

European Journal of Physical Education and Sport Science

Volume 1, Issue 4, 2016

ISSN 2501-1235
Bucharest, Romania

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THE RELATIONSHIP BETWEEN NUTRITION KNOWLEDGE, AEROBIC POWER AND LEVEL OF PHYSICAL ACTIVITY IN UNIVERSITY MALES STUDENTS OF DIFFERENT BODY WEIGHT CLASSES

Amin Daj Liri^{1*}, Farhad Rahmani Nia², Alireza Elmieh¹

¹Department of Sport Physiology, Rasht Branch, Islamic Azad University, Rasht, Iran

²Department of Sport Physiology, University of Guilan, Rasht, Iran

Abstract:

According to these research achievements, there is a meaningful relationship between all variables and the direction of all relationships is negative. By increasing in each of variables of nutrition knowledge, aerobic power and physical activity level the amount of the students body mass index decreases. So we can find out that nutrition knowledge, aerobic power and physical activity level are affected by the nomination of body mass index changing. Also heavy and fat are increasing in the boy students. 9.5% of students are lights 61.5% have normal weight, 21% are heavy and 7.8% are fat. 409 persons were used in this descriptive studying. The questionnaire of demographic information and the body test index was filled for them, and the body mass index (kg.m²) was calculated. The amount of physical activity was tested with physical activity questionnaire (Baeck), the amount of nutrition knowledge according to filling the standard questionnaire of nutrition knowledge (Parmenter & Wardal 1999) and the amount of aerobic Power was measured whit the a strand stairs test. The amount of physical activity, nutrition knowledge and different weight ranking prevalence was considered by statistic witting. According to the key pattern of the information collection about the effective factors on different body weight classes (fat, heavy, normal weight and light); this studying for achieving the information about physical activity and nutrition knowledge pattern, (for stuff model consumption) had done on boy student's whit different weight ranking in Tonekabon. The average of length, weight and age was been 177±8.35 cm, 74.4±15.95 kg.m², 22.2±3.45. In addition to the most profusions of refers to the normal weight ranking by 252 students and 61.6%, the least refers to the fat ranking by 32 students and 7.8% .The average and the veer of

standard of participation examinations in this research show that nutrition knowledge 43.8 ± 7.32 , aerobic power 2.47 ± 0.52 , physical activity level 7.92 ± 1.27 was achieved.

Keywords: different body weight classes, nutrition knowledge, level of physical activity, aerobic power

Introduction

In the last fifty years, researches have shown that the most important factors which are causing disabilities and premature deaths has changed from infectious diseases to chronic and degenerative diseases. During these years due to increasing of prosperity in life overuse consuming of fats, meat and sugar have been common increasingly and from the other hand the physical activity has decreased; so these factors lead to increase in non-communicable diseases and the risks related to them (4.) Also according to documents diet and nutrition plays a great role in the health maintenance and disease prevention. According to reports (2005) among the 1.6 billion people of adults, approximately 400 million people are overweight and it is expected that in 2015 this figure would reach to 2.3 billion overweight people and 700 million fat people (8). Overweight and underweight are multi-factor phenomenon's which are coming from several complicated factors such as inheritance and behavioral components. Behavioral components, in turn, involve physical activity and diet which is influenced by social, cultural and environmental fields (12, 15). Everyday life patterns lead most humans toward an inactive lifestyle. Industrial life despite the numerous services to humans had also some implications which motor poverty is the most of them. As you know, the human body is designed for movement and it is incongruous with inactive lifestyle from a physiological perspective. Some evidence suggested that no or low physical activity is an important factor in the obesity and overweight. In contrast, there is another problem, from which many people are suffering and that takes away peace and comfort from them; it is underweight. Reducing taking energy or reducing energy consumption is leading to increasing in the rampant of underweight. It seems that genetic factors are also factors that may be lead to underweight (24). Underweight and obesity are major problems of malnutrition. And on the other hand, along with the problems of obesity and overweight the underweight problem is promulgating especially in developing countries (33).

The most important complications of malnutrition were lack of sufficient growth, the incidence of infections and reduce capabilities which lead to weakness, disability, psychological, social, economic, cultural problems, education, and health decline which

still gripped the Iranian people despite of significant actions taken in the health sector. In developing countries, medical systems are more focusing on obesity than underweight while the complications of underweight especially in young ages are more harmful (20). According to literature, it is evident that obesity and underweight is, growing not only in developed countries but also it is spreading in the undeveloped countries and it is increasing as a health problem. Also, in our country which is faced with the phenomenon of urbanization and industrialization as an undeveloped country the prevalence of obesity is rising (31). The amount of prevalence of obesity in Iran in 1999, 2005, 2007 has been 13.6%, 19.6%, 22.3% respectively. The overweight way in years 1999, 2005, 2007 has been 32.2%, 35.8%, 36.3% respectively (30). In Malaysia, the way of overweight in the 13-17 aged kids has increased from 1% at 1990 to 6% at 1997.

In this respect in Iran some researches which refer to them has done. The results of Gasemi research indicates that in the urban regions 11% boys and 9% girls and in the rural regions 6.9% boys and 7.3% girls have overweight(31). Also, Darbani reported the prevalence of obesity and overweight in children 12-7 years as 6.5% and 10.9% respectively (34). In addition, much research has examined the factors influencing obesity and considered lack of physical activity and inactivity as one of the main reasons for the increase in overweight of children (31). One of the easiest ways to maintain good health and having optimum weight is having appropriate physical activity (16). Also Tyle et al by study the prevalence obesity in mature children (13-18 years old) found that the obesity is more prevalence in peoples that have less physical activity. In the studies conducted over American teenagers in 2004 have seen that people who were obese and overweight significantly had less physical activity in comparison with teenagers that had normal weight (36). As well as in investigating non-communicable diseases in our country the chance of married men was 1.09% more than unmarried men (6). In investigating non-communicable diseases of all age groups (15-65 years) the chance of obesity has increased following marriage for men and women 2.2% and 2.3% respectively (23). Gender, race, risk of poverty position are 3 risk factors in relation with overweight problem which control weight is ignored in most studies.

Also, it is reported that poverty and low level of education apart from race are related to obesity. The obtained results from conducted research in the Sistan and Baluchestan (26) and Yazd (17) are reported prevalence of underweight, obesity (16.2%, 8.6%, 1.5%) and (18%, 8.8%, 4.3%) respectively (13). The research conducted by Mortazavi et al is reported underweight and obesity in Zahedan 18.3% and 1.3% (28). Of course, results of low difference between overweight and underweight reported in our country. According to a research which is done by Jafari et al in Sari city over 240

girls (14-18 years old) prevalence of underweight and obesity reported as 3.7% and 3.2% (18). Now according to mentioned items we are trying to investigate to prevalence of obesity, overweight primal weight and underweight in the students and also investigate relationship between nutrition knowledge, aerobic capacity and level of physical activity in male students with different age categories and finally compare obtained results with findings of home and abroad researchers.

Materials and methods

This study is a descriptive and correlation research. The population of this research is all male students of Universities of Tonekabon city who are selected physical education (1 and 2) unit and 409 individuals were selected by using initial sampling method as sample size and nutrition knowledge and physical activity level questionnaire administered to them.

Table1: Frequency distribution and body mass index of respondents according to weight classes of students

Variable(BMI)	Frequency	Percent
Underweight	39	9.6
Optimal weight	252	61.6
Overweight	86	21
Obesity	32	7.8
Overall	409	100%

After translating the standard nutrition knowledge questionnaire (Parmanter and Vardel) and modifying some items considering food habits in Iranian culture. Opinions of experts for gaining face validity and Cronbach's alpha for obtain reliability were considered. Cronbach's alpha were obtained 0.78 for knowledge session and for attitude obtained 0.74. Thus, the questionnaire was prepared for the main stage distribution.

The level of physical activity was assessed using a Beck et al questionnaire with some changes. The mentioned questionnaire contains 16 items which are in three parts, first part physical activity, second part free time, third part exercise and physical activity related to job has been set. Also, Pele Astrand and Nomogram Astrand-Raiming for measuring aerobic power have been used. Subjects were required to during 5 minutes and in each minute 22.5 times goes up and down the stairs by the song which was played with metronome. After 5 minutes, the subjects were asked to remain in a standing position after 15 seconds heart rate of subjects for about 15 seconds to be counted. If the subjects was over 25 years old age correction factor was used. Such that

the estimated amount of aerobic capacity via standard liters per minute was multiplied in age correction factor and obtained figure was equal to aerobic power of individual. To calculate the weight, a digital scale and tape measure was used to determine the height of Students and was registered in the recording sheet results. A statistical Kolmogorov–Smirnov test for normalizing data review Pearson's correlation coefficient test and multiple regression tests (step by step) were used for review relationship between nutrition knowledge, aerobic power and physical activity level in male students with different weight categories. In all tests the error amount ($p < 0.05$) calculated. And all statistical analyzes were performed using the SPSS software.

