

## Motivation Instrument First-Testing On Brazilian'S Rugby Players

Vinicius Barroso Hirota<sup>1</sup>, Sidney Rodrigues<sup>2</sup>, Beatriz Regina Pereira Saeta<sup>3</sup>

<sup>1</sup>department Of Physical Education Mackenzie Presbyterian University And Nossa Cidade College,

São Paulo, Brazil

Researcher Member Of The Brazilian Paralympic Academy

&

<sup>2</sup>department Of Physical Education Mackenzie Presbyterian University

&

<sup>3</sup>psychologist, Mackenzie Presbyterian University

### ABSTRACT:

*The aim of this study was testing the TEOSQ instrument reliability in 59 male Brazilian's rugby players of São Paulo City – Brazil, and comparing the results of three rugby team's goals orientation; the statistical procurement was calculating Alpha's Cronbach coefficient, the average of task and ego orientation of each team comparing the results by the Man Whitney testing. The results shows the instrument stability by Alpha's task orientation 0.71 and Alpha's ego orientation in 0.70, counting the average of 4.37(±0.81) and 2.04 (±1.08) respectably. As we can confirm the Brazilian's rugby players are directed to task orientation demonstrating more security in their motor ability skills, playing for the team group, and looking for learning more for the greatest performance, concluding that the testing instrument shows stability and reliability.*

**Keywords:** Motivation; Rugby; Goals Orientation; Evaluation.

### INTRODUCTION

Cruz-Ferreira and Ribeiro (2013a) emphasize that rugby is a fast-growing sport in different countries of the world there, around this mode, an increasing attention from the media and the public, making it more competitive and exciting for everyone those who are involved. The same authors (2013b), in the wake of the study showed

that Portuguese semiprofessional athletes trained significantly more times per week than the amateurs, both in number of field training as a gym.

However, among the factors related to training are the physical variables, motor, technical, tactical and psychological variables, the latter one object of this study and of no less

importance, since for that to happen to sports practice and improved performance should motivation exists.

Thus Samulski (2002) says that motivation is characterized as an active, intentional and directed to a target process, which depends on internal factors (personal) and external factors (environmental).

So motivational process presents different ways of being triggered and is known extrinsic and intrinsic factors may vary according to the likelihood of success that an individual can or is able to achieve.

Therefore Huffman et al. (2003) defines motivation 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.

According to Nicholls (1989) the variation in the achievement of individual goals match the variations in their way of understanding the contexts that surround them, especially with regard to the meaning and function of their activities held thus being the thoughts and actions people in certain activities are rational expressions of their individual achievement of objectives. therefore the cognitive orientations of individuals in relation to a particular activity will influence their motivation for that same activity.

Fonseca e Balagué (2001) report that social cognitive approach, in turn, to assess the

achievement of objectives, takes on the existence of two goals motivational orientation or achievement goals. The first one defined as goal of ego orientation, when a person is oriented primarily to show more yield than others are, and the second is goal calls task orientation, when the orientation is linked to learning or performing a task with skill (Duda, 1993).

Smith et al. (2006) report that several strategies have been used by sports psychologists to examine combinations of task and ego regarding achieving the goal orientations; even participants with high and moderate goal orientation reported more desirable responses on motivational indices.

Stuntz and Weiss (2009) report that rugby players with high scores of task goal and also elevated scores of ego goal gets higher competence in rugbyby owning a better physical self-concept, concluding that versatile players using different ways to define success in sport have a higher score pleasure, self-perception, challenge and motivation.

Hodge et al. (2008) portrays that as with expected there is a positive relationship between task orientation and intrinsic motivation, leading to more positive performance effect, concluding that there is an attempt to unravel some of the complexities of motivation in relation to difference factors individual, specifically social and reason held.

On top of this problem motivational goal orientation and performance of rugby players, the objective of the study is to show the validity of

		AGE	COEFFICIENT
TEAMS	N	AVERAGE	OF VARIATION
<b>TEAM1</b>			
(T1)	24	23.91 ( $\pm 2.38$ )	9.95%
<b>TEAM2</b>			
(T2)	18	22.94 ( $\pm 4.11$ )	17.91%
<b>TEAM3</b>			
(T3)	17	28.05 ( $\pm 6.36$ )	22.67%
<b>TOTAL</b>	<b>59</b>	<b>24.55 (<math>\pm 4.91</math>)</b>	<b>17.14%</b>

Task and Ego Orientation in Sport Questionnaire (TEOSQ); first-testing the instrument in the modality of Brazilian amateur in rugby thus enabling to verify the reliability of the instrument within three amateur teams from São Paulo - Brazil.

