ABOUT JPESM

Journal of Physical Education and Sport Management (JPESM) is published twice a month (one volume per year) by Academic Journals.

Journal of Physical Education and Sport Management (JPESM) is an open access journal that provides rapid publication (monthly) of articles in all areas of the subject such as physical fitness, sports agent laws, sport organization, health care etc.

The Journal welcomes the submission of manuscripts that meet the general criteria of significance and Scientific excellence. Papers will be published shortly after acceptance. All articles published in JPESM are peer-reviewed.

Contact Us

Editorial Office: jpesm@academicjournals.org
Help Desk: helpdesk@academicjournals.org
Website: http://www.academicjournals.org/journal/JPESM
Submit manuscript online http://ms.academicjournals.me/.
Editors

Prof. Chung Pak-kwong  
*Head, Department of Physical Education*  
Hong Kong Baptist University,  
Hong Kong.

Prof. Nader Rahnama  
*Department of Nutrition, Food*  
and *Exercise Sciences,*  
424 Sandels Building,  
Florida State University,  
Tallahassee, FL 32306,  
USA.

Dr. Van Hung  
*College of Education, Vietnam*  
National University, Hanoi  
CauGiay Dist, Hanoi,  
Vietnam.
ARTICLES

Research Article

Goal orientation of Brazilian skateboarders
Vinicius Barroso Hirota

Psychological profiles of talented male youth athletes in team Sports games
Guelmami N.1*, Hamrouni S.2 and Agrébi B.2
Full Length Research Paper

Goal orientation of Brazilian skateboarders

Vinicius Barroso Hirota

Department of Physical Education, Mackenzie Presbyterian University and Nossa Cidade College, São Paulo, Brazil.

Received 13th December 2012, Accepted 6th February 2014, Published April 2014

The aim of this research is to evaluate the goal orientation (task and ego) of skateboarders based on a descriptive research. We evaluate thirty one male skateboarders aged between 12 to 30 years (age average: 19.54 ± 4.98), who live in São Paulo City, Brazil. They answered the TEOSQ (Task and Ego Orientation in Sport Questionnaire), and the results showed that the average for task orientation was 4.47 ± 0.34; median, 5; and for ego orientation the result was 2.47 ± 0.61; median, 3. The general results show there is significant difference between task and ego orientation in the total group, and separately by ages. We conclude that the task orientation was the tendency of these group to always work together for learning new skills and training their ability; so these sportsmen have more security in their actions and behavior; they have feeling of success constantly and more self-control.

Key words: Skateboard, evaluation, goals orientation.

INTRODUCTION

In Brazil, the practice of alternative sports proves to be growing daily in adolescents and young adults as well. Acosta (2012) reports that the culture of body movements should be understood as a sum of values, customs, knowledge and behavior; and in his work mode of skateboarding as well as other modalities is being incorporated.

However, we hypothesize that because of the diversity of materials and movements that skateboard require, one needs to be motivated to practice and has to persist in the practice, due to the complexity of motion.

Scander (2009) concludes that the primary factor based on the choice of this sport by its practitioners is, first, to increase their adrenaline after overcoming fear and exceeding preset limits, ending with friendships won and popular locations because of skateboarding.

We asked what kind of goal orientation each practitioner has. The first is task orientation, which is how can a person work hard to learn some new maneuvers; Do they like to learn new skills, and evaluate their competences during the practice? And the other kind of goal, ego orientation represents people who are very worried about the defeat of their opponent; they are individualists and very competitiveness, and these kind of practitioners cannot evaluate their skills and the level of their ability (Winterstein, 2002).

With the idea of evaluating the goals orientation, Duda and Nicholls (1998) and Duda (1992) developed an instrument (TEOSQ – Task and Ego orientation in sport questionnaire) for measuring and analyzing individual differences achievement orientation in sport. Duda (1992) emphasizes that the premise is that people can perform different activities to get self-realization with focus on different goals, in order to self-adjust in their activities.