Findings

Results of Kolmogorov–Smirnov test, confirmed normal distribution of data. And the results of average height, weight, age of participants are reported in Table 2.

Table 2: The mean and standard deviation of height, weight and age of subjects

Gender	Height	Weight	Age
Male	177±8.35	74.4±15.95	22.2±3.45

Table 3: Distribution mean and standard deviation scores of respondents in the index of nutrition, physical activity, aerobic power based on weight class

Weight class	Mean	SD	MEAN	SD	MEAN	SD
Underweight	42.6	8.4	7.9	1.3	2.5	0.62
Optimal Weight	44.3	8.1	8.5	1.3	2.7	0.54
Overweight	44.8	6	8	1.2	2.5	0.48
Obese	43.5	6.8	7.3	1.3	2.2	0.55

The mean and standard deviation scores of respondents on (nutrition knowledge, physical activity level and aerobic power) indicators in separate of weight classes indicates that: nutrition knowledge is belonged to overweight respondents with the highest average to amount 44.8 with standard deviation (6) and the lowest mean to the amount 42.67 with standard deviation (8.4) is belonged to the underweight respondents. In the physical activity indicator, the highest average belonged to optimal weight category to the amount of 8.5 with standard deviation 1.3 and the lowest average by amount 7.3 with standard deviation 1.3 belonged to obesity. In the aerobic power indicator of respondents, a little difference can be seen in age categories and finally the highest average by amount of 7.2 belongs to the category of ideal body weight (Table 3).

In studying hypothesis of research as under the title there is a relationship between nutrition, aerobic capacity and level of physical activity with weight classes' of male students .in the review of correlation analysis between variables of nutrition knowledge, aerobic power and physical activity level with weight categories in the correlation matrix that is reported in table 4 with Pearson correlation test results shows that relationship between nutrition knowledge and weight classes is meaningful in the 0.95 level and the calculated relationship is reversed. The relationship between aerobic power and weight classes at the level of 0.95 is meaningful. And the calculated relationship is reversed. The relationship between physical activities with weight classes significant at 0.95 level and the calculated relationship is reversed table (4).

Table 4: Pearson correlation coefficient between nutrition knowledge, aerobic capacity and level of physical activity and weight classes

Variable	The body mass index	Sig
Physical activity level	-0.160	0.001
Nutrition knowledge	-0.146	0.003
Aerobic power	-0.155	0.002

Also multiple regressions was used for investigate the predictive role of nutrition knowledge, aerobic power and physical activity level with the weight classes of the multiple regression which summary results are presented in Table 5.

Table 5: A summary of regression analysis of Nutrition knowledge variables, aerobic power and physical activity with weight classes

Predictor variables	R	R^2	ΔR^2	F	sig	β	sr^2
The first step of physical activity level	0.160	0.026	0.023	10.66	0.00	-0.160	0.166

Results of the table above indicate that the variable of physical activity level had been capable to justify 2.3 percent of the variance in weight classes ($\Delta R^2 = 0.023$).

Also results of Table 5 shows that calculated F of variable level of physical activity is statistically meaningful. With 95% confidence it can be concluded that there is relationship between predictor variables of physical activity level with weight classes and among predictor variables (nutrition knowledge, aerobic capacity and level of physical activity) only the physical activity level variable has the power of predicting the criterion variable weight classes. Also results of research indicates that there is a relationship between nutrition knowledge and physical activity level in male students .the results has shown in table 6:

Table 6: Distribution correlation between nutrition knowledge and physical activity level in the underweight category

	Nutrition knowledge	Activity level	df	Cd	a level R	significant level	TR	T table
Nutrition knowledge	1.00	0.756						
Activity level	0.756	1.00	37	57.2	0.01	0.393	0.00	7.03 2.7

According to the correlation coefficient with amount ($P < 0.05$, 0.739) there is a relationship between nutrition knowledge and physical activity level in male students with optimal weight and the relationship between nutrition knowledge and physical activity level in male students with optimal weight is meaningful with 95 % confidence. The relationship is positive. Also, the determination coefficient calculated 54.6 shows that we can attribute 54.6 % from physical activity changes to the nutrition knowledge. Also, results of research indicate that there is relationship between nutrition knowledge and physical activity level in male students with overweight. Results are reported in Table 8.

Table 8: Distribution of correlation coefficient between nutrition knowledge and physical activity level in overweight category

	Nutrition knowledge	Activity level	d.f	Cd	a level R	significant level	tr	T table
Nutrition knowledge	1.00	0.754						
Activity level	0.754	1.00	84	56.8	0.01	0.267	0.00	10.5 2.61

According to the correlation coefficient with amount of ($p < 0.05$, 0.754) there is relationship between nutrition knowledge and physical activity level with overweight in male students .and relationship between nutrition knowledge and physical activity level with overweight is meaningful with 95 percent confidence. The direction is positive. The calculated determination coefficient 56.8 indicates that we can attribute 56.8 percent of physical activity to nutrition knowledge. Also, results of research indicate that there is relationship between nutrition knowledge and physical activity level in fat male students .the results are reported in table 9.

Table 9: Distribution of correlation coefficient between nutrition knowledge and physical activity level in obesity category

	Nutrition knowledge	Activity level	d.f	Cd	a level R	significant level	tr	T table
Nutrition knowledge	1.00	0.762						
Activity level	0.762	1.00	30	58	0.01	0.393	0.00	6.43 2.7

The correlation coefficient with amount ($p < 0.05$, 0.762) there is a relationship between nutrition knowledge and physical activity level in fat male students .and this

relationship is meaningful by 95 percent confidence. The direct of relationship is positive. The calculated determination coefficient 58 shows that we can attribute 58 percent of physical activity changes to the nutrition knowledge. Also, results of research show that there is relationship between nutrition knowledge and aerobic power in underweight male students. Results are shown in table 10.

Table 10: Distribution of correlation coefficient between nutrition knowledge and aerobic power in underweight category

	Nutrition knowledge	Activity level	d.f	Cd	a level	R	significant level	tr	T table
Nutrition knowledge	1.00	0.637							
Aerobic power	0.637	1.00	37	40.5	0.01	0.393	0.00	5.02	2.7

According to correlation coefficient by amount ($p < 0.05$, 0.637) there is relationship between nutrition knowledge and aerobic power in underweight male students .and the relationship is meaningful by 95percent confidence. The direct of relationship is positive. The calculated determination coefficient 40.5 shows that we can attribute 40.5 percent of aerobic power changes to nutrition knowledge. Also, results of research indicate that there is a relationship between nutrition knowledge and aerobic power in male students with optimal weight. The results are indicated in table 11.

Table 11: Distribution of correlation coefficient between nutrition knowledge and aerobic power in optimal weight category

	Nutrition knowledge	Activity level	d.f	Cd	a level	R	significant level	tr	T table
Nutrition knowledge	1.00	0.826							
Aerobic power	0.826	1.00	250	68.2	0.01	0.254	0.00	23.17	2.57

According to correlation coefficient by amount ($p < 0.05$, 0.826) there is relationship between nutrition knowledge and aerobic power in male students with optimal weight .and the relationship is meaningful by 95percent confidence. The direct of relationship is positive. The calculated determination coefficient 68.2 shows that we can attribute 68.2 percent of aerobic power changes to nutrition knowledge. Also, results of research indicate that there is a relationship between nutrition knowledge and aerobic power in male students with overweight. The results are indicated in table 12.

Table12: Distribution of correlation coefficient between nutrition knowledge and aerobic power in overweight category

	Nutrition knowledge	Activity level	d.f	Cd	a level	R	significant level	tr	T table
Nutrition knowledge	1.00	0.841							
Aerobic power	0.841	1.00	84	70.7	0.01	0.267	0.00	14.23	2.61

According to correlation coefficient by amount ($p < 0.05$, 0.366) there is relationship between nutrition knowledge and aerobic power in male students with overweight .and the relationship is meaningful by 95percent confidence. The direct of relationship is positive. The calculated determination coefficient 70.7 shows that we can attribute 70.7 percent of aerobic power changes to nutrition knowledge. Also, results of research indicate that there is a relationship between nutrition knowledge and aerobic power in fat male students. The results are indicated in table 13.

Table 13: Distribution of correlation coefficient between nutrition knowledge and aerobic power in overweight category

	Nutrition knowledge	Activity level	d.f	Cd	a level	R	significant level	tr	T table
Nutrition knowledge	1.00	0.366							
Aerobic power	0.366	1.00	30	13.4	0.05	0.304	0.03	2.15	2.01

According to correlation coefficient by amount ($p < 0.05$, 0.366) there is relationship between nutrition knowledge and aerobic power in fat male students. And the relationship is meaningful by 95percent confidence. The direct of relationship is positive. The calculated determination coefficient 13.4 shows that we can attribute 13.4 percent of aerobic power changes to nutrition knowledge.

