

Attitudes, Goals Orientation and Stress of Youth Kung Fu Fighters

**Luciana Midoriy Hatamia Raymundo¹, Consoelo Leite Dos Santos¹,
Ewerton Rodrigues Lopes¹, Carlos Eduardo Lopes Verardi²,
Ademir De Marco³, Vinicius Barroso Hirota⁴**

¹Nossa Cidade College, Brazil

²Paulista State University – UNESP, Brazil

³Campinas State University – UNICAMP, Brazil

⁴Mackenzie Presbyterian University

Correspondence: vinicius barroso hirota (e-mail: vbhirota@gmail.com)

Abstract

The aim of this study was evaluate the motivation, attitudes and pre-competitive stress of Youngers Brazilians Kung Fu fighters. As instruments, we applied the Teosq, Ssca and Lsscpi correlation each one in a total of 21 students, age between 7 and 16 years old. By the results, we check mean for task orientation 4.31 and for ego orientation 2.53; for the positive attitudes the mean was 2.86 and for negative was 2.16, and the girls presents more stressed before the competitions than the boys, 2.90 and 2.61 respect. In this case, boys have tendency to task orientation, positive attitudes for the competition and more control in stress pre competitive. This results show that in correlation we have tendency to ego orientation, negative attitudes and higher level of stress in girls concluding that the characteristics related to stress tend to affect the development of a positive orientation as the orientation characteristics to task, which lead athletes to work harder and be aware of their skills.

Keywords: Motivation; Stress pre-competitive; Attitudes; Kung Fu Fighters.

Introduction

Motivation is something that leads the individual to an action, which keeps him focused to persist toward their goals, so it is necessary to have an objective to be reach(Winterstein, 2002).

Motivation includes needs, impulses, desires, interests, purposes, attitudes and aspirations of an individual. Perhaps schools could achieve greater success while exploring the interest and motivation of the child, providing opportunities that they are committed to their own learning(Marante & Ferraz, 2006).

According to Machado(1997) the key to human behavior is the knowledge of motivation, being indispensable consider the intensity of different reasons, for its efficient control. Furthermore, the motivational process is a proactive learning function and the reasons for perceived channel information in the direction of behavior.

Motivation is defined as need for achievement of success; necessity of do better than others in activities and complete challenging tasks; the desire to rise above, especially when competing with others players(Huffman, Vernoy & Vernoy, 2003).

Bebetsos, Zetou & Antoniou(2014) says that the bottom of the theory of the achievement Goal is that individuals engage in achievement contexts in order to demonstrate competence, so the individual who is high in task orientation uses self-referenced criteria to define success and perceives competence as improvement.

Therefore, we can say that a satisfied athlete are motivated. Under the assumption, the cognitive theory of motivation can establish two types of orientation: ego and task orientation(Nicholls, 1984).

According to Duda(1992), there is an association between the motivational orientation in any particular environment and the potential socialization of values inherent in that atmosphere. So when we note that an individual are propelled to ego orientation, we see some features such as individualism and performing with a low degree of difficulty, while the individual task-oriented brings the team spirit alive all the time, self-reference against its will. Individuals task-oriented are concerned with the demonstration of learning and

domain of the task, namely, their behavior is directed, are persistent and establish appropriate goals on their skills; have a greater need for achievement by being optimistic and believing in their effort. Therefore, when subjects are oriented to ego, subjects feel highly competent and successful only; when they show that, they are better than others are (Klain, Cid, Matos, Leitão, Hickner, & Moutão, 2014). They perceived of competence was judged by a normative criteria.

Son in this way of thinking may the kind of motivational orientation influence the attitudes upon the competitions and the athletes stress.

Attitude toward Brito(1998) can be understood as a personal, idiosyncratic, this provision in all individuals, directed to objects, events or people that assume different direction to and intensity according to the lived experiences of the individual. Moreover, it presents components of affective, cognitive and motor domain. You can have positive (almost when you like do something) and negative (when you don't).

In this direction, we problematized if the type of orientation (task or ego) shall be correlate with the type of attitudes and the pre competitive stress.