## METHOD

This article is focus on an experimental study (Thomas and Nelson, 2002), the procedures for data collection were established by maintaining contact with the leader of each team, leading the Consent Informed athletes and so everyone was in agreement and opting to volunteering the study, they answer the following research instrument; the study did not result in extra spending by the assessed, because the data collection was taken during training teams, over a week.

The population was selected conveniently; all participants were from the City of São Paulo –

Brazil. First, there were invitations for about ten leaders of the sport teams and only three have opened their doors in order to provide space for evaluating their athletes. The teams, all male, were divided and named as shown in the following table 01:

**TABLE 01:** Number of participants, age average, standard deviation and coefficient of variation of the teams.

According to the subjects involved in the study can be seen by the coefficient of total variation that the group is within the ideal, so not showing high dispersion of the data, so with a homogeneous group in relation to the total age group (17.14%).

The instrument used was the TEOSQ (Duda, 1992) where the participants considers their level of competence, and according to Duda (1992) the purpose of the instrument is to assess individual differences in perspective of the goal set to sport (in this case the rugby), detecting whether the individual is task or ego goal oriented. The choice in working with this instrument is that it has shown validity in different countries with different languages (Duda, 1992; Duda and Whitehead, 1998; Chi, 1997; Kim and Seong, 1997; Fonseca and Balagué, 2001; Lopez-Walle et. al, 2011)

The TEOSQ in Brazil was translated, adapted and tested, and used in different

researches (Hirota et al., 2006a; Hirota and Tragueta, 2007; Camargo et al., 2008; Hirota et al., 2009; Hirota et al., 2011a; Hirota et al., 2011b; Hirota et al., 2012; Hirota et al., 2013; Hirota, 2014) in order to present reliability and validity in different contexts of sports.

The questionnaire consists of 13 questions, with 07 questions directed to the task orientation and 06 questions for the ego orientation, through a Likert scale that possible response options for each track 1-5 points.

As statistical treatment we adopt the calculations of *Alpha's Cronbach Coefficient*, to testing the reliability of the scale, and also for showing comparative results with other studies we calculated the descriptive statistical demonstrating the average, standard deviation referring to each orientation (task orientation and ego orientation). For comparing the average between task and ego orientation we applied the Man Whitney test ( $p \leq 0.05$ ), looking for some possible differences between ages.

## RESULTS AND DICUSSION

Following the statistical method, the results of *Alpha's Cronbach* reliability shows that the instrument presents suitable, as we can see in Table 02, demonstrating that by the task orientation we had 0.70 and by the ego orientation we had 0.71, remembering that the maximum value is 1.0. Morgan and Griego (1998) suggest

that a good result would be an Alfa index above 0.70, so being accurate and reliable when it comes to evaluating.

following the aim of the study as we can see the averageresults of task and ego orientation ( $4.37 \pm 0.81$  of task and  $2.04 \pm 1.08$  of ego respect) seems to be correspondent to others studies with Brazilian's sport players (Hirota et al., 2011a; Hirota et al., 2011b; Hirota et al., 2012; Hirota et al., 2013; Hirota, 2014).

In 1992 Duda, in theirs first studies, they obtained an *Alpha's* coefficient of 0.72 for task and 0.82 for ego orientation, in its retest after three weeks had alpha's of 0.68 for task and 0.75 for ego orientation.

Therefore, following the stability of the instrument we can say that it contains internal consistency, so it can be reproducible, even though the number of participants of this study was low, and it can be expanded.

**TABLE 02:** Mean age, *Alpha's Cronbach*, average and median of task and ego orientation.

Orientation	Age (years)	N	<i>Alph a</i>	Average	Media n
TASK	24,55	59	0.70	4.37 ( $\pm 0.81$ )	5
EGO	( $\pm 4.95$ )		0.71	2.04 ( $\pm 1.08$ )	2
<b>Test "U"</b>				0.000*	

\*significant difference

Observing the average results, there is a significant difference between task and ego orientation, so we can consider that these rugby players has more characteristics of task orientation. These players presented to work hard and more, they have more control in their motor skills, presenting self-reference in their actions, and these players are looking for the exactly way to have success, going on systematically, on their carriers. According to Duda (1992), task-oriented individuals are concerned with the demonstration of learning and mastery of the task; they direct the behavior of accomplishment.