Discussion and conclusion

The results of this study indicate that: mean and deviation of (nutrition knowledge) estimated (6.2 ± 45.2). Also, it can be concluded that male students are lower than the average level in terms of nutrition knowledge which is opposite to Barzegari et al (2011) research results, nutrition knowledge of male students 57.28% which indicates that students are at medium level in terms of nutrition knowledge (7).

Results of this study indicated meaningful relationship between nutrition knowledge and aerobic power of male students with different weight categories which is consists with study results of Daneshmandi et al (2010). Results of the study indicated that there is a meaningful relationship between aerobic capacity and age, BMI and the number of hours of exercise per week (11). Also, results of Nora et al (2011) indicated that there is a meaningful and inverse relationship in males between percentile of body

fat and cardio respiratory fitness. These results were in accordance with Marshal et al (2004) results. They in their researches increasing physical activity planned for preventing obesity and increased body fat expressed essential (32). It is consistent with findings of Shimal Koli et al (2010) that relationship between BMI and fat percentage and aerobic power with some Anthropometric variables.

The mean and deviation estimated physical activity of current study in male students of master degree was (1.3 ± 8.1) and at associate (8.4 ± 1.4) which shows that male students are in medium level in terms of physical activity. Results of Moghaddam et al (2009) research indicated that almost a half of students had little physical activity. In another study in Turkey Yabancı et al (2010) which has done over 1066 people of Turkish men and women they had seen that age is one of the most important and effective factor on the obesity and abdominal obesity which is consistent with current research (29).

Maybe one of the reasons for this low prevalence of overweight and obesity in the study group Berzin et al (2009) are the amount of 37.9% severe and moderate physical activity in them. The significant relationship between physical inactivity prevalence of obesity has been reported in Switzerland (2008), England (2008), South America (2002), Kuwait (2003) and Iran (2008). (8). Results of Daneshmandi et al (2008) research indicates that there is a significant relationship between underweight, obesity and body mass index with physical fitness of students these results are in consistent with researches of Martinez (2002), Kyle (2001), Kendal (2002), Thayyil (2004). they found in their research that active people have less BMI in comparison with inactive people (35). also it is consistent with results of current study. Results of this study indicates that 21% of students are overweight while conducted research by Mirdar et al (2005) indicates that 35.1% of female students and 20.3 % of male students of Mazandaran university are overweight. Also, a study conducted in the Ziaeddin Medical Faculty in Pakistan shows that 12.6% of students are overweight. Conducted studies during 1999-2002 in America shows that almost 65% of peoples over 20 years were fat or overweight (25). In current study, 7.8% of male students are obese. Which is consistent with results of Mirdar et al (2005). 28.1% of female students and 8.5% of male students are obese (25).

The results of Bahralolom et al. (1389), showed that in active students Body Fat Percentage is 13.4 ± 3.2 and inactive students is 16.7 ± 6.2 , which their difference were meaningful statistically. In body mass active students had average had 22.6 ± 2.8 and inactive students were 22.3 ± 3.8 but there was no significant difference between the two groups. Results of current study showed the prevalence of underweight, optimal weight, overweight and obesity in male students 18-30 years old 91.6, 61.5, 21 and 7.8%

respectively. The average of BMI in students is in its natural state and the prevalence of overweight and underweight respectively has been low (7.8 ± 9.5) yet prevalence of overweight is relatively high (21%).

Amamoto et al (2004) reported that amount of overweight in Japanese students was 5.8% and amount of obesity was 0.0%. Sakamaki et al (2005) study which has done over Chinese students showed that prevalence of overweight 25% and prevalence of obesity was 0.4. But in United States, prevalence of overweight or obesity in students has been reported 35%. Bonz et al (2007) expressed the prevalence obesity in 19-26 American men 21.1%. Another research which has done by Ayatollahi et al (2010) at Shiraz city revealed that obesity and overweight in men is 49.7 and 10.5 respectively which shows almost 5.8 % during a 14 period. A study which has been done by Vaghari et al (2010) in Golistan reported prevalence of obesity in men 15.4% and prevalence of overweight 32.9%. In a review in Shiraz (2002) in men 19-29 years the average body mass index was 22.1 ± 3.8 Kilograms per square meter, underweight 12%, normal weight 69.7%, overweight 13.9% and obesity 4.4% has been reported. Results of Barzin et al (2007) prevalence of overweight and obesity in young men 18-25 years' old Tehran city 23.2% and 9.5% respectively and average body mass index (standard deviation) 24.1 ± 6.5 kilograms per square meter reported. The highest prevalence of overweight WAS in 24 years people with 41.5% and the highest rate of obesity at 25 years old with 4.18% was observed. 9.6% of all subjects were underweight (Body mass index < 18.5) and the highest rates were seen in 18 years (15.4%) the underweight problem was not found in the 24 and 25 years people(0%) which shows that the problem of overweight and obesity in young people in Tehran excels on malnutrition. The results Barzegari and colleagues (2011) showed that average of BMI of Payame Nor University of Golistan province is normal but prevalence of overweight is relatively large (14.1%) and prevalence of obesity were too low (2.2%). According to results of Varo (2001) study at united states prevalence of overweight 36 and prevalence of obesity has been reported 21%.but in US prevalence of overweight and obesity (BMI > 25) in the students has been reported 35%. And in Europe 10 to 20 percent of men are obese.

Findings of current research is similar to amount of overweight and obesity in 18-25 years men of Tehran city(2007) and 19-29 years of Shiraz city (2002) and 16-24 men of English (2007)(23% and 6%) and 19-38 men of Greece (2004)(26.5% and 4.7%) and 18 years men of Austria (15.5% and 5.8 %). Also, it is very similar to findings of Astamatakys (2008), which has been done over 16-24 men of four different regions of the world (Netherlands, Hong Kong, America and Singapore) and the prevalence of body mass index reported abnormal 32.2% ,obesity 9.2% and average body mass index has reported 23.6%. A study which was conducted in a population of neighboring

countries and East Mediterranean have shown that in Bahrain and Kuwait (2003) 25% of men are obese a study which has done in Saudi Arabia reported prevalence of obesity in men 51.5%. In Hong Kong (2001), 28.8% of the study populations were overweight and 3.4% was obese in Palestine (2003), 7.48% of men were overweight. A study which were conducted on Japanese (2004) and Chinese (2005) students reported the amount of overweight and obesity 5.8%, 2.5% and (0% zero percent), 4.0%, respectively. A study which has done by Zafar (2007) in Pakistan reported the prevalence of overweight and obesity in the 17-26 years old medical student in Lahore 20.5% and 6.2% respectively which is lower than of Barzin study et al (2007) and it is consistent with current study of course underweight was more in that study (21.3%).

This fact could be relevant with the per capita income, dietary patterns and lifestyle of young men of two countries and because of this fact the weight problems of Iranian youth less than Arabia countries. For example in Al Almi (2005) study in young boys of Saudi Arabia obesity and overweight was 17.2%, in Ajloni (1998) study in Jordanians men over 25 years old was 49.7%. Results of Cbay (2003) study in Lebanese men over 20 years was 57.5% , results of Martinez (2006) study in Kuwait high school boys was 44.4%, results of Badr study in teenager 11-19 years old was 12.1%, Kalter study in Arab and Jewish 18 years old men in occupied Palestine was 25% and 23% respectively.

According to the findings, it becomes clear that the rate of overweight and obesity in study groups in this study is similar to developed countries but the prevalence of obesity is more than European countries and less than American young. In Azadbakht study (2005) the prevalence of abdominal obesity in adult males of Tehran city reported 32.1% which could be because of more extent age range of the participants in the study. In Ramos et al (2001) study abdominal obesity was reported 39.2% also in a study which was conducted in Oman by Alryamy et al. (2003) prevalence of abdominal obesity in men reported 31.5% which much higher than finding Berzin et al (1386). In Bhopal (1999), study in Pakistani men the prevalence of obesity was less than European men but the prevalence of obesity in them was higher than Europeans. Also in Azizi study (2004) which has done in 762 men of 20-29 years old in Tehran the average body mass index was reported 24 ± 4.4 which is similar to findings of Barzin et al (2007) research. In findings of Abdollahi et al (2010) research prevalence of obesity in urban population 25.5% (men 20.3%, women 30.7%) and also overweight and obesity in total 64.1% (62.65% men and 65.7% women). The study carried out in Iran, Gazipur (2003), Salem (2001), Azadbakht (2001) has shown an increase in overweight and obesity. The findings of Abdollahi and colleagues (2005) showed that by increasing age prevalence of obesity significantly increases such that the

risk of obesity in older ages than in the age under 29 years is 3 to 4 times higher. In conducted studies in Iran has found a similar pattern. One of the shortcomings of this study was that only male students and school (associate and BA) was conducted which is recommended to researchers in future researches do about girls and higher educational level (MA and PhD) in order that more reliable results presented to the community.