Since 1992 the TEOSQ has been used by different investigators in many countries and it has been adapted from different languages and one of the last validation

*Corresponding Author. E-mail: vhirota@mackenzie.com.br. Tel: (0xx11) 3555-213.1

Author(s) agree that this article remain permanently open access under the terms of the Creative Commons Attribution License 4.0 International License
was from Spanish language, in Mexico (Lopez-walle et al., 2011). So for the Portuguese language from Portugal Fonseca and De Paula Brito (2005) presented the validity and in Brazil we have been working on it since 2006, across different sports with the reliability analysis of Alphas coefficient (Camargo et al., 2008; Hirota et al., 2009, 2011a, 2011b).

Castillo et al. (2010) tested the Measurement Invariance and Latent Mean Differences in Spanish and Portuguese Adolescents, and the TEOQ can be considered to operate equivalently across Spanish and Portuguese adolescents. The purpose of this research was to test the reliability of the scale TEOQ - Task and ego orientation in sport questionnaire - and evaluate the goal orientation of the Brazilian skateboarders.

METHODS AND INSTRUMENTS

This research was based on a descriptive research (Thomas et al. 2002) where we applied the instrument TEOQ. The first step of this study was to make contact with the association where the skateboarders train; so we have to sign the Term of Consent of the Institution of Barueri City – São Paulo, Brazil. Concluding this first contact, the second step was to contact the skateboarders and have them signed the consent form, conforming to the ethics in research. If the skateboarders were under eighteen years old, their parents should consent to let them participate in the research.

The instrument

TEOSQ was designed by Duda (1992) and translated, adapted and validated to Portuguese by Hirota and De Marco (2006). The choice of the instrument was based on the evidences of reliability during the years and the purpose was to test a new modality like skateboard. The questionnaire consists of 13 questions: 07 questions directed to the task orientation and 06 questions, the ego orientation; using likert scale from 1 to 5 points. The answers indicated in a 5-point Likert-type scale where: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree. Mean scale score for Ego Orientation = (E1 + E2 + E3 + E4 + E5 + E6)/6. Mean scale score for Task Orientation = (T1 + T2 + T3 + T4 + T5 + T6 + T7)/7 (DUDA, 1992).

On the TEOQ, the maximum score that a guy can get guidance for the task orientation is 35 points and the minimum for the same orientation is 7 points. For ego orientation, the maximum points scored can be 30 with a minimum of 6 points, so the total can add be 65 points; only 13 points among the least agree to disagree very much with the propositions represented in the following form:

When do you feel most successful in sport? In other words, when do you feel sport activity has gone really good for you?

I feel most successful in sport when...

<table>
<thead>
<tr>
<th>TASK</th>
<th>strongly disagree</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>07..................................................................................................35</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ego

06..................................................................................................30

Sample

A convenience sample composed by thirty one male (N:31) skateboarders, aged between 12 to 30 years (age average: 19.54 ±4.98) that practice this modality every day answered the TEOQ scale; all of them live in Barueri, São Paulo, Brazil. They all live in the country and ride by skate using it as a lifestyle. The youngsters seem to be doing their best looking for championships and using this sport as a means of labor, in order to become professionals in sport.

Statistical treatment

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 including 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=0.05), looking for some possible differences between ages.

RESULTS AND DISCUSSION

As we could see by the collected data the result of Alpha Coefficient is significant compared to others studies (Duda, 1989, 1992; Newton and Duda, 1993; Duda and Whitehead, 1998; Hirota and De marco, 2006). The skateboarders showed us that they understood the questions in the scale and the results are comparable with the literature. As we can see, the total subjects that are involved in this present research have task direction (average of 4.47 ±0.34); this difference is significant compared to ego orientation (2.47 ±0.61); referring to the median, these values are similar.

Comparing with Castillo et al. (2010), the alpha coefficient of task orientation of Portuguese group was 0.78 and ego’s alpha was 0.85. Fernandes et al. (2012) show 0.79 of alpha’s ego and 0.77 of alpha’s task orientation.

