

RESEARCH RESULTS FOR GOAL ORIENTATION OF YOUNG KARATEKAS OF VARIOUS COMPETITIVE ORIENTATION

UDC 796.85.01

Izet Kahrović¹, Milovan Bratić², Mirsad Nurkić², Srećko Jovanović³,
Oliver Radenković¹, Benin Murić¹

¹State University of Novi Pazar, Department of Biomedical Science, Sport and Physical Education Program, Novi Pazar, Serbia

²Faculty of Sport and Physical Education, University of Niš, Niš, Serbia

³Faculty of Sports and Physical Education, University of Belgrade, Belgrade Serbia

Abstract. *Since competitions in karate take place within bouts and katas, the subject matter of this study are the psychological characteristics which contribute to this differentiation. The goal of the research is to determine the predictive values of psychological characteristics in the competitive selection of karatekas. In relation to the subject matter and goals of the research, as well as studies carried out so far, a hypothesis has been formulated: significant differences exist in goal orientation between karatekas of various competitive orientation. The study included 79 karatekas, 12 to 14 years old, 37 of whom are competitors in bouts, 23 of whom practice katas, and 19 respondents who take part in both disciplines. In order to evaluate the motivational orientation, we used the Task and Ego Orientation in Sport Questionnaire (TEOSQ), designed by Duda & Nicholls. Even though the overall results did not confirm the initial hypothesis that the respondents of various competitive orientation should differ in their motivational climate of goal orientation, they to a large extent can be of significant help in the proper selection of young competitors in karate.*

Key words: karate, kata, kumite, target orientation

Received November 08, 2017 / Accepted May 11, 2018

Corresponding author: Izet Kahrović

State University of Novi Pazar, Department of Biomedical Science, Sport and Physical Education Program, St. Vuk Karadžić n.n., 36300 Novi Pazar, Serbia

Phone: +381 20 317 754 • E-mail: izetkahrovic@live.com

INTRODUCTION

Sports psychology today permeates all levels of sport, ranging from school to recreational sport, all the way to elite and professional sport. The psychology of sport, as an applied science, is focused both on the mental health of athletes, and on improvements which lead to success during competitions (Bajraktarević, 2008).

Collecting data on the psychological characteristics of young athletes represents an objectively large problem and has been reduced to the use of a relatively small number of applied instruments. The problem that will be studied here imposes the topicality of diverting attention to the advantages and justifiability of the focus of study, as well as the dispositional characteristics of adolescent athletes.

Goal orientation is an organized pattern of convictions, attributions and feelings which lie at the core of various strategies, engagements and reactions to the effects of participating in activities (Duda & Hall, 2001). Duda was among the first to suggest the application of the Achievement Goal Theory in sport (AGT). According to the ATG, the focus is the dispositional characteristic which lies at the basis of individual differences among athletes, which emerges through specific experience during socialization in sport and in other domains of achievement. Namely, an individual approaches any type of activity with a certain goal in mind. The aim reflects the perception and beliefs of the individual regarding the activities and how it is possible to achieve success and avoid failure. The nature of the experience which is connected to those two target goals also differs (Duda & Nicholls, 1992; Duda & Hall, 2001; Roberts, Teasure, & Cornoy, 2007).

Karate is among the youngest combat sports considering that the first sports competitions originated during the first half of the last century. Since then karate has experienced a true expansion and caused great interest in the world (Savić, Nićin, Horvat & Kopas, 1994; Ćirković & Jovanović, 2002; Bratić, 2006; Ćirković, Jovanović & Kasum, 2010). Karate sports competitions are organized according to specially designed rules and within two competitive disciplines: katas and bouts. Karate training at the very beginning takes place in joint training sessions, so that the practitioners are subjected to the same training program. After the age of ten, there is a spontaneous division of competitors who take part in two different types of disciplines (bouts, katas), after which they take part in different programs of preparation for competition, because these two disciplines also differ to a great extent (Ćirković et al., 2010; Koropanovski, 2012).

