The Correlation between Coaching Leadership, Smartphone Usage and Sport Commitment among University Athletes

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Abstract: *The objective of this study was to determine the correlation between coaching leadership, smartphone usage and sport commitment among university athletes. A total of one hundred university students' athletes successfully completed survey questionnaire. Data had been collected through a standard questionnaire. Descriptive data analysis and Pearson correlation conducted by using statistical Package of Social Science (SPSS). First, there is strong correlation between instruction and training coaching leadership and sport commitment towards university athletes. Second, there is significant strong correlation between smartphone usage and student's petanque sport commitment at university. The present findings have important implications for a better understanding of the determinants of athletes' commitment, coaching leadership behavior and using technology communication to sustain athlete university performance. This study suggests smartphone in teaching and learning of specific sports to strengthen the basics and sports skills of students' athlete's university.*

Keywords: Coaching leadership, smartphone, petanque, university athletes

1. Introduction

The most important successful factor of a coach is to help athletes to improve their athlete performance skill in a wide range of tasks from sequential development and mastery of basic skills, physical, technical, tactical and psychological preparation. Sport commitment who representing to continue participation in a particular sport program, specific sport or sport in general [1]. There is significant relationship between enthusiastic sport commitment and constrained sport commitment were positively associated with actual behaviour [2]. However, there were no significant differences on both gender perceived fitness-oriented motives, social-affective motives and task-oriented motives as the main factors for participation in sport among persons with disabilities disabled athlete [3]. This competitive environment, coaches need to consider using new technology changes such as smartphone. The usage of new technology in sports is considered as a challenge to coaches and athlete to improve specific sport skills. The sport technology important successful to help students to improve their mastery of basic skills, sport information preparation and sport commitment. Students have varied talents and each deserves respect for their uniqueness. Smartphones apps have been widely applied in health care, mobile tourism training and education. Students were interesting, satisfied and willing to continue using smartphones in their study among undergraduates' students [4]. There is positive and significant contribution of time management on student's academic achievement and significant contribution of the intensity of Smartphone using as a learning source [5]. Coaches who exhibited more on training and instruction, giving recognition, rewards, and positive feedback, and socially supportive behaviors

produced more satisfied athletes [6]. There was positive correlation between coaching leadership styles (training and instruction, democratic and social behaviors) and athlete satisfaction among university silat olahraga athletes [7]. However, there are limited study on the correlation of coaching leadership, smartphone usage and sport commitment among university petanque athletes.

The application of technology has revolutionized sports in general. The technology of smartphone will give the impact to the student in their campus life [8]. Advances in information technology have made it possible to augment and improve the feedback university athletes receive during training and competition. The concurrent validity of a smartphone global positioning system (GPS) 'app' and a sport-specific GPS device with to measure physical activity. The sports science group demonstrated proportionally greater increases in test performance when exposed to the mobile interactive intervention compared with the traditional library approach [9]. The performance expectancy, effort expectancy, social influence, and mobile learning conditions are positively correlated with behavioral intention, and that performance expectancy, effort expectancy, and mobile learning conditions significantly predict students' intention towards m-learning [10]. The nursing students have a unique perspective on how smartphones and mobile apps can support learning in clinical practice [11]. Therefore, the objective of this study is to examine the coaching leadership, smartphone usage and sport commitment among university student.

The Model Leadership for Sport adapted Unified Theory of Acceptance and Use of Technology2 and Sport Commitment as the conceptual study of students' commitment to

participate petanque university students' course [1], [12], [13]. Meanwhile, result revealed that there is were significant relation athlete satisfaction, quality services and university sport facilities [14]. There are limitations in Model Leadership for Sport, did not mention the smartphone usage which is coaching leadership affect university students' commitment in sports. Specifically, the present study is to examine the correlation of coaching leadership and smartphone usage towards athletes petanque commitment.

2. Methodology

The subjects in the study comprised of one hundred students Universiti Teknikal Malaysia Melaka (UTeM) from petanque university athletes' extra-curricular course. The Leader of Petanque university students' course had been informed and agreed to provide access their athletes students for this research. The study was conducted during the practical season. The instruments adapted Leadership Scale for Sport, adapted Unified Theory of Acceptance and Use of Technology and Sport Commitment was used to assess university athletes petanque participation perceived [1], [12], [13]. The study also was to identify the effect leadership coaching, using smartphone and petanque athlete's commitment. Subjects were asked to indicate their age, gender and year of academic study. The subjects volunteered to complete the questionnaires during petanque athlete training session. The majority of the subjects age ranged 20 years and 22 years (70%), between 22 years and 24 years (20%) and 25 years above (10%). This study is delimited to students' petanque university students representing an extra-curricular course. Generalization of the findings of this study was delimited to these subjects. The data was analyzed using Statistical Package for Social Science version 22.00 (SPSS). The descriptive analysis of the data was analyzed using by means, frequencies, percentage, and standard deviations for each item. For the purpose of correlation, Pearson's was used. Correlation was done with coaching leadership, smartphone usage against athlete commitment. The level of significance was set at $p < 0.05$.

3. Findings

Table 3.1 showed that the profile of subjects according to years of study, age and gender.

Table 3.1: The Profile of Subjects

Items	Freq	Percentage
Years of study		
First year	36	35.6
Second year	31	30.7
Third year	23	22.8
Fourth year	11	10.9
Age		
20 – 22 years	70	70.2
23 – 25 years	25	25
> 26 years	5	4.8
Gender		
Male	40	40.4
Female	60	55.5

n = 100

Table 3.2 showed that the petanque athletes were more preferred training and instruction of coach leadership. Analyzed of score mean indicated that training and instruction (m = 3.58), followed by positive feedback (m =3.00), social consideration (m = 2.85), social support (m = 2.80), democratic (m = 2.40) and autocratic coaching leadership (m = 2.15).