Observing the results of ego alpha cronbach if some items were deleted, we can see that in questions 6 and 9, the results of alpha will increase by 2 points, reaching 0.66. The same treatment was observed with task orientation, where the main question was number 5 (“I learn a new skill by training hard”); and we observed that if this item was deleted the results of task’s alpha will increase to 0.70.
Table 1. Alpha’s cronbach results, average, standard deviation, median and mode of total skateboarder’s group.

<table>
<thead>
<tr>
<th>Orientation</th>
<th>Age (years)</th>
<th>N</th>
<th>Alpha</th>
<th>Average</th>
<th>Standard D.</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>12 to 30</td>
<td>31</td>
<td>0.68</td>
<td>4.47</td>
<td>±0.34</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Ego</td>
<td>12 to 30</td>
<td>31</td>
<td>0.64</td>
<td>2.47</td>
<td>±0.61</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Test &quot;U&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.000*</td>
</tr>
</tbody>
</table>

*Significant difference.

Table 2. Alpha’s cronbach, average, standard deviation, median and mode referring to task and ego orientation of skateboarders aged between 12 and 17 years.

<table>
<thead>
<tr>
<th>Orientation</th>
<th>Age (years)</th>
<th>N</th>
<th>Alpha</th>
<th>Average</th>
<th>Standard D.</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>12 to 17</td>
<td>11</td>
<td>0.73</td>
<td>4.54</td>
<td>±0.56</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Ego</td>
<td>12 to 17</td>
<td>11</td>
<td>0.72</td>
<td>2.47</td>
<td>±0.83</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Test &quot;U&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.000*</td>
</tr>
</tbody>
</table>

*Significant difference.

Table 3. Alpha’s cronbach, average, standard deviation, median and mode referring to task and ego orientation of skateboarders aged between 18 to 30 years.

<table>
<thead>
<tr>
<th>Orientation</th>
<th>Age (years)</th>
<th>N</th>
<th>Alpha</th>
<th>Average</th>
<th>Standard D.</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>18 to 30</td>
<td>20</td>
<td>0.62</td>
<td>4.44</td>
<td>±0.61</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Ego</td>
<td>18 to 30</td>
<td>20</td>
<td>0.61</td>
<td>2.48</td>
<td>±0.98</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Test &quot;U&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.000*</td>
</tr>
</tbody>
</table>

*Significant difference.

However, observing our results, it seems possible to review the instrument on each specific question, especially because of the kind of radical sport. In testing the differences in Brazilian sports modalities we noted that the translation of the instrument stills needs some adaptations (Table 1).

The skateboarders aged between 12 to 17 years; task orientation average was 4.54 ±0.56. The value was more significant than that of ego orientation; but the values of median is the same for the total group (Table 2).

In Table 3, the results of goal orientation from the age between 18 to 30 years are similar to the group of 12 to 17 years; when we look at the median (3 for ego orientation and 5 for task orientation), there is some significant difference between task and ego orientation. These results showed that as they meet every day and practice together their ways of thinking about learning new skills are the same.

Discussing separately task orientation from the different ages, there is no significant difference between the groups, also in the median is the same. Looking for some difference in ego orientation, the group does not have significant difference and the median is three.

Looking for some comparative research, Hirota et al. (2011a), during tennis field sports learning, demonstrated ego orientation of 2.42 (±0.85) and task orientation of 4.20 (±0.93); competitive values, thinking that both sports, skateboard and tennis are also playing individually.

So, in all the tests we saw that the median of the group is 5, for task orientation, revealing that the skateboarders have a tendency to be more independent in their action; they have feeling of success because they are more persistent, they have more self-control, take responsibility for their actions; these skateboarders want to give help to their companions, if it is necessary, and believe in their effort.

The construction of new skills is always doing together with the group, so the ego characteristics are refuted and the task allocation random success is not put into
account. It means they know what they are doing.

Conclusion

Considering the findings of goal orientation, we can say that the skateboarders have task choice. The instrument (TEOSQ) presents reliability just above other studies. But in other studies, the skateboarders need to have more references and demonstrate evidences of validation of the instrument; issues of instrument should be revised. These kinds of sportsmen seem to be more persistent, they always want to learn something new, choose different kinds of ways to learn a new ability; so they can measure they effort, and also have references of their skills, to have the best performance. The practice of skateboard lets the people to look for some adrenaline and to achieve the greatest and biggest goals.