Since competitions in karate take place within bouts and katas, the subject matter of this study are the psychological characteristics which contribute to this differentiation, a form of spontaneous selection of beginner karatekas, of one or both of these disciplines. The goal of the research is to determine the predictive values of psychological characteristics in the competitive selection of karatekas. In relation to the subject matter and goals of the research, as well as studies carried out so far, a hypothesis has been formulated: significant differences exist in goal orientation between karatekas of various competitive orientation.

THE METOD

The sample of respondents was made up of male karatekas aged 12 to 14 who are involved in a regular training process, and who also currently compete in the competition system in the Karate Federation of Serbia. The study included 79 karatekas, 37 of who

are competitors in bouts, 23 of whom practice katas, and 19 respondents who take part in both disciplines. The criterion for the selection of respondents was that they had at least 2 years of continued exercise, which could be considered the minimum period of time needed to acquire the basic technique in the selected competitive discipline. In addition, another condition was that they have no health issues or any other problems which could prevent them from participating in the testing, and they all had to be active members of karate clubs.

The research included an analysis of the psychological characteristics of the karatekas carried out under the same conditions for all the respondents, one day prior to competition, in appropriate facilities equipped with tables and chairs (a classroom). The research was carried out by a psychologist and an individual specially trained for this purpose. Enough time was set aside for the study, and all the necessary conditions were met for the individual to fill out the distributed questionnaire, without any interruptions.

Data collection was carried out by the individual independently circling an answer from several provided responses, and the only form of verbal communication used during data collection were the instructions given on how to complete the questionnaire. In addition, the respondents filled out a special questionnaire which referred to all the necessary data used for identification, data on the training and competitive experience, data on the sports anamnesis of the family members, data on the coaches (especially data which could shed light onto the preferences of the coaches in terms of katas and bouts). These data are important for the discussion and conclusions on the obtained results which refer to the goal orientation of the respondents regarding a particular competitive discipline.

In order to evaluate the motivational orientation, we used the Task and Ego Orientation in Sport Questionnaire (TEOSQ), designed by Duda & Nicholls, which in the beginning was used for educational purposes, and then was adapted for use in sport. The task of the athlete was to evaluate the extent to which he agrees with a certain claim on a five-point Likert scale (ranging from 1 – “I do not agree at all” to 5 – “I completely agree”). The questionnaire contains two sub-scales which indicate goal orientation on the task (six items) and goal orientation on performance and results (seven items). In addition to this type of questionnaire, the respondents also filled out a questionnaire segment which required them to list their thoughts on the goals which their parents set regarding their participation in sport. This instrument was implemented due to special interest for obtaining possible differences in the motivational orientation of young karatekas of different competitive focus. The application of this instrument in previous studies on a sample of young athletes indicated a differentiation of two directions of the athletes’ goal orientation, including: - athletes who focused on learning and performing tasks and athletes who were result-oriented (Duda & Nicholls, 1992; Duda & Hall, 2001; Roberts et al., 2007).

The results of the measuring psychological characteristics of the studied competitive groups were statistically processed in a way which enabled us to evaluate the set hypothesis. In order to study the differences between one independent variable (sports orientation) on the one hand and dependent variables (goal orientation on learning and the end result) on the other, the analysis of variance (ANOVA) was calculated. In order to study the differences in the expression of the orientation towards learning and orientation towards results of each respondent, we used the repeated measure analysis of variance. The level of significance was set at $p < 0.05$.

RESULTS

The tables (Table 1 to 4) show the descriptive indicators (minimal and maximal values, means and standard deviation) for the entire sample, that is, subgroups identified based on the competitive focus.