These values were confirmed by the median results that proved that in this Likert scale the bigger value were reached on task goal orientation.

**TABLE03:** Number of participants, Mean age, average of task and ego orientation of Team 1 to Team 3

ORIENTATION	TEAM		
	TEAM 1	2	3
<b>N</b>	24	18	17
<b>AGE</b>	23.29 (±2.38)	22.94 (±4.11)	28.05 (±6.36)
<b>TASK</b>	4.42 (±0.74)	4.46 (±0.71)	4.21 (±0.98)
<b>EGO</b>	2.23 (±1.03)	2.17 (±1.21)	1.62 (±0.88)
<b>Test "U"</b>	0.000*	0.000*	0.000*

\*significant difference

As we can see on the Table 03 the age average on the T3, the participant's looks like to be older than the T1 and T2. It can affect the results of the goals orientation; we are talking about of having more experience in rugby.

Looking for differences between the teams following the difference of ages, the hypothesis was that the order's rugby players had more task characteristics, comparing these means the results had assessed no difference between T1 and T2 ( $p=0.768$ ), T1 and T3 ( $p=0.130$ ), T2 and T3 ( $p=0.095$ ), considering that all Brazilian's rugby players tested has task orientation approximated with no statistics difference.

However, investigating the ego orientation, we can see that comparing T1 with T2 the average results are almost similar (see Table 03) with no sign cant difference ( $p=0.340$ ); comparing T1 with T3 there is a significant difference ( $p=0.001$ ) and the same result was examined comparing T2 with T3 ( $p=0.000$ ), so a significant difference in ego orientation.

Establishing a correlation with age and ego orientation in T1 the result of correlation is positive, but weaker ( $p=0.103$ ), remembering that T1 had the higher ego's average. In T2 and T3 we had negative and weaker correlation ( $p= -0.059$  and  $p= -0.168$ , respectively), whereas we can suppose that how savvy these rugby players have a decrease in ego orientation, beholding what says Winterstein (2002) that Individuals with

expectation of success, or task orientation, have more control of their skills, believe in their effort, are more independent and are more competitive and persistent. In total group the correlation with ego orientation and age is negative and weak ( $p = -0.219$ ).

We can conclude that the instrument testing had a good performance, comparing with others study's, and with the results that the instrument offers about these rugby players, so they are task oriented. In fact, we need to get on testing the instrument with more athletes, in other to have more results about rugby players, looking over that this modality is growing in Brazil.

## REFERENCES

- Camargo FP, Hirota VB, Verardi CEL (2008). Motivational orientation in the futsal sporting learning at school. *Revista Mackenzie de Educação Física e Esporte (Online)*, 7 (3): 53-52.
- Chi L (1997). The relationships of task and ego orientation to intrinsic motivation, extrinsic motivation and motivation among tennis players. In: IX World Congress of Sport Psychology – Innovations In Sport Psychology: Liking Theory and Practice. Israel, July.
- Cruz-Ferreira AM, Ribeiro CAF (2013a). Anthropometric and physiological profile of Portuguese rugby players - Part I: comparison between athletes of different position groups *Rev. Bras. Med. Esporte*, 19 (1): 48-51.
- Cruz-Ferreira AM, Ribeiro CAF (2013b). Anthropometric and physiological profile of Portuguese rugby players - Part II: comparison between athletes with different competitive levels. *Rev. Bras. Med. Esporte*, 19 (1): 52-55.
- Duda JL (1992). Motivation in Sport Settings: A Goal Perspective Approach. In Roberts GC. *Motivation in Sport and exercise*. Illinois: Human Kinetics Books.
- Duda JL (1993). Goals: a social cognitive approach to the study of achievement motivation in sport. In: Singer RN, Murphy M, Tennant LK (Eds.). *Handbook on research in sport psychology*. New York: MacMillan.
- Duda JL, Whitehead J (1998). Measurement of Goal Perspectives in the Physical Domain. In Duda JL (Eds.). *Advances in Sport and Exercise Psychology Measurement*. Fitness Information Technology.
- Fonseca A, Balagué G (2001). Assessment of the objectives of achievement in youth football competition: comparison and Toes POSQp. In: Fonseca AM (ed.) *Estudos sobre motivação*. Faculdade de Ciências do desporto.
- Hirota VB, Schindler P, Villar V (2006a). Motivation on university female soccer's player's practitioner: a pilot study. *Revista Mackenzie de Educação Física e Esporte*, 5 (3): 135-142.
- Hirota VB, De Marco A (2006b). Identification of motivational climate in public and private sports schools in soccer: a pilot study. *Revista Brasileira*

