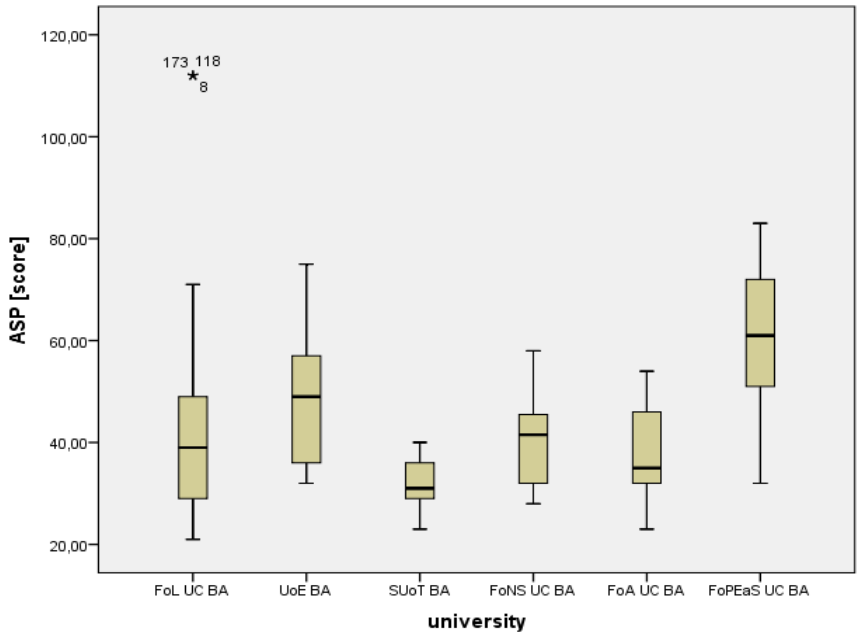

Figure 4

Score of the anxiety supporting performance of undergraduates

A statistically significant difference was also detected in the third dimension: ($H_{(5)}$ = 95.754, p = .000, η2 = .331) between the mean values of the responders' scores. The effect size is large (Figure 4). Statistically significant differences (p < .01) were detected between the students of FoPEaS CU BA and all of the other groups of responders segmented according to school type. A more detailed comparison of mean values expressed by statistical significance can be found in Table 3.

Table 3

Statistical significance of the differences between undergraduates in dimenzi anxiety supporting the performance dimension

	FoL CU BA	**UoE BA**	**SUoT BA**	**FoNS CU BA**	**FoA CU BA**	**FoPEaS CU BA**
FoL CU BA						
UoE BA	n.s.					
SUoT BA	n.s.	**				
FoNS CU BA	n.s.	n.s.	*			
FoA CU BA	n.s.	n.s.	n.s.	n.s.		
FoPEaS CU BA	**	**	**	**	**	

Discussion

Extensive research which has been conducted in the area of performance motivation has revealed significant differences between groups segmented according to a selected factor. The study by YE (2001), whose research sample comprised 2214 Chinese athletes differentiated on the basis of gender and sport activity type, showed significant differences of performance motivation between gender and type of sporting activity (individual vs. collective). The findings of the research of Vesković and Milanovič (2011) examining the relationship between the performance motivation and success of Serbian athletes indicated that athletes competing in individual sports defined higher goals to achieve their own satisfaction. In the study of Dureha, Moradhvaj, Yaduvanshi, Mishra (2010), the level of participation in foreign ice hockey tournaments was used as another criterion for the assessment of performance motivation. However, it did not reveal significant differences. The criterion of calendar age of adolescent Spanish athletes in the study of Castiollo, Duda, Balaguer, Tomás (2009) showed increasing performance motivation influenced by adolescence and the ability to better define success as well as opinions regarding achieving success. We can see the intention to differentiate respondents on the basis of school type in the study of Scholz (2011), in which he carried out a comparison of performance motivation of students of a sports grammar school and classic grammar school. The students of the sports grammar school showed a statistically significant higher performance motivation. Our findings correlate with this study: undergraduates who are more active in sport (FoPEaS CU BA) have higher performance motivation scores compared to those of other undergraduate respondents. We have not come across any research plans to segment undergraduates according to school type; therefore our study can be regarded as a pilot study. Sedláčková (2014), who compared the performance motivation of adolescents from the point of view of sporting activity, found significantly higher performance motivation among sporting adolescents compared to non-sporting adolescents. Our findings, which show higher performance motivation, higher anxiety supporting performance and lower anxiety inhibiting performance among the students of FoPEaS CU BA who engage in sporting activities more than three times a week, broaden our previous research (Šmela, Pačesová, Kraček & Hájovský 2017), which confirmed significantly higher performance motivation, anxiety supporting performance and lower anxiety inhibiting performance among elite athletes

compared to occasional athletes and non-athletes. The same conclusion, i.e., a higher level of achievement motivation with top sportsmen compared to non-elite athletes, was also made by Kavussanu & McAuley (1995) in their paper. Direct dependence between the level of sport activity and the level of achievement motivation was also supported by the studies conducted by Rathee & Singh (2011), Ibrahim & Gwari (2011), Ali (2010), Khan et al. (2010), Unierzyski (2003).

Conclusion

This study shows significant ($p < .01$) differences with a large effect size ($\eta 2 \geq .14$) in the performance motivation of undergraduates segmented according to school type. The students of FoPEaS CU BA exhibit significantly ($p < .01$) higher performance motivation, anxiety supporting performance or anxiety inhibiting performance compared to the students of all of the other school types. On the basis of the analysis of the studies in the Discussion section and more intense sporting activity of the students of FoPEaS CU BA, we believe that sporting activity itself is one of the decisive factors affecting the level of performance motivation of undergraduates.

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