Turkish Online Journal of Qualitative Inquiry (TOJQI)
Volume 12, Issue 7, Month 2021: 292-303

A Study of the Perception of Coaching Leadership Behavior of Tennis Players on the Perception of Competence: Take the Tennis Players in Nanchang, Jiangxi, China as an Example

Weiwei Yuan[1], Chiu Yi-Hsiang[2]
[1].International College, Krirk University, Thanon Ram Intra, KhwaengAnusawari, Khet Bang Khen, Krung Thep, Maha Nakhon10220, Thailand
E-mail: skt168@gmail.com
[2]International College, Krirk University, Thanon Ram Intra, KhwaengAnusawari, Khet Bang Khen, Krung Thep, Maha Nakhon10220, Thailand

Abstract: The purpose of this research is to explore the correlation between tennis players perceived coaching leadership behavior and perceived competence. This study is based on 106 tennis players in Nanchang, Jiangxi Province, China, and adopts an online questionnaire survey. The questionnaire tool for data collection uses the Perceptual Coach Leadership Behavior and Perceptual Competency Scale. The reliability analysis shows that Cronbach's α values are .99 and .94, and SPSS18.0 version software is used for data analysis. The results of this research are as follow:2. There is no significant difference in the perception of coach leadership behavior and perceived competence of different tennis players in terms of age, tennis seniority, and player level;3. The perceptual coaching behavior has no significant influence on the perceptual competence of tennis players.4. The coaching leadership's "training and teaching behavior", "appreciative behavior", "social support behavior", "communication behavior" and "management behavior" have a moderately positive correlation with perceived competence. This study concludes that the higher perception of coaching leadership behavior, the higher perception of competence for tennis players.

Key words:Perception of Coaching Leadership Behavior; Perception of Competence; tennis player.

1. INTRODUCTION:

Adolescent athletes play an important component of the country's overall competitive level, as well as the foundation and hope for the development of sports.With the operation of youth sports, more and more coaches are beginning to understand that psychological factors play an important role in the growth of young athletes[1].

Simultaneously, the coach's leadership behavior is one of the situational factors that affect the athletes' goal orientation in competitive sports.It will also affect the mental construction of athletes and their performance in training and competitive competitions[2]. Perceived competence constitutes a crucial basis for self-worth（Shen, 2010）. When the individual perceives a higher level of competence, he will experience a high-level sports technology experience and therefore will put in more effort, expecting that future performance can be in the context of competence. Competence essentially refers to the individual evaluation itself. The ability of an activity is an indicator[3]. In other words, it is also a sense of confidence in the performance of the activation process.Most of the research in coaching ability focused on the impact of coaching effectiveness and behavior on the performance of various athletes, and lots of confirmation had been acquired. However, the awareness of the relationship between the psychological level in athletes and how it affected the performance of athletes was insufficient(Keatlholetswe&Malete, 2019)[4].However, in recent years, domestic research on coaching leadership behavior has gradually shifted to the influence of coach leadership behavior athletes' motivation from the original focus on the coach's effect on athletes' performance. It also showed that the focus had shifted to the psychology of athletes.The main reason is not only the coach's factor that affects the athlete's performance but also the athlete's motivation, effort, emotional attitude, and other perceptual competence factors[5].Yan Shi et al. (2013) surveyed about 150 athletes registered with the Korean Ice Federation. It found that there was a significant positive correlation between the various dimensions of coaches' leadership behavior and the various dimensions of athlete's self-efficacy[6].Iso-Ahola (1988) explored the impact of perceptual competence on the satisfaction of leader behavior of event organizers with 182 climbers.The results show that the higher the satisfaction of leadership behavior, the higher the perceived competence[7].It could show that the self-efficacy of athletes will be affected to a certain extent by coaches' leadership behavior. The leadership behavior of coaches has a certain effect on the athlete's state confidence.This study intended to explore the differences of demographic variables between tennis players' perceived coaches' leadership behavior and perceived competency based on the research by related scholars on the correlation between two variables and to understand the relationship between the two variables. Lastly, this studyexplored the impact on tennis players' perceptual coaches' leadership behavior of perceptual competence.In summary, the purpose of this research is as follows: (1) To understand the differences in perceived coaching leadership behavior and perceived competence of tennis players in the way of genders, ages, tennis years, and player

levels.(2) Understand the influence of the perceptual coaching behavior of tennis players on perceptual competence.