Weinberg & Gould(2001) describe the stress as a process containing four stages. First, the individual and placed a demand that can be physical or psychological, after the second stage is the perception regarding to the demand, which is different for each individual. Third step response occurs as demand lodged, and the last stage and the behavior of individual the stress caused by this process, so a continuous cycle especially when the answer is negative.

The pre-competitive stress can cause consistent changes in the behavior of an athlete before competition, disfiguring his hours of sleep, and during sports practice, harm your performance(Hirota, Tragueta & Verardi, 2008).

Apparently, the motivation includes needs, impulses, desires, interests, purposes, attitudes and aspirations of an individual. Perhaps schools could achieve greater success while exploring the interest and motivation of the child, providing opportunities that they

are committed to their own learning (Marante & Ferraz, 2006). Motivation seen to be a psychologically directed force. Students may be more or less motivated to study and are motivated differently for different courses. Therefore it should not be studied only the strength or amount of motivation, but also their quality. Use task goals and intrinsic goals is better than other goals that guide for performance and extrinsic goals. Thus, personal reasons are more adaptable than impersonal reasons to study (Lens, Matos, & Vansteenkiste, 2008). Thus, the practice of physical activity can help teens develop positive attitudes to their concepts (Matias, Rolim, Kretzer, Schomoelz, & Andrade, 2010).

In this way, the aim of this study was to evaluate and correlate the motivation, attitudes and pre-competitive stress of Youngers Brazilian Kung Fu fighters.

Method

This study is classified as a descriptive and correlate research, which aims to describe the characteristics of a given population or phenomenon, and establish relationships between variables (Thomas & Nelson, 2002).

Sample

The study sample was intentional, and consisted of a total of 21 students (n:21), all practicing of Kung Fu, in the City of Carapicuíba, São Paulo - Brazil; students present age between 7 and 16 years old (mean 11.87 ± 2.76 , coefficient of variation of 23.25%). All students involved in this study were selected by establishing the criteria that should participate in the sport related and in regular championships of this modality. Of the total students, 17 (n: 17) of participants were male (mean age 12.72 ± 2.73 years, and coefficient of variation of 21.46%) and four (n: 04) made up the female sample (mean age 10.75 ± 2.98 , coefficient of variation of 27.72%). By the ages, even if we separated by the gender we have no homogeneous characteristic's in the sample according to the age.

Instruments

a. For data, gathered in this study, the motivation scale used was Task and Ego Orientation in Sport Questionnaire – TEOSQ (Duda, 1992), and since then the instrument has been tested in several studies both in Portuguese, the Brazilian version (Hirota & De Marco, 2006; Hirota, Schindler & Villar, 2006; Hirota, Hayashi, De Marco, Verardi, 2011; Hirota, 2014; Hirota, Touri, Ferreira, & Leite 2014; Hirota, Diniz, Arroxellas, De Marco, Verardi, Seabra, Paula, 2016c) and has also been adapted into other languages in different countries (Duda & Whitehead, 1998; Fonseca & Balagué, 2001; Lopez-Walle, Tristan, Tomas, Castillo, & Balaguer, 2011; Klain et al., 2014). The purpose of TEOSQ is to evaluate individual differences in perspectives of the goal, set a school sports practice, detecting if the individual is determined to be task-oriented or ego-oriented. This instrument allows us to identify the motivational goal orientation (task and ego) of the participants assessed when performing a task, in other words, respondents should see in front of sports and evaluate how successful they seen to be in this sport. Therefore, the instrument consists of 13 Likert type questions of 5 points, divided by 6 issues regarding ego orientation, and seven questions related to task orientation;

b. Scale of Attitudes toward Mathematics (Brito, 1998) proposal, adapted and validated in Brazil (Hirota, Diniz, Silva, Lima, Verardi & De Marco, 2014b; Hirota, Anjos, Ferreira, De Marco, 2016b), named of Sports Scale For Attitudes Competition (SSAC) Likert-type scale, oh 4 points, that consists of 20 items (10 positive and 10 negative) whose purpose was to assess attitudes toward a joint entity, in this case, the sporting competition. Issues 01, 02, 06, 07, 08, 10, 12, 13, 16 and 17 expressed whereas negative feelings the issues 03, 04, 05, 09, 11, 14, 15, 18 and 19 is related to positive feelings⁵. this instrument watching whether it the athletes have a positive or negative attitude towards sports competition, in other words, if they like or not to join championships;