Conflict of Interests

The author(s) have not declared any conflict of interests.

REFERENCE


Psychological profiles of talented male youth athletes in team sports games

Guelmami N.1*, Hamrouni S.2 and Agrébi B.2

1 17 cité Hached le Kef 7100, Tunisia.

To represent the relationship between psychological skills and performance level in ball team sports within a youth talent group, 216 youth Tunisian male athletes representing four sports ball games (16 to 18 years) packed in the third version of the Ottawa Mental Skills Assessment Tool-3 with scales for Goal Setting, Self Confidence, Commitment, Stress Reactions, Fear Control, Activation, Relaxation, Imagery, Mental Practice, Focusing, Refocusing and Competition planning. A performance level (elite versus sub-elite) by type of sport multivariate analysis of covariance with age as a covariate showed had significant effects. Psychological skills distinguished between more and less successful talented athletes. In general, psychological profiles differed between team sports games sport and practice level gap.

Key words: Ball games, mental skills, practice level, psychological profiles.

INTRODUCTION

Much of the research in applied sport sciences agrees that athletic successful performance is assured by a total package including physical, psychological, technical and tactical skills (Carling et al., 2009; Franks et al., 1999; Malina et al., 2000).

Besides the physical skills, factors related to mental state of the player have to be considered.

In this multidimensional conceptualization of sport performance, psychological or mental skills become a common essential factor for sport excellence (Morris, 2000; Thelwell and Maynard, 2003).

Mental skills are practices that help athletes manage their minds efficiently while performing their activities. These practices assist athletes adjust their action, thoughts, feelings and physicals conditions to boost their performance (Garza and Feltz, 1998). Mental skills help competitors enhance their physical skill, deal with competitive pressure, adjust their awareness to achieve optimal performance and remain concentrated despite distractive external environment during competition (Elferink et al., 2004; Van Raalte and Brewer, 1996).

Mental skills involve different abilities such as commitment, goal setting, self-confidence, imagery etc. Published data show how important it is to rely on mental skills in goals’ achievement in sport’s competition and rehabilitation from serious injury (Hardy et al., 1993).
Competitors and injured patients indeed have to work out mental rather than physical skills. Coaches and athletes do acknowledge the importance of mental skills but they do not use them properly. First, sports medicine and other physicians’ lack of knowledge about mental skills prevent them from using these mental factors in their work with athletes (as patients); moreover, mental abilities in sport are often viewed as part of an individual’s personality (Caudill et al., 1983).

Initial research in applied sport psychology focused primarily on the differences in personality’s characteristics that differentiated elite performers from others. Additionally, early works in field of sport and exercise psychology explored the relation between psychological trait of personality and optimal performance.

In this perspective, psychological factors may play a dominant role in achieving success in elite level sports; in fact, the connection between series of specific trait of personality and sport excellence has been investigated. Actually, an essential part of empirical studies examines differences in terms of psychological or mental skills which athletes have practiced and utilized (Vealey, 2007; Visek et al., 2009).

Mental skills are extremely important factors influencing an athlete’s performance.

In fact an extensive review of the literature (Gould et al., 2002; Williams and Krane, 2001) shows that researchers have recognized and demonstrated the importance of psychological skills for athletic performance.

To improve this field of research, Silva et al. (1985) assessed determinants of qualifiers and non-qualifiers in the 1980 United States Olympic wrestling trials. Psychological variables were able to differentiate between groups with 78.1% accuracy. Physiological variables were less important and only able to discriminate between performances with 60.9% accuracy.

The early work of Orlick and Partington (1988) indicated that mental skills components are necessary for performing at high profile events when working with Olympic athletes.

As a result of studies conducted by Orlick et al. across a range of events (Orlick et al., 1978; Orlick and Partington, 1988; McCaffrey and Orlick, 1989; Talbot-Honeck and Orlick, 1998), a combination of pre-event and in-event behaviors is now accepted as being able to distinguish between performances of elite and sub-elite class athletes.