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REGRESSION ANALYSIS OF ORGANIZATIONAL LEARNING (OL) AND KNOWLEDGE MANAGEMENT (KM) ON ORGANIZATIONAL CITIZENSHIP BEHAVIOR (OCB) - A CASE STUDY: YOUTH AND SPORTS DEPARTMENTS OF KERMANSHAH PROVINCE

Hekmat Angazi¹, Zahra Keshtmand^{2*}, Masud Moradi³

¹MA Sport Management, Borujerd Branch, Islamic Azad University, Borujerd, Iran

²MA Sport Management, Kurdistan Science and Research Branch, Islamic Azad University, Sanandaj, Iran

³MA Sport Management, North Tehran Branch, Islamic Azad University, Tehran, Iran

Abstract:

The aim of this study was to Regression Analysis of Organizational Learning and Knowledge Management on Organizational Citizenship Behavior in Youth and Sports Departments of Kermanshah Province. The population included 148 employees and experts of General Administration of Sport in Kermanshah province that were randomly selected and evaluated using by three questionnaires: Nifeh's (2001) assessing organizational learning, Abtahi and Salvati's (2006) of knowledge management and a third questionnaire of organizational citizenship behavior and, using Regression in level of $P < 0.05$ were analyzed. The results showed that three components of organizational learning, knowledge management and organizational citizenship behavior are in a desirable status at General Administration of Sport of Kermanshah province; also, there is a significant relationship between the components of the research. According to the findings above, it can be concluded that by providing appropriate opportunities for professional growth and increase their public information and responsible participation in organizational learning and political life cycle of an organization, we can strengthened organizational support and encourage employees and managers to participate actively in the organizations meetings, to provide and receive constructive suggestions, and through improving the effectiveness of units and organizational, also improving the quality of administrative services to be participate in their organization efficiency growth.

Keywords: organizational learning, knowledge management, citizenship behavior, youth and sports departments

Introduction

In developed countries, sports and healthy recreations are considered as an important industry and an effective element on growth of national economy and also it is considered as one of the most income making industries during the 21st century (Cohen, 2014). Today, leaders and managers have found that looking at learning in their organizations is a considerable phenomenon; and to build a better future, grow an organization that has an effective and proper way of looking for learning, to survive aligned with changes since organizational learning is a lifelong process. These have various definitions: in an individual aspect, learning, accessing to information, understanding them and gaining skills. From an organizational point, learning is focusing on gaining traditions, perspectives, strategies and transferring knowledge that in both views, learning is in consistence with innovation, recognition, creativity, discovery and production of new knowledge (Amin, 2001).

The primary objective of organizational learning is to increase the quality and quantity of performance. In addition, organizations that learn faster, have their strategic capabilities increased, that enable firms to strengthen a position of competitive advantage. These attitudes, behaviors and organizational learning strategies are guidelines in superior long-term performance for organizations (Morales, 2011). Knowledge management plays a critical role in supporting organizational learning since it facilitates effective sharing of collective knowledge at the organization. Knowledge management is a coherent systematically process that use an appropriate combination of information technology and human interactions to identify, manage and sharing the information assets of the organization. These assets are including databases, documents, policies and procedures. In addition, the explicit and tacit knowledge include staffs and uses a wide variety of methods to capture, store and share knowledge within an organization (Abbaspoor, 2006). Several studies have shown that identifying and understanding these behaviors and providing an appropriate environment will lead on the type of organization's service delivery by its staff would be desirable, higher customer satisfaction and organizational and individual effectiveness to be increase (Kurland, 2010). Continuous learning is a process that occurs over time by gaining knowledge and improving performance. In general, it can be said that those who are seeking continuous learning are skillful in acquisition and transfer of knowledge and

act to change and modify their behaviors by the help of acquired new knowledge. In this definition, creating knowledge, innovation and creativity constitute basic pillars of continuous learning, but creativity and gaining knowledge only are not enough for an organization to be considered like a learning organization; so it should be able to apply that knowledge in its behaviors and practices and by help of those improve and modify its operations. Due to this, it is appropriate that the officials in charge of Administration of Physical Education as the main responsible for sport in Iran in order to provide the increasing learning opportunities of the organizations' experts and improve their performance, necessary arrangements have to be considered (Asadi, 2009).

In general, citizenship behavior will help to efficiency and effectiveness of organizations through resource developments, innovation and adaptability. Organizational citizenship behavior has many advantages in a way that will bring benefits to organization and employees based on different approaches to the interests of the organization, citizenship behavior would have cause to a group of employees who are committed to the company. According to Jin (1988) organizational citizenship behavior (especially dedication, conscientiousness, and patience) would lead to reduce and decreasing leaving and absenteeism from work; and employees who are committed to remain in the company for a long time, produce products with high quality and help to the company position on the basis of various approaches. Logically it can be assumed that organizational citizenship behavior may be improving a better internal working environment (Castiglione, 2008).

Nowadays sport organizations are subject to constant changes. Communication and interaction of these organizations with different factors, such as government agencies, private sector, financial sponsors and other international and national sport organizations and most importantly, social, economic, political and cultural factors causes these organizations face with different and various demands (Abtahi, 2006). Therefore, it is essential for these organizations in order to maintain their position and to be successful in their organizational mission, to improve their performance through organizational learning and other scientific methods. Creating learning organizations in sports protect sports organizations largely against environmental changes. It is noteworthy that the establishments of sport learning organizations coordinate with the axis that organizational learning innovators state, before a certain point at the end of a long path, is endless way. So creating a learning organization means endless progress on this path and move forward from one stage to the next stage (Asadi, 1998). Sports organizations are targeted institutions that have been in search of growth and development in different ways over the time. Regards the importance and necessity of

efficient and competent human resources in met the organizational goals in order to adapt daily changes and explore potential opportunities in the field of sport, we need to have creative, innovative and capable employees who are able to discover and learn new subjects (Jimenez, 2008). Employees of each organization and their knowledge have a decisive role in this issue (Lopez, 2005). Thus, understanding the characteristics of employees' is the first and most fundamental issue of the organization. Finally, researcher seeks to answer this question: what is the relationship between organizational learning and knowledge management on organizational citizenship behavior in the General Directorate of Youth and Sports in Kermanshah province.

Methods

The research method is descriptive-correlational and the research is implemented as a field study. The population were includes 148 employees and experts of General Administration of Sport in Kermanshah province that were randomly selected and evaluated using by three questionnaires of Nifeh's (2001) assessing organizational learning, Abtahi and Salvati's (2006) knowledge management and third questionnaire of organizational citizenship behavior was used. The validity of the questionnaires was approved by expert professors of sport management and the Cronbach's Alpha reliability for the questionnaires were obtained and using regression in level of $P < 0.05$ were analyzed. All the statistical operations are performed by SPSS software.

Results

Table 1: Impact of knowledge management on organizational citizenship behavior (OCB)

Variable	Organizational Citizenship Behavior		
	R2	P-Value	R
Knowledge Management	0.0625	0.010	0.25

According to the results presented in Table 1, the achieved significant level was less than 0.05, thus the null hypothesis is rejected and the other hypothesis is confirmed; i.e. by assurance of 95% we could say that there is a significant relationship between knowledge management and organizational citizenship behavior (OCB) at Administrative of Youth and Sports in Kermanshah province. Also, the calculated coefficient of determination shows that 0.0625 of knowledge management component is defined by the OCB.

Table 2: Impact of organizational learning and its aspects on organizational citizenship behavior

Variable		R	R2	Sig.
Organizational Learning	Organizational Citizenship Behavior (OCB)	0.29	0.0635	0.001
Shared Vision		0.21	0.0586	0.015
Organizational Culture		0.24	0.0455	0.005
Team Work and Learning		0.18	0.0386	0.011
Sharing		0.23	0.0425	0.020
Knowledge		0.20	0.0439	0.025
Systematic Thought		0.17	0.0486	0.019
Participative Leadership		0.24	0.0489	0.001
Competence Development				

According to the results presented in Table 2, the achieved significant level of organizational learning and all its components were less than 0.05, thus the null hypothesis is rejected and the other hypothesis is confirmed; i.e. by assurance of 95% we could say that there is a significant relationship between organizational learning and its aspects with organizational citizenship behavior (OCB) at Administrative of Youth and Sports in Kermanshah province.

Table 3: Impact of knowledge management and its aspects on organizational citizenship behavior

Variable		R	R2	Sig.
Knowledge Management	Organizational Citizenship Behavior (OCB)	0.29	0.0684	0.003
Organizational Culture for Creating Knowledge		0.25	0.0564	0.012
Knowledge Leadership		0.21	0.0539	0.035
Knowledge Source		0.22	0.0550	0.017
Knowledge Structure		0.18	0.0453	0.021
Organizational Process for Creating Knowledge		0.19	0.0495	0.021
Technological and Cultural Factors		0.26	0.0615	0.021

According to the results presented in Table 3, achieved significant level of knowledge management and all its components were less than 0.05, thus the null hypothesis is rejected and the other hypothesis is confirmed; i.e. by assurance of 95% we could say that there is a significant relationship between knowledge management and its aspects with organizational citizenship behavior (OCB) at Administrative of Youth and Sports in Kermanshah province.