(3) Understand the situation related to the perceived competence of tennis players' perceptual coaching leadership behavior.

1.3 Research questions

Based on the above research purposes, this research proposes the following research questions:(1) Are tennis players of different genders, ages, years of tennis experience, and player levels different in their perceived coaching leadership behavior and perceived competence?(2) Does the perceptual coaching behavior of tennis players have an impact on perceptual competence?(3) Is there any situation related to the perceived competence of tennis players' perceptual coaching behavior?

2. Research methods

2.1 Research subjects

In this study, a total of 106 tennis players from Nanchang, Jiangxi Province selected as participants, including 55 males (51.9%), 20.56±3.31 years old, 2.96±.99 years old, and the most athlete level is level 2. 30 athletes (54.5%), at least 2 master athletes (3.8%); 51 females (48.1%), age 20.12±2.85, seniority 2.55±1.23 years, the most athlete level is junior athlete 23 People (accounting for 45.1%), at least 3 athletes (accounting for 5.9%).

Research structure

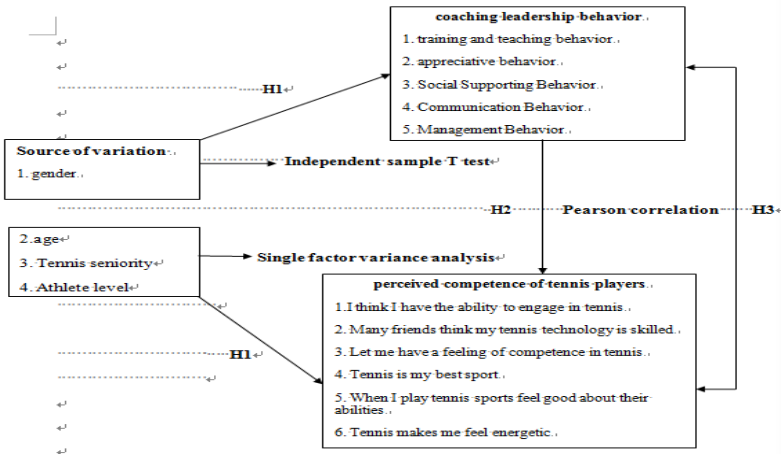

Figure 1 Research structure diagram

2.3 Research hypothesis

The hypotheses of this research are as follows:

H1: There are differences in gender, age, tennis seniority, and player level in the perception of coach leadership behavior and perceived competence of tennis players.

H2: The leadership behavior of tennis players in perceptual coaches has a significant impact on perceptual competence.

H3: Tennis players have a significant correlation with perceived competence in perceptual coach leadership behavior.

2.4 Instruments

This study uses measurement tools (see appendix 1) to collect and process data. The content includes 1. College students' basic personal background information, perceptual coaching leadership behavior scale, and perceptual competency scale. The various research tools are described below:：

(1) Personal background information:This study will take tennis players from Nanchang, Jiangxi Province as the participants, and use gender, age, tennis seniority, and player level as the basic data content, and further explore the backgroundstructure of tennis players. (2) Perceptual Coaching Leadership Behavior Scale: In this study, Huang Junming (2005) refers to the coaching leadership behavior scale compiled by Chelladurai and Saleh (1980), with a total of 34 questions[8]. This research is based on five dimensions for reliability testing. There are 8 questions for "training and teaching behavior" with the credibility of Cronbach's α value of .96; "appreciative behavior" has 7 questions with the credibility of Cronbach's α value of .96; There are 7 questions on "Social Supporting Behavior" with the credibility of Cronbach's α value of .96; "Communication Behavior" has 7 questions with the credibility of Cronbach's α value of.97; "Management Behavior" has 5 questions with the credibility of Cronbach's α The value is .97, and the Cronbach's α value of the total scale reliability is .99, which has high internal consistency. This scale uses a Likert-type five-point scale to indicate strong disagree, disagree, normal, agree, and strongly agree with 1, 2, 3, 4, and 5 points, the higher the score The higher the level of agreement with the Tennis Coach Leadership Behavior Scale.(3) Perceived Competency Scale: This study uses the Weissinger and Bandalos (1995) developmental competency scale, with a total of six items; this study uses this scale and will appropriately modify the item sentence for tennis players [9]. The reliability of this scale is Cronbach's α value of .94, indicating high internal consistency. This scale uses a Likert-type five-point scale to indicate strongly disagree, disagree, normal, agree, and strongly agree with 1, 2, 3, 4, and 5 points, the higher the score It means the higher the quality of competence.