Moreover, Orlick and Partington (1988) showed that in terms of physical, technical and mental preparations of Canadian Olympians, only the latter variable could significantly predict actual Olympic placing.

In the same context of idea, many researchers found a significant distinction related to mental skills with Olympic medalists and non-medalists in the 1988 Olympic Games (Gould et al., 1993a, b, 1993).

Today, the psychological dimension of sport performance was widely discussed as interdisciplinary practice where coaches and experts in this field across the globe were interested in the sport’s psychology and mental skills training which should be established in standard norms (Thelwell et al., 2006).

In order to optimize their use, psychologists in this field developed many tools to measure psychological or mental skills based on their works on theory construct and applied research such as the Ottawa Mental Skill Assessment Tool (OMSAT-3, Durand-Bush, et al, 2001) or the Test of Performance Strategies (TOPS, Thomas et al., 1999).

Nowadays, there are not enough studies related to how psychological skills may influence performance during different stages of competition, especially, when dealing with youth practitioners.

A popular focus of empirical sport psychology literature over the past 2 decades has been the provision of mental techniques, skills, qualities and training that characterize elite and sub-elite performers (Weissensteiner et al., 2012; Sheard and Golby, 2010; Connaughton, et al., 2008). In addition, some study in behavioral sport psychology research has interest in differentiating athlete by gender (male versus female) and type of sport (Elferink-Gemser et al., 2004). However, the mental skills demands of ball team sports and the specific needs of each of them have received less attention.

To the best of our knowledge, the scientific literature has not yet present any study which investigated into the Tunisian mental skills profiles of elite and sub elite youth athletes. Therefore, this lack of information prompted us to determine mental skills for youth team ball athletes and how or whether mental skills can discriminate youth team ball athletes by type of sport and level of play between four sports ball practice.

In another aspect, this study can provide a new investigation into the use of OMSAT-3 in any research related to mental skills of Tunisian youth sports team players. The main purpose of the present study is to compare youth Tunisian male athletes (elite versus sub-elite) in mental skills by type of ball games practice.

MATERIALS AND METHODS

Participants

A total of 206 youth Tunisian male athletes representing four sports ball games were involved in this study.

Elite subjects were selected from the Tunisian national team’s sports games players U18: Football (n=18), handball (n=26), basketball (n=23), volleyball (n=31).

Feltz and Ewing (1987) suggested that an elite-level young athlete can be defined as one who has competed national-level and has participated in his sport for at least 2 years.

The sub-elite group was chosen from Tunisian league 2 team's
sports games players U18: Football (n=34), handball (n=27),
basketball (n=25), volleyball (n=22).

The mean age ranged from 16 to 18 years and all players were
training regularly for competition during the period of data
collection.

Instrument

The third version of the Ottawa Mental Skills Assessment Tool-3
(OMSAT-3) developed by Durand-Bush and Salmela was used to
collect the mental skills.

OMSAT-3 measures a broad range of mental skills that include
48 items and 12 mental skills groups (Goal Setting [GS], Self
Confidence [SC], Commitment [CO], Stress Reactions [STR], Fear
Control [FC], Activation [AC], Relaxation [RLX], Imagery [IMG],
Mental Practice [MP], Focusing [FOC], Refocusing [RFOC] and
Competition planning [CP]), which are grouped under three main
conceptual components (Each item on this tool was answered on a
"strongly disagree" to "strongly agree" on a 7-point Likert scale.
The psychometric propriety of the French version shows a high
level of Cronbach's alpha value between .58 and .64 and displayed
internal consistency scores ranged from .68 to .88, while intra-class
reliability scores ranged from .78 to .96, indicating strong reliability
(Durand-Bush et al., 2001).

Procedures

Permission to conduct this study was obtained from the National
Sport Observatory (NSO) and the National Federation of each sport
for Elite athletes. Sub-Elite athletes were contacted by their
coaches who were asked to solicit the voluntary participating
athletes.