Table 4: Results of organizational learning regression effects with predictability in the ability of organizational citizenship behavior

Model	T	Sig	Standard Coefficients	Non-Standard Coefficients	
			Beta	SE	B
Organizational Learning	2.463	0.000	0.608	1.414	3.425
Organizational Citizenship Behavior	2.874	0.001	-	0.041	0.325
Knowledge Management	1.254	0.000	0.534	1.425	2.025
Organizational Citizenship Behavior	11.454	0.001	-	0.045	0.689

According to Table 4, the results of variable regression effects over the predictor of variable criterion on the component of organizational learning, its standardized regression coefficient is equal to 3.425 and significant; also in organizational citizenship behavior, standardized regression coefficient is equal to 0.325 and meaningful.

According to Table 4, the results of predictable variable regression effects over the variable criterion on the component of knowledge management, its standardized regression coefficient is equal to 2.025 and significant; also in organizational citizenship behavior, standardized regression coefficient is equal to 0.689 and meaningful.

Discussion and Conclusion

The results show that organizational learning is in a desirable level at Administrative of Youth and Sports in Kermanshah province. Learning is not important just because of learning nature and advantages, but for the success and development of the organization. The organization would pay the excessive expenses of lack of learning, not knowing, duplication and inefficiency of something, wasting of resources and skills, losing of employees' self-confidence and finally decreasing its income because of lack of innovation. However, if learning and continuous commitment to it would be exist, the profit organizations will increase and individuals will change to the organizations' capital rather than dumped only into workforce.

Knowledge management is in a desirable level at Administrative of Youth and Sports in Kermanshah province. In organizations, knowledge is easily transferred and available to all employees. When employees access to corporate knowledge, they can know their environment and make it meaningful. They can find new and better methods for implementing their tasks, work together, fill the gap of knowledge, boost productivity, satisfy the customers and ultimately reach to effective competition. Organizations that through research and development or informal learning processes

seek to generate new knowledge are superior to those which act based on other ones rather themselves. Knowledge management deals with issues such as organizational adaptation, survival and competence in encountering increasingly changing environment. In fact, knowledge management seeks synergistic combination of information processing, information technology and creative ability of human beings.

Organizational citizenship behavior is in a desirable level at Administrative of Youth and Sports in Kermanshah province. Organizational citizenship behavior as one of the new concepts of organizational behavior management that emphasizes on the ultra-role of staffs and managers, in organizational processes and changing the traditional environment to a dynamic and efficient one has a decisive role. So, if successful and unsuccessful organizations in order to create organizational citizenship behavior decisively take steps, in this case, the productivity and efficiency of the organization will potentially increase therefore their performance will improve among competing organizations. If the ability to learn in organizations is improved, consequently, citizenship behaviors among employees will grow and they would have more willing to provide organizational citizenship behaviors. Managers of the organizations, by identifying knowledge management processes and extending them, will encounter fewer expenses in the issues of information technology. And also with focus on organizational citizenship behaviors, they could direct their view and their employees toward the organizational objectives and goals; so these types of behaviors, however, are beyond the duties and obligations of the employees, but will improve and increase the capabilities and abilities of individual and all members of the group and would be a factor for the survival of the organization in the competitive environment.

The study also shows a significant and positive relationship between organizational learning and its aspects with organizational citizenship behavior at Administrative of Youth and Sports in Kermanshah province. In managements which feelings of eligibility, the right to choose, effectiveness, meaningfulness and trusting among employees are more and considerable, the more organizational learning will exist. Based on this, increasing staffs eligibilities, believe in self-ability and capacities, the ability to influence on strategic outcomes, individual feeling about his. Its right to choose and self-confidence will also increase organizational learning. Knowledge management deals with issues such as organizational adaptation, survival and competence in encountering increasingly changing environment. In fact, knowledge management seeks synergistic combination of information processing, information technology and creative ability of human beings. Attention to the citizens in a democratic value system is rising. Organizations cannot move on their path without

their members as good citizens' acts and have positive behaviors. In organizations, knowledge is easily transferred and available to all employees. When employees access to corporate knowledge, they can know their environment and make it meaningful. They can find new and better methods for implementing their tasks, work together, fill the gap of knowledge, boost productivity, satisfy the customers and ultimately reach to effective competition. Organizations that through research and development or informal learning processes seek to generate new knowledge are superior to those which act based on other ones rather themselves.

According to the findings above, it can be deduced that by providing opportunities for professional growth and increasing their public information and responsible participation in organizational learning and political life cycle of an organization, we can strengthened organizational support and encourage employees and managers to participate actively in the organizations meetings to provide and receive constructive suggestions and through improving the effectiveness of units and organizational, and also improving the quality of administrative services to be participate in their organization efficiency growth. Also in communicate with people out of the organization, civil behavior through volunteer and participate actively in the meetings by group actions' coordinating of team members, efficiency and effectiveness of groups and organizations will provide a positive image of the organization and promote the reputation of the organization. Conscious staffs usually, have high performance and by reducing the volatility in united working performance will lead to stability of organizational performance.

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THE RELATIONSHIP BETWEEN LEADERSHIP STYLE AND COMMUNICATION SKILLS IN HIGH SCHOOL PHYSICAL EDUCATION TEACHERS OF GUILAN PROVINCE

Vahid BakhshaliPour¹ⁱ, Siavash Khodaparast Sareshkeh²,
Majid Keramati Moghadam³, Maryam Falah Kazemi⁴, Nasrin Toubia⁵

¹Sama Technical and Vocational Training College,
Islamic Azad University, Lahijan Branch, Siyahkal, Iran

²Department of Physical Education and Sport Science,
Islamic Azad University, Lahijan Branch, Guilan, Lahijan, Iran

³MA Sport Psychology, Islamic Azad University Karaj Branch, Iran

⁴MA Sport Management, Alzahra University, Iran

⁵MA in Physical Education and Sport Sciences,
Payam Noor University, Center of Tehran, Iran

Abstract:

Goals: Physical education and health managers of Education offices should pay attention to the improvement of communication skills due to the students' needs and adopt the right leadership style. This study examined the relationship between leadership style and communication skills in high school physical education teachers in schools of Guilan Province.

Method: The method of this study was descriptive correlation. The statistical population was all high school physical education teachers in public Schools of Guilan province. The instrument of this study was the Multi-factor Leadership Questionnaire (MLQ-X5) and communication skills Questionnaire (Barton G.E). The collected data were classified by descriptive statistical methods and were analyzed by Pearson's correlation coefficient, Spearman's correlation coefficient, and ANOVA ($\alpha \leq 0.05$).

Results: the results of this study showed that there was a significant relationship between communication skills and transactional and transformational leadership styles in high school physical education teachers of Guilan Province. But there was no significant relationship between communication skills and laissez-faire Leadership.

ⁱ Corresponding author: vahidbakhshalipour@yahoo.com

Conclusion: this study concluded that communication skills are as a facilitator, effective, and motivational factor for the leadership styles in physical education teachers.

Keywords: communication skills, leadership style, physical education teachers, Guilan province

Introduction

Iranian society is one of the youngest populations in the world that more than 14 million students are studying in its schools. Physical education and health managers of Education offices should adopt the right leadership style due to these students' needs in the field of physical education and sport until they can handle up to organize all the resources and talents and improve the productivity of each resource in the education system. Thus, a good teacher always tries to establish a right and balanced relationship between transferable concepts and his/her students (1). Nowadays the ideal teacher's role is emphasized in students' constructiveness in societies and communication (1).

Teachers should have the necessary skills for successful implementation of curricula, interaction, and effective response to the students at their disposal. The effective communication is one of these vital skills in human resource management (2, 3). Many factors play a role in the communication process between teachers and students so that the ability of effective communication is one of the important indicators in the process of teacher that it should be considered (4). The issue of human resources has always a large part of the time and capital in organizations and in recent years (5) so that the proper and deeper attention into this stratum of society is a need to improve the performance and enhance an optimal communication between teachers and students (6). Since the bulk of our time to interact with others, so the communication method play a decisive role in life (7). One of the important aspects of the teacher's behavior is the effective communication with students that should be the focus of attention. This requires the correct communication and the learning of communication skills. Communication skills are those skills that people can be involved in interpersonal interactions and communication process. They include different skills that the most important of these skills are verbal skills, effective listening and feedback (8, 9). Rapid changes in various sectors of communities has caused that managers encounter new issues in the type of behavior with employees in organizations (10). Studies show that individuals' effective management and leadership styles in different

organizations are one of the important and effective factors for the success of any business, occupation, organization in the achievement of predetermined goals (11). An effective leader must provide a path to guide all the staffs' efforts to implement goals of organization (12).