Table 1 Descriptive statistics for the entire sample

	MIN	MAX	AS	SD
GOAL LEARNING	2,80	5,00	4,56	0,486
GOAL RESULT	1,83	5,00	3,296	0,736

MIN - smallest value; MAX – greatest value; AS – arithmetic means; SD – standard deviation

Table 2 Descriptive statistics for the contestants in bouts

	MIN	MAX	AS	SD
GOAL LEARNING	3,20	5,00	4,62	0,38
GOAL RESULT	2,00	4,67	3,27	0,67

MIN - smallest value; MAX – greatest value; AS – arithmetic means; SD – standard deviation

Table 3 Descriptive statistics for karatekas who practice katas

	MIN	MAX	AS	SD
GOAL LEARNING	3,60	5,00	4,59	0,47
GOAL RESULT	2,00	5,00	3,30	0,79

MIN - smallest value; MAX – greatest value; AS – arithmetic means; SD – standard deviation

Table 4 Descriptive statistics for the contestants in bouts + katas

	MIN	MAX	AS	SD
GOAL LEARNING	2,80	5,00	4,43	0,67
GOAL RESULT	1,83	4,83	3,32	0,81

MIN - smallest value; MAX – greatest value; AS – arithmetic means; SD – standard deviation

The analysis of variance did not indicate any differences between respondents of various competitive focus based on the extent of their focus on both goals, while based on the repeated analysis of variance, we can conclude that in the case of our respondents the focus on learning ($AS = 4.56$ $SD = .49$) is significantly more pronounced than the focus on the result ($AS = 3.30$ $SD = .73$), Wilk's Λ has a value of 0,29, $F(1,78) = 182,51$, $p = 0,01$.

DISCUSSION

In this study we focused on finding the possible influence of psychological characteristics on the choices the respondents made in terms of competitive disciplines, and on trying to determine any differences in the motivational climate and goal orientation in relation to the expected effects of learning, improvement and competing in karate.

The expectation of differences between karatekas of various competitive orientations was primarily based on the objective differences in the type of competition of the two disciplines: fighters competing directly in bouts (one against each the other) and indirectly by participating in katas (in reference to a standard). Accordingly, it was expected that at

the studied age level the competitors would already show a preference for the two groups based on the cited systematization in the theoretical framework (Duda & Nicholls, 1992; Duda & Hall, 2001; Roberts et al., 2007). To be precise, it was expected that karatekas who practice katas would primarily be focused on learning and performing tasks, and would believe that by investing effort they can improve their competence while evaluating it in relation to their own previous performance or achieved progress. Contestants in bouts were expected to be primarily focused on the result, mastery or progress in the performance of sports skills and to a greater extent oriented on the demonstration of competence in front of others, more so than its development.

The results obtained in our research did not confirm the expected differentiation in relation to goal orientation. The first analysis of variance indicated that contestants in bouts, karatekas who practice katas, and contestants in both bouts and katas are focused on both goals to the same extent. This piece of data, obtained following the research and the overall analysis of the characteristics of the sample, is somewhat understandable since we are dealing with athletes of an age at which they are still not constitutionally differentiated, nor is their motivation fully formed for a certain competitive discipline, and who are still in the process of joint training. This is reflected in the fact that a significant part of the sample is made up of respondents who are still equally competing in both disciplines and are still not differentiated clearly in relation to the technique profile for katas and bouts (refer to the results on specific motor skills).

Based on the repeated measures analysis of variance, we can conclude that among our respondents focus on learning ($AS=4.56$ $SD=.49$) is significantly more pronounced than focus on the results ($AS=3.30$ $SD=.73$), Wilk's Λ has a value of 0,29, $F(1,78)=182,51$, $n=0,01$. Namely, in the case of karatekas who are contestants in bouts, practice kata or both disciplines, they are dominated by a focus on development and the improvement of their own competence (which they evaluate in relation to the achieved personal growth). For them the basic criterion of success is a subjective feeling of improvement, which is based on a subjective feeling of improvement in their sports performance or overcoming a sports task. In addition, they are to a much smaller extent focused on the demonstration of their own competence in front of others and the imperative *to be better than others*.