c. LSSCPI - List of Symptoms of “Stress” Pre-Competitive Youth Children (De Rose Jr., 1998; Hirota, Verardi & De Marco, 2016). This instrument also constitutes as a Likert scale of 5 points

where the answers may vary: 1: Never/ 2: Rarely / 3: Sometimes / 4: Often and 5: Always. The applicability of the instrument provides that it be applied in the period from 24 hours before the sport competition, and can be administered to athletes aged 10-14 years, upper age range of athletes since the language is properly appropriate to them. This instrument aims to identify the level pre-competitive stress for young athletes who participate in school sports competitions.

Procedures for Data Collection

Prior to collecting data with students, we ask permission from the Academy of Kung Fu to conduct the survey, so the Director signed a Letter of Authorization Institution. A Term of Free and Informed Consent Form (TFICF) that was delivered to parents to allow their children to participate in the study, so students received along with the consent form, a letter of information to the research subject was written, describing what procedures would be taken in data collection. After receiving the TFICF's, we rely on the help of Master's institution, and as students arrived for sports practices, were separated into five groups, and the researchers handed a clipboard and a pen containing the instrument. Students should respond individually to ensure nothing interfering with the results, and after responses, the researchers checked whether all issues were properly completed. The procedures for data collection followed the Newsletter to Research Subjects and signature of the Terms of Consent, by paying attention to research ethics set by the Declaration of Helsinki, 1964/21, Resolution no. 466, 2012(Who, 2002).

Processing Statistical Data

The statistical method used was calculating the *Alpha's Coefficient Crobach* in order to verify the reliability and internal consistency of the instrument items therefore calculated separately for each type of motivational orientation (task and ego), for each attitude (negative and positive) and pre competitive stress, to guarantee the scales performances. We adopted this procedure because according Pasquali(1998) the most used techniques to assess the internal con-

sistency are two halves, Kuder-Richardson and *Cronbach's Alpha*. Also for statistical analysis to calculate the median, average, standard deviation and score for all the scales. We have adopted the division of the calculations of descriptive statistics separately by genders. In order to highlight possible significant differences between the means we include the Mann-Whitney test ($p \leq 0.05$) and *Spearman test (rho)* was used to establish the correlation of data. For these analyzes we used the SPSS software EDITOR-DATA (Statistical Package for Social Science) version 18.0 for Windows.

Results & Discussion

Testing the reliability of the instruments, we found for TEOSQ the result of Alpha's Coefficient for task orientation of 0.87 and 0.80 for ego orientation (see Table 01) representing a good performance of this instrument as in other studies (Duda, 1992, Duda & Whitehead, 1998, Fonseca & Balagué, 2001, Lopez-Walle et al., 2011, Klain et al., 2014)

The reliability of the attitudes instrument show us Alpha of 0.82 for positive attitudes and Alpha 0.71 for negative attitudes questions (see Table 02), confirmed excellent results (Brito, 1998, Hirota et al., 2014b). For the third and last instrument, the one that evaluate the stress pre-competitive we had Alpha's Coefficient of 0.89 for the whole instrument (De Rose Jr, 1998, Hirota, Tragueta, & Verardi, 1998, Hirota et al., 2014c).

Table 01: Results of Mean, Standard Deviation, Median, Score and Alpha's Cronbach by Gender of Task and Ego Orientation.

| Gen-der | ORIENTATION (TEOSQ) | | | | | | | | | |
|---------|---------------------|---------|------|-------|----------|------|---------|------|-------|----------|
| | TASK | | | | | EGO | | | | |
| | Mean | S. Dev. | Med. | Score | α | Mean | S. Dev. | Med. | Score | α |
| Male | 4.28 | ±0.98 | 5 | 31 | 0.87 | 2.51 | ±1.28 | 2 | 15.11 | 0.80 |
| Female | 3.85 | ±1.14 | 4 | 27 | | 2.58 | ±1.05 | 2 | 15.50 | |
| Total | 4.31 | ±1.04 | 5 | 30.23 | | 2.53 | ±1.24 | 2 | 15.19 | |

Comparing the results of mean of task and ego orientation of female group, we check that there is a significant difference between task and ego ($p=0.001$), so girls are task orientated as boys are.