The technical directors and coaches facilitated our efforts recruit-
ing study subjects and organization of players with experiences.
No inducement was offered for participation in the study.

All players were informed about the procedures of the study
before providing their verbal consent to participate and were asked
to complete the OMSAT-3 questionnaire in 30 min before training.

At the beginning of the questionnaire, an introductory page
appears, informing participants about the anonymity of their answers
and instructing them to answer as correctly and honestly as
possible.

Statistical analysis

Data management and computations of statistics were performed
using SPSS version 16.0 (SPSS Inc., Chicago, IL, USA) and the
significance level was set at p < 0.05. Means ± standard deviations
were calculated for each variable.

Data comparisons were analyzed using multivariate analysis of
covariance (MANCOVA) general linear models (GLM) procedure.
As part of the GLM procedure, least-squares means are calculated.
For the MANCOVA, performance level and type of sport served as
the independent variables, while the categories of psychological
skills served as the multivariate dependent variable.

Age was considered as a covariate since the relationship
between mental skills and performance level may change with age.
Therefore, each variable was adjusted for age.

Univariate analyses of covariation (ANCOVA) with factors of
performance level and type of sport and with age as a covariate
were carried out separately for each psychological variable, with
follow-up analyses to clarify the source and nature of significant
relationships.

RESULTS

A performance level by type of sport multivariate analysis of
covariance (2 X 2) resulted in significant main effects for
performance level [F = 97.26, p < 0.001] and type of sport
[F = 7.00, p < 0.001].

Table 1 shows the means of the psychological skills for
categories of performance level, and type of sport.

Performance level

In the relation of psychological skills and performance
level, we found high significant main effects for Goal
Setting, Self confidence, Commitment, Stress Reactions,
Fear Control, Imagery, Mental Practice, and Competition
planning.

Elite and sub-elites athletes had similar scores on
Activation, Relaxation, Focusing and Refocusing.

Type of sport

In the relation of psychological skills and type of sport, we
found high significant main effects for Goal Setting and
Imagery (p<0.001). The statistical values also show
significant main effects for Commitment, Stress Reactions,
Fear Control and Activation (p<0.01) and demon-
strate significant main effects with significance level
p<0.5 for Self confidence and Mental Practice (Table 2).

Regardless of performance level, hand-ball players
outscored other players in all these psychological skills.
We also found significant interaction effects for Fear
Control (Performance level by Type of Sport).

DISCUSSION

The aim of this study was to reveal the relationship bet-
ween mental skills and performance level with effects of
type of sport within youth sports ball games athletes. To
accomplish this purpose, two different performance level
groups for each sport's ball players group were compared
in terms of mental skills.

Multivariate Statistical results confirmed significant
main effects for performance level and type of sport on
OMSAT-3 mental skills. as well as the mental skills these
athletes used to achieve optimal psychological states.
Characteristics included self-regulation of arousal, high
confidence, better concentration and focus, an in control
but not forcing it attitude, positive imagery and self-talk
Table 1. Means of the psychological skills by categories of performance level, and type of sport.