The obtained results are confirmed by numerous studies carried out on samples of athletes who train in various sports: samples of male and female volleyball players (Hatzigeorgiadis, 2002; Gano-Overwaya, Guivernaub, Magyarc, Waldron, & Ewing, 2005; Waldron & Krane, 2005), handball players (Balaguer, Duda, Atienza, & Mayo, 2002), soccer players (Gershgoren, Tenenbaum, G., Gershgoren, A., & Eklund, 2011), track and field athletes (Hall, Kerr, Kozub, & Finnie, 2007), swimmers (Givvin, 2001). Similar results were obtained in studies which included athletes from our own environment: large samples of athletes who are involved in various types of sports (Vesković & Milanović, 2011) and a sample of female handball players (Vesković, Valdevit, & Đorđević-Nikić, 2013) of an age similar to that of the respondents in our study.

CONCLUSION

The aim of the study was to evaluate of the predictive value of the psychological characteristics of karatekas of the aforementioned age in competitive selection, that is, their competitive orientation towards a particular discipline: katas or bouts.

The possible influence of psychological characteristics on the choices of the respondents regarding a particular competitive discipline was sought out in the differences in the motivational climate of goal orientation of the respondents in relation to the expected effects of studying, improving and competing in karate. However, the research results have indicated that the contestants in a bout, karatekas who practice kata and contestants in bouts and katas are equally focused on both goals, and did not confirm the expected differentiation in relation to goal orientation. Thus, the hypothesis on the existence of a significant difference in goal orientation between karatekas of varying competitive orientation was discarded.

Even though the overall results did not confirm the initial hypothesis that the respondents of various competitive orientation should differ in their motivational climate of goal orientation, they to a large extent can be of significant help in the proper selection of young competitors in karate. Namely, numerous studies have indicated that it is very important for a younger competitor to be predominantly focused on learning, and less on achieving results.

Some of the tendencies identified in the obtained results of the studied differences between young practitioners of kata and competitors in karate, as well as the research results of other studies, offer a wide enough selection of arguments for us to expect a different outcome in goal orientation, and perhaps, significant differences in the focus of elite competitors in katas and bouts.

This research offers a contribution to karate because it in a precise manner determined whether and to which extent psychological characteristics are predictors of competitive selection, and the results could serve as the basis for supporting further research in karate, which would include other anthropological features with the aim of determining a more permanent solution to the problem of the training process involving young karatekas.

REFERENCES

- Balaguer, I., Duda, J. L., Atienza, F. L., & Mayo, C. (2002). Situational and dispositional goals as predictors of perceptions of individual and team improvement, satisfaction and coach ratings among elite female handball teams. *Psychology of Sport and Exercise*, 3, 293–308.
- Bajraktarević, J. (2008). *Psihologija sporta, teorija i empirija* (Psychology of sport, theory and empirical findings). Sarajevo: University of Sarajevo.
- Bratić, M. (2006). *Borenja* (Combat). Niš: Faculty of Sport and Physical Education.
- Duda, J. L. & Nicholls, J. G. (1992). Dimensions of achievement motivation in schoolwork and sport. *Journal of Educational Psychology*, 84 (3), 290-299.
- Duda, J. L., & Hall, H. L. (2001). Achievement goal theory in sport: Recent extensions and future directions. In R. N. Singer, & Hausenblas, & C. M. Janelle (Eds.), *Handbook of Sport Psychology* (pp. 417-443). New Jersey: John Wiley & Sons, Inc.
- Gano-Overwaya, L., Guivernaub, M., Magyarc, T., Waldron, J., & Ewing, M. (2005). Achievement goal perspectives, perceptions of the motivational climate, and sports personship: individual and team effects. *Psychology of Sport and Exercise*, 6, 215–232.
- Givvin, K. B. (2001). Goal orientations of adolescents, coaches, and parents: Is there a convergence of beliefs? *Journal of Early Adolescence*, 21 (2), 228-248.
- Gershgoren, L., Tenenbaum, G., Gershgoren, A., & Eklund, R. C. (2011). The effect of parental feedback on young athletes' perceived motivational climate, goal involvement, goal orientation, and performance. *Psychology of Sport and Exercise* 12, 481-489.
- Hatzigeorgiadis, A. (2002). Thoughts of escape during competition: relationships with goal orientations and self-consciousness. *Psychology of Sport and Exercise*, 3, 195–207.