Comparing the average between task orientation by gender, in male group, there is a significant difference, so boys are more task oriented than girls are ($p=0.01$). About ego orientation, there is no difference ($p=0.800$), so in this orientation both genders are similar.

Table 02: Results of Mean, Standard Deviation, Median, Score and Alpha's Cronbach by Gender of Positive and Negative Attitude's.

| Gender | ATTITUDE'S (SSCA) | | | | | | | | | |
|--------|-------------------|---------|------|-------|----------|----------|---------|------|-------|----------|
| | POSITIVE | | | | | NEGATIVE | | | | |
| | Mean | S. Dev. | Med. | Score | α | Mean | S. Dev. | Med. | Score | α |
| Male | 2.89 | ±0.93 | 3 | 31.88 | 0.82 | 2.13 | ±0.92 | 2 | 21.35 | 0.71 |
| Female | 2.72 | ±1.01 | 3 | 30 | | 2.30 | ±0.79 | 2 | 23.00 | |
| Total | 2.86 | ±0.95 | 3 | 31.52 | | 2.16 | ±0.89 | 2 | 21.66 | |

Referent the attitudes, in total group there is a significant difference between positive and negative attitudes ($p=0.001$), so the total group have a positive way to leading with the sports competition. In female group, there is no significant difference between positive and negative attitudes ($p=0.03$), so we cannot say that the girls really like the sports championships, but there is a tendency for them to like competition if we look the median (Table 02).

The male group, when we compare the positive and negative attitudes, there is a significant difference ($p=0.001$), so definitively boys like more the competitions than girls do.

Comparing the mean of negative attitudes between genders there's no significant difference ($p=0.255$), so they see the negative points of the competition in the same way, the median are 2 for both. For positive attitudes the difference is not significant also ($p=0.284$)

In the first testing of the instrument with 260 younger athletes the average results was 2.52 (± 0.86) to negative and 4.66 (± 0.84) was determined for positive (Hirota et al., 2014b).

The mean stress of the group was 2.66 (± 0.48), score total of 82.71; the male mean was 2.61 (± 1.29) with a score of 81 while the female has a mean of 2.90 (± 1.50) with a score of 90 (see Table 03).

Table 03: Results of Mean, Standard Deviation, Median, Score and Alpha's Cronbach by Gender of Stress Pre-Competitive.

| STRESS (LSSCPI) | | | | | |
|-----------------|------|------------|------|-------|----------|
| Gender | Mean | S. Dev. | Med. | Score | α |
| Male | 2.61 | ± 1.29 | 3 | 81 | 0.89 |
| Female | 2.90 | ± 1.50 | 3 | 90 | |
| Total | 2.66 | ± 0.48 | 3 | 82.71 | |

According to the results of mean, there is a significant difference between the gender ($p=0.03$), so the girls have more pre-competitive stress than the boys. First, because girls are younger than the boys are and second they have less experience in competitions. However, as we can see in the median results, both have three, as the role group.

The athletes participating in competitions often have advantages over the athlete who do not participate in competitions with the control of stress before and during the competition (De Rose Jr., Korsakas & Deschamps, 2001).

In this way, the motivation, stress and anxiety are directly connected to sport performance, which can be decisive when facing the

victory as the failure during sports competition. The guidance could be adjusted as the environment of learning, so students can take the guidance as atmosphere created by the teacher (Duda, 1989).

In sports, the success, perspective should be create sports training centers, exploring age groups, genders and different skill levels to better develop the fights in the formative context of struggles (Franchini & Del Vecchio, 2011).

Establishing the correlation between task orientation and positive attitudes, only in females, was found evidence of an moderate and significant correlation ($\rho=0.406$, $p=0.03$); Another correlation was detected from the level of stress and task orientation ($\rho=0.455$, $p=0.01$), and the level of stress and ego orientation, there is also a moderate and significant correlation ($\rho=0.518$, $p=0.01$), thus demonstrating that no matter the cases of motivation, girls suffer from pre competitive stress.