2.4 Dataanalysis

The analysis used the SPSS statistical software package. The method is as follows:(1) In descriptive statistics, the average (M) and standard deviation (SD) used to analyze the basic background structure of tennis players, including gender, age, tennis seniority, and player level.(2) An independent sample t-test is used to analyze the differences between the gender of tennis players in perceptual coach leadership behavior and perceptual competence.(3) Using independent sample variance analysis to test the differences in the perception of tennis players' age, tennis seniority, and player level, the coach's leadership behavior, and perceived competence.

(4) Pearson-related tests was used to test the relationship between the perception of tennis players and the coach's leadership behavior and the perception of competence.

The significance level of the statistical test in this study is set as $\alpha = .05$.

3. Results and Discussion

This research was based on the research of the relationship between the leadership behavior of tennis coaches and athletes' perceived competence. The questionnaire survey method was used to obtain relevant data. On this basis, the statistical results of the data are as follows:

3.1 The differences between the gender, age, tennis seniority, and athlete level of tennis players in coach leadership behavior and athletes' perceived competence

Analyzing the results of an independent sample *t* test (see Table 1), it is found that tennis players of different genders have no significant difference in perception coach leadership behavior [t(104)=1.74, p=.084>.05], but they are not significantly different from athletes' perception Competence [t(104)=2.68, p=.009<.01] reached a significant difference. Therefore, in terms of perceived competence, male tennis players (M=4.36, SD=.71) are higher than female tennis players (M=3.93 SD=.93).

Table 1 Tennis player gender in perceptual coach leadership behavior and perceptual competence *t* test

	Mean (standard deviation)		*df*	*t*value	*p*
	male (N=55)	female (N=51)			
perceived coaching leadership behavior	4.51(.71)	4.23(.92)	104	1.74	.084
perceived competence	4.36(.71)	3.93(.93)		2.68**	.009

*p<.05 **p<.01 ***p<.001

The single-factor variance ANOVA was used to analyze the differences between the perceived coaching leadership behavior and the perceived competence of tennis players (see Table 2 and Table 3). The results showed that different ages [F(16,51)=.383, p=.981>.05], tennis seniority [F(3,51)=.106, p=.956>.05], and athlete level [F(3,51)=.182, p=.908>.05] There is no significant difference in the leadership behavior of perceptual coaches. Secondly, different age [F(16,51)=.764 p=.716>.05], tennis seniority [F(3,51)=.884, p=.456>.05], athlete level [F(3,51)=.901, p=.447>.05] There was no significant difference in perceptual competence. It means that there is no significant difference in the perception of coach leadership behavior and perceived competence of different tennis players in terms of age, tennis seniority, and player level.

Table 2ANOVA analysis of the perception of tennis players' age, seniority, and athlete level

Source of variation	SS	*df*	MS	F	*p*	ηp2
age	4.664	16	.292	.383	.981	.107
Tennis seniority	.242	3	.081	.106	.956	.006
Athlete level	.415	3	.138	.182	.908	.011
error	38.790	51				
sum	71.342					

*p<.05 **p<.01 ***p<.001

Table3ANOVA Analysis of Perceived Competency of Tennis Players' Age, Tennis Seniority, and Player Level

Source of variation	SS	*df*	MS	F	*p*	ηp2
age	7.945	16	.497	.764	.716	.193
Tennis seniority	1.723	3	.574	.884	.456	.049
Athlete level	1.757	3	.586	.901	.447	.050
error	33.135	51				
sum	75.546					

*p<.05 **p<.01 ***p<.001

3.2This study used Pearson's correlation analysis to test the relationship between perceptual coaching leadership behavior and perceived competence (see Table 4), and found that "training and teaching behavior" [r(105)= .611, p<.01], "appreciation" The behavior of "[r(105) = .578, p<.01], "The behavior of social support" [r(105) = .592, p<.01], "The behavior of communication" [r(105)= .602, p<.01] and "management behavior" [r(105)= .599, p<.01] have significant correlations with athletes' perceived competence and are moderately positive, indicating coach leadership behavior The higher the degree of "training and teaching behavior", "appreciative behavior", "social support behavior", "communication behavior" and "management behavior", the higher the athlete's perceived competence.