Table 3.2: Coaching Leadership Preferred by Petanque Athletes

Coaching Leadership	Mean	Std. Dev
Training and Instruction	3.58	.80
Positive Feedback	3.00	.80
Social Consideration	2.85	.82
Social Support	2.80	.87
Democratic	2.40	.80
Autocratic	2.15	.85

Table 3.3 showed that the petanque athletes were more preferred performance expectancy. Analyzed of score mean indicated that performance expectancy (m = 4.15), effort expectancy (m = 4.05), social influence (m = 4.25) and facilitating conditions (m = 3.15).

Table 3.3: Acceptance Smartphone Usage by Petanque Athletes

Category	Mean	Std. Dev
Performance Expectancy	4.35	.80
Effort Expectancy	4.25	.80
Social Influence	4.15	.82
Facilitating Conditions	3.15	.87

Table 3.4 indicated that the petanque athletes dedicated to continue the practice. Analyzed of the score mean showed that to continue practice (m = 4.30), will do everything to not abandon sports (m = 4.25) and difficult for students to abandon sports (m = 3.25).

Table 3.4: Sport Commitment Preferred by Petanque Athletes

Category	Mean	Std. Dev
Dedicated to continue the practice	4.55	0.87
Determined to continue the practice	4.5	0.8
Will do everything to not abandon petanque	4.37	0.8
It is difficult to abandon petanque	4.35	0.8

Ho1: there is no significant correlation between coaching leadership and sport commitment among petanque athletes. Pearson correlation analysis is used to test the first hypothesis (Ho1). Table 3.5 shows that Pearson correlation analysis that there is a significant correlation between training and instruction (r = .750), positive feedback (r = .655), social consideration (r=.650), social support (r = .550), democratic (r =. 502), autocratic (r = .310) and sport commitment. Thus, the Ho1 is rejected. This result shows that there is a significant positive strong correlation between coaching leadership and sport commitment among students' commitment.

Table 3.5: Correlation analysis for coaching leadership and sport commitment

Coaching Leadership	Correlation	Sig
Training and Instruction	0.75	
Positive Feedback	0.655	
Social Consideration	0.61	p < .001
Social Support	0.65	
Democratic	0.502	
Autocratic	0.31	

Ho2: there is no significant correlation between smartphone usage and sport commitment among petanque athletes. Pearson correlation analysis is used to test the first hypothesis (Ho1).). Table 3.6 shows that Pearson correlation analysis shown that there is a significant correlation between performance expectancy ($r = .755$), effort expectancy ($r = .655$), social influence ($r = .482$), facilitating conditions ($r = .450$) and petanque commitment. Therefore, the Ho2 is rejected. This finding shows that there is a significant strong correlation between smartphone usage and petanque athletes' commitment (performance expectancy, effort expectancy. These result similar Bruce et. al., (2013) and O'Connor and Andrews (2018) students have a unique perspective on how smartphones and mobile apps can support learning in practice.

Table 3.6: Correlation analysis for Smartphone Usage and Sport Commitment

Category	Correlation	Sig
Performance Expectancy	0.755	
Effort Expectancy	0.655	p < .001
Social Influence	0.482	
Facilitating Conditions	0.45	

$p < 0.05$

4. Discussions and Conclusion

This study has showed that the athletes preferred coach leadership training and instruction styles to committed for sport specifically in petanque tournament. The present results obtained there was a strong correlation between coaching leadership and sport commitment among university athletes. These findings consistent to Chelladurai and Salleh (1980), Mohamed Shapie et. al., (2016) and Rodolfo et., al., (2017). The athletes are dedicated to continue the practice of petanque and satisfied to enhance skills performance through coach leadership style such as training and instruction, positive feedback and social consideration. These results supported Ketut et.al, (2017) findings, coaches who exhibited more on training and instruction, giving recognition, rewards, and positive feedback, and socially supportive behaviors produced more satisfied athletes. At the same time improving their understanding of the behavior of their athletes and also acknowledge them in time and appropriately. This study has indicated that performance expectancy was the most factor influencing athlete's commitment in petanque tournament. The results obtained there was a moderate correlation between effort expectancy and sport commitment among the university athletes. These findings similar to Bruce et. al., (2013), Seok Kang (2015) John and Irene (2017) results which is the performance expectancy, effort expectancy, social influence, and mobile learning conditions are

positively correlated with behavioral intention, and that performance expectancy, effort expectancy, and mobile learning conditions significantly predict students' intention towards m-learning. Also, these results similar to Scanlan et., al., (2016), Hagiwara (2017) and Nurul et., al., (2017). This competitive environment, coaches need to consider using new technology as a challenge and athlete to improve specific sport skills. Sporting technologies are man-made means developed to reach human interests to a particular sport. Athletes attempt to improve their training and competitive surroundings in order to enhance their overall athletic performance.

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Asiah Mohd Pilus received the B.S., M.S. Edu. and PhD degrees in Sport Sport Science and expertise on sport industry management, sport coaching leadership and sport education. During 2012 -2016, she stayed in Sport Centre, Universiti Teknikal Malaysia Melaka (UTeM) to manage sport administration and management. She now with Head of Department Extra-curricular, Centre for Languages and Human Capital Development, UTeM.

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