Regarding ego orientation and negative attitudes the correlation is strong but not significant ($\rho=0.870$, $p=0.686$), i.e., the negative factors have connection with guidance to ego, where athletes tend to be more insecure, less persistent and give up more easily.

In recent study with 207 athletes who participate in school sports competitions, aged between 14-18 years old, girls are more stress than boys are significantly; correlation between stress and the positive attitude proved a weak and negative result; thus, students who have higher positive attitudes invariably tend to have a more controlled level of stress (Hirota et al., 2014c).

The other correlations were weak and not significant in males, negative correlation between task orientation and negative attitudes ($\rho=-0.117$); weak and positive guidance between guidance to ego and negative attitudes ($\rho=0.148$), results that justify these in the direction of correlation of variables.

The extent that the results of positive attitudes increase, negative attitude decreases, so more students who like to compete in sports, tend to have less negative attitudes (Hirota, 2014b).

We can conclude that with all applied instruments, female athletes have emotional alteration that can bring in their competitive results since the pre competitive stress was correlated most other

characteristics. The characteristics related to stress tend to affect the development of a positive orientation as the orientation characteristics to task, which lead athletes to work harder and be aware of their skills; they are more persistent, self-confident and give a clear direction to the positive performance during training and during competitions.

References

1. Bebetos, E., Zetou, E. & Antoniou, P. (2014). How does parental motivational climate differentiate athletic experience? *Journal of Physical Education and Sport* (JPES), 14(4): 526 – 531.
2. Brito, M. R. F. (1998). Adaptation and Validation of a Scale of Attitudes towards Mathematics. *Zetetiké Journal*, 6 (9).
3. De Rose Jr. D. (1998). List of symptoms of “stress” pre competitive Children and Youth: development and validation of an instrument. *Paulista Journal of Physical Education and Sports*, 12 (2): 126-133.
4. De Rose Jr., D., Korsakas, P. & Deschamps, S. R. (2001). The game as a source of stress in children and youth basketball, *Portuguese Journal of Sport Sciences*, 1(2): 36-44.
5. Duda, J. L. (1989). Relationship between task and ego orientation and perceived purpose of sport among high school athletes. *Journal of Sport & Exercise Psychology*. 11: 318-335.
6. Duda, J. L. (1992). Motivation in Sport Settings: A Goal Perspective Approach. In Roberts, G. C. *Motivation in Sport and exercise*. Illinois, Human Kinetics Books.
7. Duda, J.L. & Whitehead J. (1998). Measurement of Goal Perspectives in the Physical Domain. In Duda, J. L. (Eds.). *Advances in Sport and Exercise Psychology Measurement*. Fitness Information Tecnology.

8. Fonseca, A. & Balagué G. (2001). Assessment of the objectives of achievement in youth football competition: comparison and TEOSQp POSQp. In: Fonseca, A. M. (ed.) *Studies on motivation*. Faculdade de Ciências do desporto.
9. Franchini, E. & Del Vecchio, F. B. (2011). Studies in sports fighting: state of the art. *Brazilian Journal of Physical Education and Sport*, 25(spe): 67-81.
10. Hirota, V. B. & De Marco, A. (2006). Identification of the motivational climate in public and private schools in sports learning in football field: a pilot study. *Brazilian Journal of Physical Education and Sports*, 20 (5): 415.
11. Hirota, V. B., Schindler, P. & Villar, V. (2006). Motivation in university athletes practicing female soccer field: a pilot study. *Mackenzie Journal of Physical Education and Sports*, 5(3): 135-142.
12. Hirota, V. B., Tragueta, V. A. & Verardi, C. E. L. (2008). Level of Stress Pre-Competitive in Practicing University Athletes of the Feminine Sex of the Futsal. *ConexõesJournal*, 6: 487-497.
13. Hirota, V. B., Hayashi, D. H., De Marco, A. & Verardi, C. E. L. (2011). The influence of motivational orientation during training of novice athletes in tennis field. *Mackenzie Journal of Physical Education and Sports*, 6 (3): 11-20.
14. Hirota, V. B. (2014). Goal's orientation of Brazilians skateboarders. *Journal of Physical Education and Sport Management*, 5(1): 1-4, Doi: <http://dx.doi.org/10.5897/JPESM2012.015>
15. Hirota, V. B., Touri, A. F., Ferreira, M. V. S. & Leite, P. S. (2014a). Goal's orientation of Brazilian's Youngers school's sports players. *International Journal of Physical Education, Sports and Health*, 1(2), p. 1-5.
16. Hirota, V. B, Diniz, D. V., Silva, M. R., Lima, R. O, Verardi, C. E. L & De Marco, A. (2014b). Initial Stages of Attitude's Instrument Adaptation to Brazilian Sports Competitions. *International Journal of Physical Education, Sports and Health*, 1(1): 10-13.