The connection between individual and organizational of goals may break or destroy in the appropriate leadership. This can lead to undesirable situation that individual work to be done solely in order to achieve individual goals in this situation, so the organization loses its efficiency and adequacy and cannot achieve its goals (13). We can never image a number of individuals' coherent and common activity without leadership and management. Even the best employees need guidance and leadership to contribute in the achievement of organizational goals (14). Because if all necessary facilities and resources be without effective leadership and management, its result will be nothing but a waste of resources (15). So leadership style as a facilitator and motivational factor affect directly and indirectly staffs' efficiency and effectiveness (16). In other words, leadership makes a person able to influence others so that individuals do their work with their wishes instead of doing the work due to the task or fear of the consequences of failure to do it (17).

The adoption of leadership style in dealing with different situations is one of the most important fundamental topics of behavioral sciences. The chosen style should be compatible with the available situation and this can be a result of correct identification of all available factors (18). The need for leadership and management is very sensible and vital in all fields of social activity. These needs are important especially in education system and its training centers and schools, because this important system plays the main role in education and training of committed and specialist human resources for all organizations and departments (19).

The results of Ismaili's (2013) study showed that there was a significant relationship between coaches' leadership style and athletes' satisfaction in track and field league of country (20). Halaji, et al., (2011) found that transformational leadership style can predict players' commitment more than transactional leadership style (21). The encouraging intellectual effort and attention to individual differences had a significant and positive relationship with players' commitment (21).

Also, transformational leadership style increased players' commitment more than transactional leadership style (21). In addition, the lack of attention to communication skills and its weaknesses in life are some of the factors that the lack of attention to those causes problems in social individual communities, so that a study showed that communication was the most important factor that must be considered.

The lack of communication is a problem in coordination, solidarity, and cooperation between team. A coach acts as a transmitter who should find the most appropriate ways to send messages to recipients (athletes and assistants).

An appropriate and effective communication between coaches and athletes are an important factor before, after, and during games and can positively or negatively affect the individual and team performance (22). A study suggests that the lack of communication skills increases costs and reduces effectiveness. Effective leaders build bridges through communication and they connect the past and present time with their speeches and performances in an inspiring vision of the future (23, 24). The attention to communication skills and its application is obvious and inevitable with the introduction of physical education and exercise as a need in modern societies, a clear of effects of exercise on physical, mental, and social health in members of society, and the development of sports halls in Education. On the other hand, results of studies show that school teachers' leadership style affects significantly the amount of students' communication. Physical education teachers need to apply communication factors more than others due to the practical nature of physical education.

Therefore, the purpose of this study was to examine the relationship between leadership style and communication skills in high school physical education teachers of Guilan Province.

Methodology

This study was a descriptive correlation research and it was conducted through field method.

Participants

The statistical population was all high school physical education teachers in public Schools of Guilan province. 156 physical education teachers were selected by stratified sampling and Morgan's table.

Instruments and Tasks

The instrument of this study was the Multi-factor Leadership Questionnaire (MLQ-X5) and communication skills Questionnaire (Barton G.E).

Procedure

The purpose and the process of study were explained to subjects. The participants were assured that their data will be kept confidential and those will not be available to anyone. Then all subjects completed a consent form to participant in this study and they attended with the complete satisfaction in this study. Researchers distributed questionnaires among subjects. The subjects completed questionnaires without name due to the subjects, security sense.

Data Analysis

The collected data were classified by descriptive statistical methods and were analyzed by Pearson's correlation coefficient, Spearman's correlation coefficient, and ANOVA ($\alpha \leq 0.05$).

Results

The results of this study showed that 61.7% of subjects were men and 38.3% of them were women. 62.2% of teachers had an associate's degree, 57.6% of them had a bachelor's degree, and 26.2% of them had a master's degree. The results of showed verbal skills had highest mean ($M=18.9$, $SD=2.6$) and listening skills had lowest mean ($M=17.1$, $SD=3.9$). Also, 57.5% of subjects had a transformational leadership style, 39% of them had a transactional leadership style, and 2.5% of them had Laissez-faire a leadership style. The transformational leadership style had highest mean ($M=2.16$, $SD=0.2$).

Table 1: The results of ANOVA for the comparison of score mean in leadership styles

Variable	mean square	df	F	Sig
Transformational, Transactional, and Laissez-faire Leadership	119.5	1.11	337.6	0.001

The results of ANOVA showed that there was a significant relationship between physical education teachers' leadership styles in Guilan province ($P=0.001$).

Table 2: The results of Pearson's correlation coefficient for the determination of correlation between leadership styles and communication skills

Variable		Communication skills
Transformational Leadership	Correlation coefficient	0.272
	Sig	0.042
Transactional Leadership	Correlation coefficient	0.272
	Sig	0.035
Laissez-faire Leadership	Correlation coefficient	0.221
	Sig	0.080

The results in table (2) showed that there was a significant and direct relationship between physical education teachers' communication skills and transformational leadership style ($P=0.042$, $r= 0.272$) and transactional leadership style in Guilan province ($P=0.035$, $r= 0.272$). But, there was no significant relationship between physical education teachers' communication skills and Laissez -faire a leadership style in Guilan province.

Table 3: The correlation coefficient between leadership styles and subscales of communication skills

Variables		Verbal skills	Listening skills	Feedback skills
Transformational Leadership	Correlation coefficient	0.210	0.013	0.372
	Sig	0.089	0.931	0.001
Transactional Leadership	Correlation coefficient	0.321	-0.079	0.387
	Sig	0.012	0.567	0.001
Laissez-faire Leadership	Correlation coefficient	0.003	0.203	0.269
	Sig	0.999	0.111	0.038

The results in table (3) showed that there was a significant relationship between feedback skills and transformational leadership ($P=0.001$, $r=0.372$), transactional leadership ($P=0.001$, $r=0.387$), and laissez -faire leadership ($P=0.001$, $r=0.372$). Also, there was a significant relationship between verbal skills and transactional leadership ($P=0.012$, $r=0.321$). But, there was no significant relationship between listening skills and leadership styles.

Discussion and Conclusion

The purpose of this study was to examine the relationship between leadership style and communication skills in high school physical education teachers of Guilan Province. The results of this study showed the mean of communication skills was moderate level.

Physical education teachers' dominant leadership style was reported at optimum levels in Guilan province so that the results of statistic test confirmed that there was a significant difference between physical education teachers' leadership styles in Guilan province. Also, there was a significant and direct relationship between physical education teachers' communication skills and transformational leadership and transactional leadership styles that this result is consistent with the results of Halaji, et al., (2011); Mozafary, et al., (2006); Jong (2002); Yilmaz, et al., (2011); Hsin, 2007; and Ismaili's (2013) study (10, 15, 20, 21, 25, 26). The reason of this consistency can be due to the appropriate and talented atmosphere in Guilan Province.

Physical education teachers have more verbal communication with their students in their profession and they act as a guide, speaker, and explainer. This can increase teachers' communication skills. Perhaps this belief is one of the reasons for the desired level of verbal skills and communication skills in teachers. The results of this study showed that there was a significant relationship between transformational leadership style and communication skills.

Also, there was a significant relationship between feedback skills and transformational leadership style and there was no significant relationship between transformational leadership style and listening and verbal skills. This approach requires high feedback skills to receive the right feedback from students in transformational leadership style. The charismatic behavior, the creation of motivation, encouraging intellectual effort, and attention to individual differences are effective factors. In addition to, there was a significant and direct relationship between transactional leadership style and communication skills in this study. There was a significant relationship between transactional leadership style and feedback and verbal skills from subscales of communication skills.

But there was no significant relationship between transactional leadership style and listening skills. In general, there was a positive relationship between communication skills and transformational leadership and transactional leadership styles and high communication skills is associated with the increasing of use of these two leadership style. It was shown that the relationship of each of these leadership styles with different sub scales of communication skills is high. This is probably due to

the different nature of these two leadership styles that the application of every style requires the use of different communication methods.

Conflict of interest

The authors declare no conflict of interest

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THE SURVEY OF MOOD STATES IN MALE AND FEMALE HIGH SCHOOL CHESS PLAYERS OF LORESTAN PROVINCE

Roghayeh Keramati Moghadam¹, Nasrin Touba²,
Majid Ketamati Moghadam³ⁱ, Vahid BakhshaliPour⁴

¹M.Sc in Educational Administration,
Islamic Azad University, Central Tehran Branch, Iran

²M.Sc in Physical Education and Sport Sciences,
Payam Noor University, Center of Tehran, Iran

³M.Sc in Sport Psychology, Islamic Azad University Karaj Branch, Iran

⁴Department of Physical Education and Sport Science, Islamic Azad University,
Langarud Branch, Guilan, Langarud, Iran

Abstract:

The purpose of this study was to survey mood states in male and female high school chess players of Lorestan Province. The method of study was causal - comparative. The statistical population of this study was all selected high school chess players (the first and second year of high school) of Lorestan Province. The instrument for collecting of data is included the Brunel Mood State Inventory (BRUMS). The collected data were analyzed by independent t-test ($\alpha \leq 0.05$). The results of this study showed that there was a significant difference between male and female high school chess players in tension, depression, anger, confusion, and fatigue subscales. The results of this study showed that there was no significant difference between male and female high school chess players in relaxation, vigor, and happiness subscales.