Table 4 Correlation matrix of perceptual coaching leadership behavior to perceptual competence (N = 106)

	1	2	3	4	5
1training and teaching behavior	-				
2 appreciative behavior	.929**	-			
3 social support behavior	.915**	.946**	-		
4 communication behavior	.919**	.928**	.949**	-	
5 management behavior	.907**	.913**	.922**	.971**	-
6 athlete's perceived competence.	.611**	.578**	.592**	.602**	.599**

*p<.05 ** p <. 01 *** p < .001

3.3The Impact of Tennis Players' Perceptual Coach Leadership Behavior on Perceptual

Competence

Regression analysis is used to examine the relationship between the training and teaching behaviors, admiration behaviors, social support behaviors, communication behaviors, management behavior aspects of perceptual coach leadership behavior, and athletes' perceived competence (see Table 4). The results of the study found that the behavior of training and teaching [β=.384, p>.05], the behavior of appreciation [β=.286, p >.05], and the behavior of social support [β=.300, p >.05], communication behavior [β=.402, p >.05], management behavior [β=.335, p >.05] have no significant relationship with athletes' perceived competence. The results of this study indicate that the leadership behavior of perceptual coaches has no significant effect on the perceived competence of tennis players.

Table5 Linear regression of perceptual coach leadership behavior and athletes' perceptual competence

	Athlete's Perceived Competence		
Perceptual coaching behavior	B	SE B	β
Training and teaching behavior	.376	.229	.384
Appreciative behavior	-.154	.286	-.150
Social support behavior	.141	.300	.142
Communicative behavior	.069	.402	.069
Management behavior	.192	.335	.190
R^2	.387		
Adj R^2	3.57		
F	12.648**		
df	(5, 100)		

注：N = 106 *p<.05 ** p<. 01 *** p < .001

4. Conclusion

The purpose of this research was to explore the relationship between the perceived coaching leadership behavior of tennis players and their perceived competence. An online questionnaire survey of 106 male and female tennis players in Nanchang, Jiangxi, China was conducted using the Perceptual Coaching Leadership Behavior and Perceived Competency Scale. Based on the results of this research, the research conclusions showed:

4.1 The results of this study partially support the research hypothesis 1: Tennis players of different genders, ages, tennis years, and athlete levels vary significantly in perceptual coach leadership behavior and perceptual competence.The results showed that male tennis players' perceived coaches' leadership behavior and perceived competence were higher than female

tennis players. Lu Wenling's (2007) survey of junior taekwondo athletes shows that male and female taekwondo players have significant differences in their perceived coaching behavior. Among them, male players have more "training and guidance behaviors", "caring behaviors" and "caring behaviors" than female players. "Democratic Behavior" and "Reward Behavior"[10]. Of course, previous studies have also pointed out that in the general mode of coaching decision-making, the study of a leader's decision-making behavior is mainly to discuss whether team members are involved in the decision-making process. Differences in the participants and situational conditions may lead to different decision-making results[11]. The literature pointed out that the measurement of coaches' leadership behavior included questionnaire surveys and observations. This study mainly adopts questionnaire survey methods, which are measurement methods. Both observation and evaluation methods in the authentic measurement environment, two methods will use in the future. In a comparative study of measurement results, the significant difference in perceptual competence has been confirmed in enormous literature. Research on adolescents' motor skills learning pointed out that men have a higher sense of self-efficacy in skills learning than women. By contrast, men were better than women in f skill stimulation and skill challenges. The stronger the motivation, the better effort, and experiment will be practiced[12].

The level of tennis in this survey is not high, and the training years are not long, and the span of age is not large, resulting in no significant difference in the level of tennis skills of the surveyed groups. Wu Zhiwen's (2010) pointed out that different grades, ages, sports levels, under the leadership of coaches, "training and teaching behaviors", "social support behaviors", "management behaviors", and "appreciative behaviors" and "communication behavior" there is no difference in cognition which is consistent with the results of this study[13]. Besides, Luo Jiaming's (2017) survey of basketball players in Taipei Junior High School showed that different grades and training hours showed significant results in "training and guidance behavior", "caring behavior", "democratic behavior", and "authoritarian behavior". The difference[14]. It showed that the training time and the level of sports affect the value of the player's perception of coaching leadership behavior.