<table>
<thead>
<tr>
<th></th>
<th>Elite Football (n=18)</th>
<th>Elite Handball (n=26)</th>
<th>Elite Basketball (n=23)</th>
<th>Elite Volleyball (n=31)</th>
<th>Sub-elite Football (n=34)</th>
<th>Sub-elite Handball (n=27)</th>
<th>Sub-elite Basketball (n=25)</th>
<th>Sub-elite Volleyball (n=22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GS</td>
<td>22.22±3.15</td>
<td>24.92±2.54</td>
<td>20.17±3.78</td>
<td>17.82±3.25</td>
<td>19.41±3.69</td>
<td>17.68±3.13</td>
<td>16.82±3.03</td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>21.72±2.68</td>
<td>24.38±3.38</td>
<td>21.22±4.08</td>
<td>21.06±4.43</td>
<td>25.00±2.22</td>
<td>18.22±3.42</td>
<td>16.77±3.70</td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>22.44±4.03</td>
<td>24.12±3.55</td>
<td>20.83±4.34</td>
<td>20.42±4.82</td>
<td>16.94±4.73</td>
<td>17.12±4.35</td>
<td>15.64±3.71</td>
<td></td>
</tr>
<tr>
<td>STR</td>
<td>19.22±3.01</td>
<td>20.85±3.22</td>
<td>19.13±3.35</td>
<td>18.84±3.49</td>
<td>19.56±5.52</td>
<td>17.12±3.36</td>
<td>17.23±3.15</td>
<td></td>
</tr>
<tr>
<td>FC</td>
<td>23.89±2.30</td>
<td>24.23±2.16</td>
<td>21.48±3.69</td>
<td>23.68±3.10</td>
<td>19.38±5.64</td>
<td>18.58±3.87</td>
<td>16.89±2.96</td>
<td></td>
</tr>
<tr>
<td>AC</td>
<td>19.61±3.62</td>
<td>21.58±3.31</td>
<td>18.26±4.38</td>
<td>17.97±4.08</td>
<td>18.21±4.01</td>
<td>17.96±4.92</td>
<td>17.82±3.95</td>
<td></td>
</tr>
<tr>
<td>IMG</td>
<td>20.39±3.43</td>
<td>23.00±2.21</td>
<td>22.13±3.60</td>
<td>21.23±4.15</td>
<td>16.65±3.23</td>
<td>20.67±3.31</td>
<td>17.48±3.16</td>
<td></td>
</tr>
<tr>
<td>MP</td>
<td>21.44±4.03</td>
<td>22.31±3.31</td>
<td>22.13±3.68</td>
<td>20.58±3.86</td>
<td>17.62±3.64</td>
<td>20.07±4.00</td>
<td>16.68±2.87</td>
<td></td>
</tr>
<tr>
<td>FOC</td>
<td>17.44±3.73</td>
<td>18.54±2.90</td>
<td>17.96±3.65</td>
<td>17.58±4.47</td>
<td>16.50±3.62</td>
<td>18.19±3.62</td>
<td>18.12±3.32</td>
<td></td>
</tr>
<tr>
<td>RFOC</td>
<td>17.56±3.26</td>
<td>17.88±3.10</td>
<td>17.52±3.86</td>
<td>15.84±5.14</td>
<td>15.85±4.80</td>
<td>17.81±3.83</td>
<td>17.24±3.63</td>
<td></td>
</tr>
<tr>
<td>CP</td>
<td>20.72±3.06</td>
<td>23.31±2.61</td>
<td>21.30±4.07</td>
<td>22.22±3.28</td>
<td>17.12±3.88</td>
<td>18.33±3.74</td>
<td>18.32±4.18</td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Summary of Univariate F-ratios calculated using type III of squares with hypothesis for GS, SC, CO, STR, FC, A, RLX, IMG, MP, FOC, RFOC and CP for (General Linear Model).

<table>
<thead>
<tr>
<th>Performance level (PL)</th>
<th>Type of sport (TS)</th>
<th>PL* TS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GS</td>
<td>97.26***</td>
<td>7.00***</td>
</tr>
<tr>
<td>SC</td>
<td>84.56***</td>
<td>3.73*</td>
</tr>
<tr>
<td>CO</td>
<td>64.17***</td>
<td>8.41**</td>
</tr>
<tr>
<td>STR</td>
<td>10.87**</td>
<td>4.24**</td>
</tr>
<tr>
<td>FC</td>
<td>36.52***</td>
<td>4.49**</td>
</tr>
<tr>
<td>AC</td>
<td>1.96</td>
<td>5.88**</td>
</tr>
<tr>
<td>RLX</td>
<td>0.35</td>
<td>1.37</td>
</tr>
<tr>
<td>IMG</td>
<td>68.25***</td>
<td>10.04***</td>
</tr>
<tr>
<td>MP</td>
<td>60.26***</td>
<td>5.49*</td>
</tr>
<tr>
<td>FOC</td>
<td>0.25</td>
<td>1.36</td>
</tr>
<tr>
<td>RFOC</td>
<td>0.23</td>
<td>1.49</td>
</tr>
<tr>
<td>CP</td>
<td>75.82***</td>
<td>2.24</td>
</tr>
</tbody>
</table>