- Hall, H. K., Kerr, A. W., Kozub, S. A., & Finnie, S. B. (2007). Motivational antecedents of obligatory exercise: The influence of achievement goals and multidimensional perfectionism. *Psychology of Sport and Exercise*, 8, 297–316.
- Korapanovski, N. (2012). *Karakteristike neuromišićne funkcije vrhunskih karatista različite specijalizacije* (Characteristics of the neuromuscular function of elite karatekas of various specializations). Unpublished doctoral dissertation. Belgrade: Faculty of Sport and Physical Education.
- Roberts, G. C., Teasdale, D. C., & Cornoy, D. E. (2007). Understanding the dynamics of motivation in sport and physical activity. In G. Tenenbaum, & R. C. Eklund (Eds.), *Handbook of sport psychology* (pp. 3-30). New Jersey: John Wiley & Sons, Inc.
- Savić, M., Nićin, Đ., Horvat, S., & Kopas, J. (1994). *Borilački sportovi* (Combat sports). Novi Sad: Faculty of Physical Education.
- Vesković, A., & Milanović, M. (2011). Relationship between goal orientation, motivation and positive affective outcomes of young athletes in Serbia. *Facta universitatis - series: Physical Education and Sport*, 9 (4), 455-464.
- Vesković, A., Valdevit, Z., & Đorđević-Nikić, M. (2013). Goal Orientation and Perception of Motivational Climate Initiated by Parents of Female Handball Players of Different Competition Levels. *Facta universitatis - series: Physical Education and Sport*, 3(11), 337-345, <http://facta.junis.ni.ac.rs/pe/pe201303/pe201303-15.pdf>
- Waldron, J.J. & Krane, K. (2005). Motivational Climate and Goal Orientation in Adolescent Female Softball Players. *Journal of Sport Behavior*, 28(4), 378-391.
- Ćirković, Z., & Jovanović, S. (2002). *Borenja, boks-karate* (Combat, boxing and karate). Belgrade: Faculty of Sport and Physical Education.
- Ćirković, Z., Jovanović, S., & Kasum, G. (2010). *Borenja* (Combat). Belgrade: Faculty of Sport and Physical Education.

REZULTATI ISTRAŽIVANJA CILJNE USMERENOSTI MLADIH KARATISTA RAZLIČITE TAKMIČARSKJE ORIJENTACIJE

Pošto se takmičenja u karateu odvijaju u borbama i katama, predmet interesovanja u ovom istraživanju su psihološke karakteristike koje doprinose toj diferencijaciji. Cilj istraživanja je utvrđivanje prediktivnih vrednosti psiholoških karakteristika u takmičarskoj selekciji karatista. U odnosu na postavljeni predmet i cilj istraživanja, kao i na osnovu dosadašnjih istraživanja, postavljena je hipoteza: postoje značajne razlike u ciljnoj usmerenosti između karatista različite takmičarske orijentacije. Istraživanjem je obuhvaćeno ukupno 79 karatista, 12 do 14 godina, od čega 37 takmičara u borbama, 23 takmičara u katama i 19 ispitanika koji se takmiče u obe discipline. Za procenu motivacione orijentacije primenjen je Upitnik ciljne usmerenosti TEOSQ (The Task and Ego Orientation in Sport Questionnaire), autora Duda & Nicholls. Iako ukupno dobijeni rezultati nisu potvrdili postavljenu hipotezu da će se ispitanici različite takmičarske orijentacije razlikovati u motivacionoj ciljnoj orijentaciji, oni u velikoj meri mogu biti od značajne pomoći za dobru selekciju mladih takmičara u karateu.

Ključne reči: karate, borbe, kate, ciljna usmerenost