4.2 The results of this research failed to support hypothesis 2: The leadership behavior of tennis players in perceptual coaching has a significant impact on perceptual competence.In the field of sports, a few previous studies of Bandura have found that the pre-factors affecting self-efficacy cover four aspects, and the leadership behavior of coaches has a major effect on the self-efficacy of athletes[15]. The study of Schwarz et al. (1999) found that coaches' leadership behavior has a certain effect on athletes' state confidence[16]. Zhanhui's (2016) research found that multiple dimensions of synchronized swimming coaches' leadership behavior can significantly predict athletes' general self-efficacy[17]. However, the reason why the perceptual coaches' leadership behavior in this study did not have an impact on perceptual competence may be

attributed to the training method and training duration. The athletes interviewed this time are amateurs and athletes with a certain professional basis. Some people interviewed do not have the "three-concentration" learning model in sports schools, and have relatively little daily communication with coaches. Therefore, the level of perceptual coaches' leadership behavior is generally not high. Literature studies have pointed out that the self-efficacy and perceived competence of young athletes form an interactive relationship. A higher sense of self-efficacy leads to a higher sense of perceptual competence[18,19].Gao Sanfu(2005) pointed out that the parental leadership preferred on the players has positive predictive power on the athlete's trait self-confidence, and the parental leadership preferred by the players can positively predict the self-efficacy of the athletes, which is inconsistent with the results of this study[20].

4.3 This research supports research hypothesis 3: There is a significant correlation between the perceived coaching leadership behavior of tennis players and their perceived competence.Tennis players' perceptions of coach's leadership behavior include "training and teaching behaviors", "appreciative behaviors", "social support behaviors", "communication behaviors" and "management behaviors" are related to perceived competence. Tennis players perceive The higher the coach's leadership behavior, the stronger the perceived competence[21]. A questionnaire survey of Weiss and Friderichs (1996) on college men's basketball players showed that coaching leadership behavior can predict players' overall perceived competence and satisfaction[22]. At the same time, the results of this study found that the various items of the Coach Leadership Behavior Scale also showed a high degree of correlation. The Martens (1990) questionnaire survey of 131 college football players shows that the scores on the Coach Leadership Behavior Scale found that there is a significant relationship between the items[23]. Most scholars support that perceptual competence is a positive and ideal training state, and the subjects of this article are tennis players, who have accumulated a certain amount of game and training experience from the perspective of sports experience, and have established training guidance for coaches. One's own psychological cues and task orientation can basically form a clear and accurate understanding of training or competition goals, and the perception of competence will also improve[24,25,26]. Wu Guoxian's (2000) research pointed out that players with better performances are less aware of coaches' "training and guidance behaviors", "caring behaviors", "democratic behaviors" and "reward behaviors"[27], which is inconsistent with the results of this research. Studies have also proved that the words and deeds of coaches will affect athletes subtly, and the coach's leadership style plays an extremely critical role in the performance of athletes' skills and tactics and the winning or losing of competitions. The more critical the moment, the more prominent it becomes[28]. When athletes perceive the evaluation and comparative analysis of their own strength from the coach, they will have a change in their perceived competence. Amorose& Horn (2000) research pointed out that the leadership behavior of perceptual coaches is positively correlated with the intrinsic motivation of players, especially

those with high intrinsic motivation perceive coaches with higher training and guidance behaviors and democratic behaviors, and lower authoritarian behaviors[29]. Of course, the subjects of this study are not like athletes with rich experience who can play their own strengths and know-how to adjust their mentality promptly. Their technical and tactical skills and competition experience are in the process of accumulating, so the coaches are in this process. The middle is playing an extremely important role. The coach's behavioral state of the whole process of the athlete's leadership will affect the athlete's sense of self-efficacy and perceived competence. In summary, the conclusions of this study point out that the higher the tennis player's perception of coach leadership behavior, the stronger the tennis player's perceived competence.