17. Hirota, V. B., Diniz, D. V., Silva, M. R. & Lima, R. O. (2014c). Situations of stress pre-competitive of young Brazilian's athletes. *ARENA - Journal of Physical Activities*, 3: 97-104.
18. Hirota, V. B., Verardi, C. E. L., De Marco, A. (2016a). Reliability Analysis of Pre-Competitive Stress Instrument of Young Brazilians Soccer Players. *European Journal of Physical Education and Sport Science*, 1,39-46.
19. Hirota, V. B., Anjos, R. M. M., Ferreira, E. N. G., De Marco, A. (2016b). The first test of attitudes instrument for sports competition in athletics. *Journal of Physical Education Research (JOPER)*, 3, 10-17.
20. Hirota, V. B., Diniz, D. V., Arroxellas, R. D., De Marco, A., Verardi, C.E.L., Seabra, A. G., Paula, C. S. (2016c). Instrument Motivation Application in Disabled Boccia Athletes: A Pilot Study. *Cadernos de Pós Graduação em Distúrbios do Desenvolvimento (Online)*, 16, 8-15.
21. Huffman, K., Vernoy, M. & Vernoy, J. (2003). *Psychology*. São Paulo: Atlas.
22. Klain, I. P., Cid, L., Matos, D. G., Leitão, J. C., Hickner, R. C. & Moutão, J. (2014). Motivational climate, goal orientation and exercise adherence in fitness centers and personal training Contexts. *Motriz*, Rio Claro, 20(3): 249-256.
23. Lens, W., Matos, L. & Vansteenkiste, M. (2008). Teachers as sources of students' motivation: About the what and the why of student learning. *Education*, 31(1): 17-20.
24. Lopez-Walle, J., Tristan, J., Tomas, I., Castillo, I. & Balaguer, I. (2011). Invarianza factorial del teosq en jóvenes deportistas mexicanos y españoles. *Mexican Journal of Psychology*, 28 (1).
25. Machado, A.A. (1997). *Sport Psychology: Emerging themes I*. Ápice: Jundiaí, São Paulo.
26. Marante, W. & Ferraz, O. (2006). Motivational climate and physical education: respect and pedagogical implications. *Motriz*, Rio Claro, 12(3): 201-216.

27. Matias, T. S., Rolim, M. K. S, Kretzer, F. L., Schomoelz, C. P. & Andrade, A. (2010). Corporal satisfaction associated with physical activity practice during adolescence. *Motriz*, 16(2): 370-378.
28. Nicholls, J. G. (1984). Achievement motivation: Conceptions of ability, subjective experience, task choice, and performance. *Psychological Review*, 91: 328-346.
29. Pasquali, L. (1998). *Psychological instruments: a practical manual drafting*, Brasília, D.F.: Lab PAM.
30. Thomas, J. R. & Nelson, J. K. (2002). *Research methods in physical activity*. Porto Alegre: Artmed.
31. Weinberg, R. S. & Gould, D. (2001), *Fundamentals of Sports Psychology and exercise*, Artmed, Porto Alegre.
32. Winterstein, P. J. (2002). The Motivation for Physical Activity and Sport. In De Rose Jr., D. *Sport and Physical Activity in Childhood and Adolescence: A Multidisciplinary Approach*, Artmed, Porto Alegre.
33. World health organization (WHO). (2002). World Medical Association Declaration of Helsinki, Ethical Principles for Medical Research Involving Human Subjects. *Bulletin of the World Health Organization*, 79 (4).