Note:* p<0.5; ** p<0.01; *** p<0.001.

and high determination and commitment. Skills used to achieve peak psychological states included imagery, goal setting, thought control strategies, arousal management. The findings of the Univariate analysis of the mental skills one by one demonstrated that the majority of mental skills are different by the level of play except activation, Focusing and Refocusing. Also eight of them varied by the type of sport ball game. No differences were showed for Relaxation, Focusing and Refocusing. The interact effects illustrated significant main effects for Goal Setting, Self confidence, Commitment, Stress Reactions, Fear Control, Activation, Imagery and Mental Practice. After an extensive review of the literature, Williams and Krane (2001) identified a number of psychological characteristics of highly successful athletes (Olympians), well-developed competition plans, well-developed coping strategies, and pre-competitive mental preparation plans. The quantitative and qualitative results collected with these Olympic champions paralleled, practically, the results of the present study. In another work, it was proved that psychological skills differentiate between successful and unsuccessful athletes. In general, elite performers have higher self-confidence, heightened concentration, can regulate arousal effectively, use
systematically goal setting and imagery, and have high levels of motivation and commitment (Gould et al., 2002). It was also established that elite athletes use more goal setting, imagery and activation than non-elite athletes (Thomas et al., 1999).

Despite significant advances and a growing knowledge base, mental skills training in sport must continue to evolve in socially significant ways. As discussed, mental training in sport must begin to address issues that arise with athletes and coaches due to their inclusion in a specific social-cultural context.

Highly skilled athletes use self-talk in a more planned and consistent manner than less skilled athletes, who tend to think reactively (Hardy et al., 2004; Hatzigeorgiadis et al., 2007; Perkos et al., 2002). Research concurs that successful elite athletes regularly use relaxation techniques to manage their physical energy (Durand-Bush and Salmela, 2002; Gould et al., 1993a, b).

Research with elite, collegiate, and adolescent athletes has confirmed that almost all athletes set goals, but most of them rate goals as only moderately effective in enhancing their performance (Burton et al., 1998; Weinberg et al, 2000).

This finding emphasizes the important point that goals by themselves do nothing to enhance athletes. Overall, more successful elite athletes use imagery more extensively and more systematically and have better imagery skill than less successful athletes (Calmels et al., 2003; Cumming and Hall, 2002; Hall et al., 1990).

Conclusion

From the findings of the present study, it is concluded that mental skills change by level of practice and type of sport game in youth athletes.

This study can help all parties who are involved in youth sports ball games by determining psychological profiles of athletes in four ball team players, especially in the Tunisian elite and sub elite play level. The athletes need to have positive and good mental skills to achieve success.

The results of mental skills profiles of the players in this study are useful to enable coaches to choose players who are truly worthy, good, and have the thirst for success to bring up the name and reputation of the team. While the findings of this study extend previous elite versus sub-elite empiric research and several differences between types of sport are shown, a number of limitations should be considered.

The specific nature of the study prevents the current findings to generalize results. Specifically, the current sample does not contain female athletes. In addition, more evaluations are required to determinate the athlete mental profile of each sport discipline.

In light of these limitations, several areas of future research are suggested. First, these findings should be replicated with youth participants representing female athletes.

Additionally, it is suggested that further research includes the investigation of longitudinally procedure to determinate the mental profile needed to perform in each ball team sport.

Finally, it is recommended that further research should include more sports team discipline.

ACKNOWLEDGEMENTS

The authors would like to thank all the players for their invaluable participation and cooperation. The authors also wish to thank ONS Tunisia staff.

Conflict of Interests

The author(s) have not declared any conflict of interests.

REFERENCES


Journal of Physical Education and Sport Management

Related Journals Published by Academic Journals

- Journal of Media and Communication Studies
- International Journal of English and Literature
- Philosophical Papers and Reviews
- Educational Research and Reviews
- Journal of African Studies and Development
- Philosophical Papers and Reviews