de Educação Física e Esporte, V. 20 (Suple. 05): 415.

Hirota VB, Tragueta VA (2007). Verification of the motivation climate in futsal female athletes: a study with the task and ego orientation in sport questionnaire (TEOSQ). *Revista Mackenzie de Educação Física e Esporte (Online)*, 6 (3): 207-213.

Hirota VB, De Marco A, Verardi CEL (2009). Evaluation of motivational orientation of young athletes in soccer *Revista Mackenzie de Educação Física e Esporte (Online)*, 8 (2): 35-37.

Hirota VB, Verardi CEL, De Marco A (2011a). Motivation in the selection process of talent in soccer. In: 13 FEPSAC - European Congress of Sport Psychology, 2011, Ilha da Madeira - Portugal. *Sport and Exercise Psychology: Human Performance, Well-being and Health*.

Hirota VB, Hayashi DH, De Marco A, Verardi CEL (2011b). The motivational's orientation influence during the tennis athletes beginners training. *Revista Mackenzie de Educação Física e Esporte (Online)*, 10 (2): 11-20.

Hirota VB, Verardi CEL, De Marco A (2012). Motivation of goals orientation in basketball modality. *Educação Física em Revista (Brasília)*, 6 (3): 1-9.

Hirota VB, De Marco A, Verardi CEL, Gomes RM, França E (2013). Evaluation of motivational goals orientation in soccer. *Motrivivência (Florianópolis)*, 40(1): 67-79. Doi:

<http://dx.doi.org/10.5007/2175-8042.2013v25n40p67>

Hirota VB (2014). Goals orientation of Brazilians skateboarders. *Journal of Physical Education and Sport Management*, 5 (1): 1-4. Doi: <http://dx.doi.org/10.5897/JPESM2012.0158>

Hodge K, Allen JB, Smellie L (2008). Motivation in Masters Sport: Achievement and social goals. *Psychology of Sport and Exercise*, 9 (2): 157-176.

Huffman K, Vernoy M, Vernoy J (2003). *Psychology*. São Paulo: Atlas.

Kim BJ, Seong CH (1997). Participation motivation, enjoyment, and stress in Korean youth sport. In: IX World Congress of Sport Psychology – Innovations in Sport Psychology: Liking Theory and Practice. Israel, July.

López-walle J, Tomás I, Castillo I, Tristán J, Balaguer, I (2011). Invarianza Factorial del Teosq en Jóvenes Deportistas Mexicanos Y Españoles. *Mexican Journal of Psychology*, 28(1): 53-61.

Morgan GA, Griego OV (1998). Easy use and interpretation of SPSS for Windows. Answering research questions with statistics. Lawrence Erlbaum Associates: New Jersey.

Nicholls JG (1984). Achievement motivation: conceptions of ability, subjective experience, task choice, and performance. *Psychological Review*, 91.

Samulski D (2002). *Sport psychology*. Barueri: Manole.

Smith AL, Balaguer I, Duda JL (2006). Goal orientation profile differences on perceived motivational climate, perceived peer relationships, and motivation-related responses of youth athletes. *Journal of Sports Sciences*, 24 (12): 1315-1327.

Stuntz CP, Weiss MR (2009). Achievement goal orientations and motivational outcomes in youth multidisciplinary approach. Porto Alegre: Artmed.

sport: The role of social orientations. *Psychology of Sport and Exercise*, 10 (2):255-262.

Thomas JR, Nelson JK (2002). *Research methods in physical activity*. Porto Alegre: Artmed.

Winterstein PJ (2002). Motivation for physical activity and sport. In De Rose Jr D. *Sport and physical activity in childhood and adolescence*: