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PSYCHOLOGICAL SKILLS FOR CANOEING ATHLETES SELECTION

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Abstract.

The athlete selection is very important for the success of the team in the event. Canoeing is one of sports which have special characteristics in physical and psychological factor. Once of psychological factor in canoeing athlete selection is psychological skill (PSIS R-5). This study aim is to establish the dominant variable for canoeing athlete selection based on psychological skill. The type of research is correlational research. This research was conducted at the national training center canoeing athletes in Jatiluhur, West Java (N=25). The results showed that dominant indicators of psychological skill in the selection of canoeing athletes are: self-confidence (r = 0,57), concentration (r = 0,79), motivation (r = 0,71), mental readiness (r = 0,81), team emphasis (r = 0,81), and control anxiety (r = 0,51). It can be concluded that the selection of canoeing athletes can be done by measuring the psychological skill indicators.Performance canoeing athlete can be explained by psychologicalskill variables is 31.5%.

Keyword: psychological skill, canoeing, selection

INTRODUCTION

Indonesia canoeing athlete's performance is still left behind compared to athletes from Europe, America, Australia, China, Korea, and even Southeast Asia such as Thailand and Vietnam. The process of canoe coaching in Indonesia is deficient until now. One of this is selection athlete process, where the selection is based on the participation and external encouragement. The progress may still exist, but it is difficult to maintain it consistently. Moreover, the discussion about how to develop the sport in a systematic and a sustainable way is not appeared yet. Developing sport cannot only be based on the knowledge and experience that is speculative and intuitive. Like and dislike in the athlete's process selection are still happens. Potential athletes or best athletes may not be a core player.

Actually achievements in the sport are observable, measurable and predictable [1]. Canoeing is one of sports which has special characteristics in physical and psychological factor. The physical factors influence in canoeing achievement such as anthropometric factors (proportion, composition and structure) of the body, bio-motoric and physiologic. Psychological factors have great influence in canoeing. It's because canoeing is a sport that is carried out in the wild nature, has characteristics that prioritize physical ability with aerobic endurance dominant element (50%), with the emergence of excessive fatigue will affect the psychological condition [2]. Nowadays, there no model canoeing athlete selection included psychological skills. The approach use to for the canoeing athlete's selection today are often based on the evaluation of the factors, for example, based on the results of a championship. The effect of this approach is still vulnerable like and dislike decision, conflict of interest and manipulation of data so Indonesia canoeing athletes are not compete at the International level championship.

The selection of athletes is the momentum that determination the success and achievements of athletes in an event or championship. The quality of athletes who will be sent in a championship determined by the quality of the selection. Based on those conditions, the selection of athletes should be carried out based on the needs of the branch of sport

achievement. It means that the selection process should be based on the indicators determined sport achievements. There is a very fundamental difference determinant of achievement of each sport [3]. Several scientific approaches of major concern in the selection of athletes, there are physiological/anthropometry approach, performance approach, and psychological approach [4]. According to Regnierin1983, the selection of athletes is done by measuring physical, physiological, psychological, and social attributes [5] [6].
Theoretically canoeing achievement numbers are influenced by several factors such as physical, technical, tactical, psychological/mental, and supported by social factors and nutrients [7]. Furthermore, the researcher developed model of construct canoeing achievement numbers selection as follows:

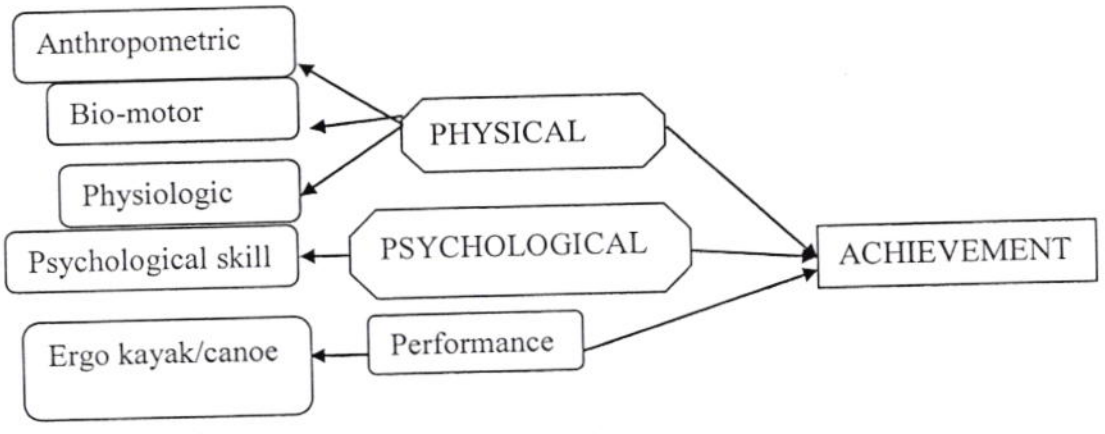

Figure 1. Simple models Canoeing Athlete Selection [7]

The psychological factor is everything that arises from the psychological conditions that influence the motoric behavior. Recent research on athlete's success at the Olympic Games highlights the importance of psychological skills. Psychological skill is the set of trainable mental abilities and methods that are held to underpin successful learning and performance. The basic psychological skills include concentration, goal-setting, imagery and mental rehearsal, relaxation and self-talk. There are six psychological skill factors were dominant in competitive sports are: confidence, motivation, concentration, anxiety control, mental preparation, and team emphasis [8]. These six factors are associated with the appearance of an athlete during training and competition. Various psychological symptoms will occur when the training and competition sourced from the fifth factors. The example of capabilities focusing on the activities of the competition is often influenced by the concentration of these athletes. Confidence, goal setting, and persistence is determined by the motivation of athletes. The sixth psychological factors are called psychological skills.
Mahoney in 1987, have develop an instrument to measure psychological skills namely Psychological Skills Inventory for Sport R-5 (PSIS R-5) consist of 51 items which is subsequently revised to 45 items and revised again to 44 items. Instrument PSIS R-5 consists of 44 items statement that control anxiety (8 items), concentration (7 items), confidence (8 items), mental readiness (6 items), motivation (8 items),focus of the team (7 items). PSIS R-5 is a measurement instrument that multifactor psychological skills including cognition skills are influences the sport appearance.

METHOD

The type of this study is the correlation research. This research aims is finding dominant indicator of psychological skills can be used for canoeing athlete's selection. Research subject in this study is canoeing athletes at training center West Java (N= 25). Research variable are:

a. Independent variable is psychological skills include: self-confidence, concentration, motivation, control anxiety, mental readiness, and focus groups.
b. The dependent variable: achievement (time) rowing canoeing 500 meters.

Data collection techniques in this study are classified into two, named performance data and psychological data. Performance data obtained by test and psychological data obtained by PSIS R-5 questionnaires. Statistical analysis uses bivariate and multivariate correlations.

RESULT

A. Variables and indicators of the selection of athletes canoeing literature study results

Table 1. Correlation factor variables and indicators

Variables	Indicators	R
Psychological skills 31.5%	Self confidance	0.57
	Concentration	0.79
	Motivation	0.71
	Anxiety control	0.51
	Team emphases	0.81
	Mental readines	0.81

Factor analysis identify patterns of factors in which each factor (or group of similar items) measure the dimensions will be measured but does not measure other dimensions. The purpose of this analysis is to identify indicators that have construct validity. Analysis Confirmatory factor using Partial Least Square. Factor analysis with KMO and Bartlett's test. Factor analysis to perform the extraction of the set of variables that exist KMO> 0,5 in order to form one or more factors.

Table 2. KMO and Bartlett's test indicators

	Psychological skill
KMO-measure of sampling adequacy	0.599
Bartlett's test of Sphericity	63.459

The method used for extracting is Principal Component Analysis and varimax rotation factor methodand the interpretation of results is done by looking at a loading factor (≥ 0.5). Loading factor is a number that indicates the magnitude of correlation between a variable and other form factors. Psychology skill measured tool using Psychological Skills Inventory for Sports (PSIS R -5). The requirements to test the good instrument can be seen from validity and reliability of these tools. Validity used in this study is the construct validity. The construct validity estimation is done by measuring the items and the total score. Limit power index difference minimal items used as a valid point was 0.30.

Results of test calculations different point, the trial against 44 items of psychological skills have different power index ranged from 0.514 to 0.814. After test the validity conducted, then

done the confirmatory factor test. This test is done to know whether these items represent the construct being measured or in accordance with the factors. Based on confirmatory factor calculation that all the questions have value loading factor of ≥ 0.5 and has been a factor as it has been determined that these items can be used for further research.

Psychological skill variable calculation results showed that the magnitude of the value Bartlett Test of Sphericity was 63.459 at the 0.000 significance. It means that in this study there was a significant correlation between variables and the calculation results of KMO of 0.599 so that the adequacy of the sample belongs to the category satisfactory. Based on the Initial Eigen value derived factor that has eigenvalue greater than 1.0 have been the biggest factor among other components. These factors explained that 50.920% of the total variance that influence variables. Based on the results obtained from Component Matrix variable self-confidence, concentration, motivation, mental preparation, team emphasis, and anxiety control into the psychological skill variables that will be used as an indicator in the selection of canoeing athlete.

The tests of inner model conducted to determine the relationship between the constructs in this study. Structural model was evaluated using the R-square for the dependent construct. Changes in the value of R-square can be used to assess the effect of certain latent variables independent of the dependent latent variables and whether to have a substantive effect. The analysis shows that the performance is explained by psychologicalskill variables is 31.5%.

The determination of the indicators is in line with the opinion of the experts. Psychological skills related to performance in sports such as motivation, concentration, control anxiety, the team's focus, confidence, and mental preparation [8]. Confident, cognitive anxiety and somatic anxiety affect sports performance [9].The perceived power/control an athlete has over her/his sport performance is known as the locus of control [10]. Much of the learned helplessness research would suggest that a perceived external locus of control (coaches, parents, or peers) would lead to lack of internal motivation in some individuals and thus a greater potential for withdrawal or burnout [11][12][13]. Furthermore, Smith and colleagues in1990 suggest that athletes with social support, sensation seeking motivation, and internal locus of control are able to reduce their stress outcome association and have a reduced potential for injury [13].Murphy and his colleagues, demonstrated the ability of the PSIS R-5 to discriminate among world class, national team, junior elite [9][14], and control athletes. White (1992) differentiated between collegiate male and female skiers on the team emphasis subscale. Cox and Davis in 1992 reported that elite wheelchair athletes score on the average higher than a sample of able-bodied collegiate athletes [15]. Finally, Cox and Liu in1993 reported that a sample of Chinese collegiate athletes display higher psychological skill scores than their American counterparts in confidence, motivation, and total psychological skill [16].

CONCLUSION

Psychological skill indicators with self-confidence, concentration, motivation, mental preparation, team emphasis, and anxiety control are very appropriate for canoeing athlete selection.

SUGGESTION

Based on the conclusions, the suggestions of this study that is the study should be continued, to get a software that is implementable and multi-factor.

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July 07, 2017

Dear

Nurkholis[1]

PSYCHOLOGICAL SKILLS FOR CANOEING ATHLETES SELECTION

We are pleased to inform you that the Program Committee of 2nd ICSS – International Conference of Sports Science 2017, after rigorous peer review, has decided to **accept** your full paper

2nd ICSS 2017 will be held on July 12, 2017

We are very much looking forward to your participation in the 2nd ICSS 2017 at the State University of Surabaya (UNESA). If I can be of any other assintance, please do not hestitate to contact me directly by email at *icss2017@unesa.ac.id*.

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Certificate

This is to certify that

Nurkholis (Indonesia)

Departement of Sport Coaching, Sport Science Faculty,
Universitas Negeri Surabaya

Has presented full paper by oral with title **Psychological Skills for Canoeing Athletes Selection .**
In The 2nd International Conference of Sport Science On The New Dimensions of Sport Sciences
Surabaya, 12 July 2017

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