Keywords: mood states, chess players, Lorestan Province

Introduction

Mood is a variable and unstable emotional state and arousal. The pride and happiness sense does not last over several hours or several days while self-confidence or self-esteem that is a sign of person's personality status is stable. Mood refers those

ⁱ Corresponding author: majid.keramatomoghadam@gmail.com

psychological characteristics that originate from physiological processes. On the other hand, some authors believe that mood is the result of emotional reactions at a given time. In other words, mood is an underlying emotional talent that is full of emotional and instinctive tendencies and offers pleasant and unpleasant aspects to mental states.

Therefore, mood is related to the brain excitability, autonomic nervous system, and endocrine system in person. Mood characteristics include feelings such as anxiety, depression, anger, fatigue, and confusion. Since the mood is not static phenomenon, it seems logical that the method and pattern of life influence on mood. The person's mental health will enhance if negative mood factors decrease. It is well known that physical activities are one of the effective factors on the physical and mental health. But the effect of physical activities had been twofold on the mental and physical health and other factors such as demographic characteristics, lifestyle, and activity affect on mental and physical health. Therefore, the relationship between physical activities and mood are not well defined that the inconsistent results in studies of this field are the reason of this claim (Azerbaijani, et al., 2012). Morgan (1988) stated that the increasing of training intensity can increase total mood disorders. The reason of its decreasing can be related to subjects' adaptation with training intensity in this study (Morgan, 1988). Berlin, et al., (2006) showed that competition stress is one of effective factors on mood. If the presence of individuals is not selective for the participation in sports activities, they will not compete with each other and there will not competitive tension during exercise. So this can lead to the decreasing of negative characteristics in mood (Berlin, et al., 2006).

As physical characteristics are affected by the training intensity and duration, behavioral and psychological characteristics are also affected by these changes. If the regularly person does physical trainings and with moderate-intensity, he/she will experience the reduction of anxiety and depression and the increasing of self-confidence (Bartholomew, et al., 2005; Berlin, et al., 2006). Mood is another sensitive psychological parameter to the changes in training intensity and volume (Morgan, 1987). It seems that mental game plays an important role in chess. It can even be said that psychological factor is important as players' technical skills at World Championships. These psychological were considered tricks in the past, but now they are essential for elite chess players (Euwe, 1997). However, there is the widespread consensus about the necessity of special knowledge for professional performance in chess, but there is disagreements about the importance of individual's general characteristics in the adjusting of achieved performance level and the process of skill acquisition (Roland, et al., 2006). The Profile of Mood States Inventory (POMS) was frequently used to assess mood changes in sports. The Profile of Mood States is one of the first psychological instruments to display training pressure. Morgan, et al., (1987) reported that athletes'

assessment on the basis of mood profile scores was potential method to prevent mood disorders. The preliminary studies shows that mood disorders total increase alongside negative mood components after weeks of intense training in swimmers, but a mood powerful factor that is considered as a positive mood factor decreases. This means that negative components of mood including tension, depression, anger, fatigue, and confusion increase and vigor component decreases. Morgan, et al., (1987) after the 10-year study about mood found that mood disorders total increased significantly as the increasing of training load and if training load reduced, it would return to the initial values (Morgan et al., 1987).

Some psychological tests such as the profile of mood states is used in sport in recent years. These tests measure a person's mental condition and it is used to show what is called overtraining. It is believed that positive thinking, high concentration on task, enough self-confidence, high motivation, and the ability to cope with stress is effective in the reduction of injuries. Also, psychological factors such as poor concentration, low motivation, negative thinking, lack of self-confidence, and low ability to deal with stress can lead to the increasing of injuries (Shafi Zadeh and Zahedi, 2007). Researchers use the interactive model on the basis of athlete's personality characteristics and position for the better and more accurate prediction of athlete's performance because athlete's mood is the resultant of his/her character and situation at any time. So, the measurement of athletes' mood will be valid method in performance time (Bergen and Motel, 2000). Some researchers believe that the use of this test to measure athletes' psychological characteristics is an appropriate method to prevent the extreme fatigue. The preliminary studies shows that scores total of mood disorders increases after periods of heavy training in swimmers, but a mood powerful factor that is considered as a positive mood factor decreases and athletes' profile iceberg is reversed (O'connor, et al., 1991; Raglin,1993). Herbert and Potgieter (2005) examined mood states during a successful world record underwater diving attempt.

The mood states of a diver were recorded over a period of almost 10 days of submersion. Scores on the Profile of Mood States obtained on the components of depression, anger, and confusion suggested that there were no signs of psychological disintegration over this period. As expected, scores on Fatigue increased whereas perceived vigor diminished over time (Herbert and Potgieter, 2005). Covassin and Pero (2004) studied the Relationship Between self-confidence, mood state, and anxiety among collegiate tennis players. Twenty-four collegiate tennis players completed the POMS and CSAI-2 30 minutes prior to their tennis match during their participation in the NCAA Regional (VII) Team Tennis Tournament. Results revealed winning tennis players displayed significantly higher self-confidence, lower cognitive and somatic

anxiety levels, and lower total mood disturbance scores than losing players. In addition, winning tennis players exhibited the iceberg profile on the POMS (Covassin and Pero, 2004). Few studies have been done about the comparison of mood states in both gender and in sport environments that the results of these studies have showed little difference between men and women in scores of emotional states (Fuchs & Zaichkowsky, 1983; Terry & Lane, 2000). Terry and Lane (2000) examined normative values for the profile of mood states for use with athletic samples. They reported no significant difference between men and women in the comparison of mood scores (Terry & Lane, 2000). Fuchs and Zaichkowsky (1983) compared psychological characteristics in male and female body builders. They reported that personality and mood characteristics were similar in male and female body builders (Fuchs & Zaichkowsky, 1983).

Several studies were conducted about the profile of mood states and its changes as a result of sports activities and in athletes (Shafi Zadeh and Zahedi, 2007; Salehi, 2003; and Mirzaei, et al., 2006). Mirzaei, et al., (2006) compared profile of mood states in wrestlers of the junior and senior national teams in freestyle and Greco Roman wrestling. The results showed that there was no significant difference between groups in anger, vigor, confusion, depression, and fatigue subscales. However, the profile of mood states in the four groups consistent with Morgan's pattern of the iceberg in elite athletes (Mirzaei, et al., 2006). Therefore, the purpose of this study was to survey mood states in male and female high school chess players of Lorestan Province.

Methodology

Method

This study was a causal - comparative research.

Participants

The statistical population of this study was all selected high school chess players (the first and second year of high school) of Lorestan Province. 102 players were selected by census sampling ($N_{\text{Female}} = 61$, $N_{\text{Male}} = 41$).

Instruments and Tasks

The instrument was the Brunel Mood State Inventory (BRUMS) including 32 questions. The first part of his questionnaire was included the questions about players' individual characteristics on age, gender, sport history of s activities, level of skills – competitive experience, and type of sport. The second part of the questionnaire was included the questions about players' mood states using the Brunel Mood State Inventory. Its

purpose was to determine the validity and reliability of the Persian version of Lane, et al.,'s (2007) BRUMS including 32 questions. So, 423 (216 male and 207 female) athletes with different skill levels (beginner, non-elite, and elite) were randomly selected in 10 individual and team sports. They completed questionnaires.

At first, the face and content validity of the Persian version of questionnaire was confirmed by three sport psychology experts and three English language training expert. Then, confirmatory factor analysis based on structural equation modeling was used to determine construct validity of the questionnaire.

Cronbach's alpha coefficient was used to determine the internal consistency of the questionnaire and intra-class correlation coefficient in test-retest method with 2-week interval was used to determine the time-out questionnaire (the stability of questions answers). The results of study showed that measurement model of 32 questions was acceptable in the propriety indicator (TLI=0.93, CFI=0.94, RMSEA=0.08), the internal consistency indicator (confusion=0.72, fatigue=0.76, anger=0.72, depression=0.70, happiness=0.77, relaxation=0.78, tension=0.74, vigor=0.80, and the entire questionnaire=0.78), the time-out questionnaire indicator (confusion=0.84, fatigue=0.86, anger=0.86, depression=0.88, happiness=0.87, relaxation=0.86, tension=0.90, vigor=0.87, and the entire questionnaire=0.88). This shows the appropriate reliability and validity of the Persian version of the Brunel Mood State Inventory (BRUMS) including 32 questions.

Therefore, the Persian version of the Brunel Mood State Inventory (BRUMS) including 32 questions can be used as an instrument to study and evaluate Iranian athletes' mood and emotional characteristics (Farokhi, et al., 2013). Answers was expressed with a 5-point scale so that 0 = I do not feel that way, 1= I feel a little bit, 2= I almost felt, 3=I'm feeling a lot, 4= I absolutely feel.