Reference:

1. CAO DAWEI, CAO LIANZHONG:Research on leadership of coaches in China: Based on the source and communication path of leadership. J SHENYANG I PHYS ED, 40(01),94（2021）.
2. ZENG LANYING:The Influence of Coach's Leadership Behavior on Teenage Athletes' Goal Orientation [D].Central China Normal University, (2020)
3. SHEN WEIJUN. Perceived Competence, Implicit Theory of Competence and Self-handicap: The Mediating Effect of 2×2 Achievement Goal. Taoyuan County: Master's thesis, Institute of Physical Education, China Sport University, unpublished. (2010)
4. KEATLHOLETSWE, LESIKA & MALETE, LEAPETSWE:Coaching efficacy, player perceptions of coaches' leadership styles, and team performance in premier league soccer. RES Q EXERCISE SPORT, 90(1),71, (2019).
5. YU SHAOYONG, CHEN HONGBO, ZHANG XIN:Structure and Measurement of Serving Leadership Behavior of Coach in "Three Big Ball" Projects . J WUHAN I PHYS ED, 54(05),82(2020).
6. YAN SHI, LI SHANGBIN, JI YANHONG:The Relationship between the Leadership Behavior of South Korean Speed Skating Coaches and Athletes' Willpower. SHANDONG SPORTS SCI,35(01),49(2013).
7. ISO-AHOLA, S. E., LAVERDE, D., & GRAEFE, A. R: Perceived competence as a mediator of the relationship between high risk sports participation and self-esteem. J LEISURE RES,21(1),32 (1989).
8. WANG JUNMING Journal of Sports Psychology,(7),1-18. (in Chinese with English abstract) (2005).
9. WEISSINGER, E; BANDALOS, DL :Development, reliability and validity of a scale to measure intrinsic motivation in leisure. J LEISURE RES, 27(4),379(1995).
10. LV WENLING.A study on the leadership behavior of taekwondo coaches in colleges and universities.Unpublished master's thesis.NationalPingtung University of Education, Pingtung County. (2007)
11. XIE CHAO:The Relationship between Leadership Behavior and Team Effectiveness of Football Coaches: The Chain Mediating Role of Team Trust and Organizational Citizenship Behavior. CHINESE SPORTS COACH,28(03),12 (2020).
12. CAI WEIMIN, LIU QIAN, XU LEI:Research on the Relationship between Coach

Paternalistic Leadership Behavior and Sports Engagement from the Perspective of Basic Psychological Needs. J HUBEI NORMAL U NAT,40(02):53 (2020).
13. WU ZHIWEN.A study on the leadership behavior of high school baseball coaches and players' training satisfaction in Taiwan.Unpublished master's thesis.School of Management and Health, Keelung, China. (2009)
14. QIU YOLING .Research on the relationship between perceived coaches' leadership behavior, participation motivation and collective effectiveness of competitive cheerleaders.Unpublished Master Dissertation, Institute of Sport and Leisure Management, Taiwan Normal University. Taipei city. (2013)
15. BANDURA，A:The explanatory and predictive scope of self-efficacy theory. J SOC CLIN PSYCHOL,4（3）,359 (1986).
16. SCHWARZE R., MUELLER J., &GREEN GLASS E:Assessment of general perceived self efficacy on the internet: data collection in cyber space[J]. Anxiety, Stress, and Copying,12（3）,145 (1999).
17. CHAM HUI:The relationship between the leadership behavior of synchronized swimming coaches and the general self-efficacy of athletes: The mediating role of athletes personality. J CHENGDU I PHYS ED,042(1),96 (2016).
18. LIU YUE:Emotional Intelligence and Leadership Behavior of Volleyball Coaches: The Mediating Role of Coach Effectiveness. SHANDONG SPORTS SCI,42(03),41 (2020).
19. JIN XU: The Influence of Coach's Transformational Leadership Behavior on Sports Satisfaction of Youth Soccer Players: The Mediating Role Based on Role Engagement. CHINESE SPORTS COACH,28(01),46 (2020).
20. GAO SANFU: The development and feasible research direction of sports leadership theory. CHINA SPORTS Q,21(1): 59 (2007).
21. Perera H: Does the Coach Leadership Behavior Mediates the Influence of Factors Affecting Coach Leadership Behavioral Styles on Team Success. INT J HUMAN MOVEMENT,7(3) , (2019).
22. WEISS, M. R., & FRIDERICHS, W. D:The influence of leader behavior, coach attributes, and institution variables on performance and satisfaction, of collegiate basketball teams. J SPORT EXERCISE PSY,8, 332 (1996).
23. MARTENS, R.,BURTON, D.,VEALEY, R. S.,BUMP, L. A., SMITH, D. E.,R. MARTENS, R. S. VEALEY, D. BURTON: Competitive anxiety in sport. Champaign, IL:Human Kinetics. (1990).
24. CAO DAWEI, CAO LIANZHONG:A Review of Research on the Leadership of Coaches at Home and Abroad [A]. Chinese Sports Science Association.The 11th National Sports Science Conference Abstract Compilation [C]. Chinese Sports Science Society: Chinese Sports Science Society:3,(2019).
25. YAN LU: Study on the Relationship between Volleyball Coach's Leadership Behavior and Team Cohesion [D].Henan University, (2019).
26. LIU Y, TAO Y, LIU Y, ET AL:A study on the transformational leadership behavior of coaches and its effectiveness. Stylish and Sports Products & Technology (24):55 (2018).
27. WU GUOMIAN: A Comparative Study on the Leadership Behavior of Sports Coaches in Colleges and Universities in China. J PHYS ED,(28), 59 (2000).

28. LI MENGZHEN : A study on the leadership behavior of tennis players' perceived coaches and their confidence in sports in Kaohsiung.Unpublished master's thesis.Nationalkaohsiung normal university, kaohsiung city. (2012) .
29. AMOROSE, A. J., & HORN, T. S:Intrinsic motivation Relationships with collegiate athletes' gender, scholarship status, and perceptions of their coaches' behavior. J SPORT EXERCISE PSY, 22(1),63(2000).
30. NURNAZAR, PIRNAZAROV; ,Scientific and Philosophical Analysis of the Concept of «Spirituality»,Адамәлемі,83,1,3-10,2020,"050010, Алматықаласы,«Философия, саясаттануполитологииирелигиоведения …"
31. ULI, PIRNAZAROV NURNAZAR RAHSID; ,INFLUENCE OF VIRTUAL REALITY ON THE SPIRITUALITY OF INFORMATION SOCIETY,ЕвразийскийСоюзУченых,,2-2 (71),,2020,ООО «ЕвразийскоеНаучноеСодружество»
32. BERDIMURATOVA, A. K., & MUKHAMMADIYAROVA, A. J. (2020). Philosophical and methodological aspects of the interaction of natural environment and man. International Journal of Pharmaceutical Research. https://doi.org/10.31838/ijpr/2020.12.03.235
33. PIRNAZAROV, N. (2020). Philosophical analysis of the issue of spirituality. International Journal of Advanced Science and Technology, 29(5).
34. Pirnazarov, N. R. Ul?. (2020). INFLUENCE OF VIRTUAL REALITY ON THE SPIRITUALITY OF INFORMATION SOCIETY. Eurasian Union Scientists. https://doi.org/10.31618/esu.2413-9335.2020.2.71.587
35. АЛИМА, БЕРДИМУРАТОВА; ,Хабарҳам оны изетрлеўдинфилософиялықметодологиялықусыллары,Вестник КГУ,47,2,127-130,2020,Государственный университет имени Бердаха
36. АЛИМА, БЕРДИМУРАТОВА; ,Хабаржәмийетитүсиниги: теориялық-категориялықанализлеўтийкарлары,Вестник КГУ,47,1,144-149,2020,Каракалпакский государственный университет
37. БЕРДИМУРАТОВА, АЛИМА; ,ТІЛЕУБЕРГЕН ЖҰМАМҰРАТОВ ШЫҒАРМАШЫЛЫҒЫ ФИЛОСОФИЯЛЫҚ АНАЛИЗДІҢ ОБЪЕКТІ РЕТІНДЕ,Адам әлемі,85,3,19-27,2020,Қазақстан РеспубликасыныңмәдениетжәнеақпаратминистрлігіАқпаратжәне …
38. PIRNAZAROV, NURNAZAR; ESHNIYAZOV, RUSTAM; BEZZUBKO, BORYS; ALIMOV, ATABEK; ARZIEV, AMANBAY; TURDIBAEV, ALAUATDIN; ,BACHELOR DEGREE PROGRAMS IN BUILDING MATERIALS TECHNOLOGY,European Journal of Molecular & Clinical Medicine,7,10,1780-1789,2021,