Procedure

The researcher distributed questionnaires among subjects. He explained the inventory for the subjects before its completing. Each subject had 30 minutes to complete the questionnaire. The subjects completed questionnaires without name due to the subjects' security sense.

Data Analysis

The collected data were classified by descriptive statistical methods and were analyzed by independent t-test. The SPSS software (version 19) was used for data analysis ($\alpha \leq 0.05$).

Results

The results in table (1) show that the mean, standard deviation (SD), and standard error of the mean (SEM) of mood states subscales in male and female high school chess players of Lorestan Province. The results in table (2) showed that there was a significant difference between male and female high school chess players in mood states subscales.

Table 1: The mean, standard deviation, and standard error of the mean of mood states subscales male and female high school chess players

Gender		N	Mean	SD	SEM
Male	Tension	41	1.1280	0.97166	0.15175
Female		61	0.6762	0.68821	0.08812
Male	Depression	41	0.7622	0.87491	0.13664
Female		61	0.2582	0.46986	0.06016
Male	Anger	41	0.8476	0.73075	0.11412
Female		61	0.3361	0.49557	0.06345
Male	Vigor	41	2.5305	0.88423	0.13809
Female		61	2.5943	1.11539	0.14281
Male	Fatigue	41	0.7012	0.85736	0.13390
Female		61	0.4180	0.54337	0.06957
Male	Confusion	41	0.7927	0.79235	0.12374
Female		61	0.5328	0.60977	0.07807
Male	Relaxation	41	1.9695	0.83516	0.13043
Female		61	2.1803	1.07929	0.13819
Male	Happiness	41	2.2622	0.83095	0.12977
Female		61	2.4918	1.11052	0.14219

Table 2: The results of independent t-test for the determination of difference between male and female high school chess players in mood states subscales

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Tension	Equal variances assumed	7.316	0.008	2.750	100	0.007	0.45182	0.16429	0.12587	0.77777
	Equal variances not assumed			2.575	66.483	0.012	0.45182	0.17548	0.10152	0.80212
Depression	Equal variances assumed	17.216	0.001	3.768	100	0.000	0.50400	0.13375	0.23864	0.76936
	Equal variances not assumed			3.376	55.617	0.001	0.50400	0.14930	0.20488	0.80312
Anger	Equal variances assumed	10.275	0.002	4.216	100	0.000	0.51150	0.12133	0.27078	0.75221
	Equal variances not assumed			3.917	64.447	0.001	0.51150	0.13058	0.25067	0.77232
Vigor	Equal variances assumed	4.237	0.042	0.307	100	0.760	0.6377	0.20784	0.47613	0.34858
	Equal variances not assumed			0.321	97.196	0.749	0.6377	0.19866	0.45804	0.33050
Fatigue	Equal variances assumed	5.192	0.025	2.043	100	0.044	0.28319	0.13862	0.00816	0.55821
	Equal variances not assumed			1.877	61.524	0.035	0.28319	0.15089	0.01849	0.58486
Confusion	Equal variances assumed	2.485	0.118	1.869	100	0.035	0.25990	0.13907	0.01602	0.53581
	Equal variances not assumed			1.776	70.714	0.080	0.25990	0.14632	0.03187	0.55166
Relaxation	Equal variances assumed	4.636	0.034	1.056	100	0.294	0.21082	0.19971	0.60703	0.18540
	Equal variances not assumed			1.109	97.935	0.270	0.21082	0.19002	0.58791	0.16628
Happiness	Equal variances assumed	7.566	0.007	1.128	100	0.262	0.22961	0.20357	0.63349	0.17428
	Equal variances not assumed			1.193	98.780	0.236	0.22961	0.19251	0.61159	0.15237

The results in table (2) showed that there was a significant difference between male and female high school chess players in tension, depression, anger, confusion, and fatigue subscales ($P \leq 0.05$). The results of this study showed that there was no significant difference between male and female high school chess players in relaxation, vigor, and happiness subscales ($P \geq 0.05$).

Discussion and conclusion

The results of this study showed that there was a significant difference between male and female high school chess players in tension, depression, anger, confusion, and fatigue subscales. The results of this study showed that there was no significant difference between male and female high school chess players in relaxation, vigor, and happiness subscales. The results is consistent with the results of Bartholomew et al., (2005) and Berlin et al', s (2006) study that they concluded that If the regularly person

does physical trainings and with moderate-intensity, he/she will experience the reduction of anxiety and depression and the increasing of self-confidence.

Also, Morgan, et al., (1987) stated that mood disorders total increased significantly as the increasing of training load and if training load reduced, it would return to the initial values and Covassin and Pero (2004) expressed that winning tennis players displayed significantly lower total mood disturbance scores than losing players. The results of this study are conflict with the results of Fuchs and Zaichkowsky (1983); Mirzaei, et al., (2006); Herbert and Potgieter (2005); and Covassin and Pero's (2004) study. Covassin and Pero' (2004) showed that there was no significant difference between men and women in mood states scores. Fuchs and Zaichkowsky (1983) stated that personality and mood traits were similar between men and women. Mirzaei, et al., (2006) compared profile of mood states in wrestlers of the junior and senior national teams in freestyle and Greco Roman wrestling.

The results showed that there was no significant difference between groups in anger, vigor, confusion, depression, and fatigue subscales. There was a significant difference between groups in tension subscale. Herbert and Potgieter (2005) showed that scores on the Profile of Mood States obtained on the components of depression, anger, and confusion suggested that there were no signs of psychological disintegration over this period. Sports coaches need to identify athletes' mood status due to the importance of mood states in athletes' performance because this identification guides them to adjust training pressure, involved sports and physiological factors in the training and facilitates athletes' successful performance. It is obvious that coaches must assess their athletes' mood states in different age groups and skill levels including adolescent and semi-skilled athletes) using appropriate instruments and implementation of researches such as this study to achieve this goal.

Also, coaches can design appropriate training for their athletes with the comparison of results of conducted studies in elite players including this study. In addition, the use of the results of these studies can facilitate athletes' talent, selection, and training.

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THE IMPACT OF INTEGRATION USING THE COLLABORATIVE APPROACH IN THE GAME OF BASKETBALL ON THE DEVELOPMENT OF SOCIAL INTERACTION FOR CHILDREN WITH SIMPLE MENTAL DISABILITIES WITH THEIR NORMAL PEERS

Sifi Belkacem, Zabchi Noredine,

Benzidane Houcine, Sebbane Mohamed

Physical Education and Sports Institute, University Mostaganem, Algérie

Abstract:

This study aims at determining the effect of the integration of children with simple mental disabilities with their normal peers in the game of basketball in the development of their social interaction. For this purpose, the experimental approach was used through the application of a cooperative educational programme in basketball. The latter consists of 11 units through which two groups of 5 children of simple mental disability-belonging to the mentally disabled children care centre of the district of Mostaganem (Algérie) were integrated with a group of 5 other normal children whose age ranged between 9 and 12. We used the gauge of social interaction for the mentally disabled, Goodnough's drawing test to measure intelligence, and Alfred Binet's age measurement test. After data analysis, we found out that the integration of children with simple mental disability with their normal peers in basketball has a positive effect on the social integration of the formers (children with simple mental disability). In addition to that, we found that the integrated cooperative approach as a means of integration in basketball contributed to a fast development of social interacting for the mentally disabled children

Keywords: integration, cooperative approach, social interaction, mental disability, basketball

Introduction

Estimations of the International Health Organization of the year 2012 reveal an average of mentally disabled individuals within any society ranging between 1 and 3%, and that there are about 7.2 million mentally disabled individuals according to the report of the United Nations Population's Fund for the year of 2011 (Ibrahim, 2014). As for Algeria there are 130 thousand mentally disabled individuals according to the Office for National Statistics in Algeria for the year 2015. These numbers call for offering social services to mentally disabled individuals in the different spheres; be it educational, social, psychological and so on, as international calls and directives appeared recently demanding a change in the treatment of mentally disabled individuals considering their isolation in schools and special centres as a wrong practice while suggesting their integration with their normal peers in ordinary school (Azab, 2002).

Consequently many experiments appeared in developed countries such as USA where mentally disabled individuals were integrated with their normal peers in ordinary classes, for some time. Also in Britain where school is compulsory for mentally disabled individuals since the age of five until sixteen, and these children pursue their studies in ordinary schools as long as these schools are able to fulfil their needs with the learning facilities that go with the nature and level of their disability. As for Arab countries, Jordan was the first to the implementation of integration and likewise KSA (Al-Matar, 2002).

The first appearance of integration in Algeria goes back in date to 1982 then 1996, as Algeria showed the will to integrate mentally disabled children and adolescents in ordinary schools starting from the launch of fundamental education (Boukhelif, 2015). Therefore, the world became readier to bear responsibility of this category which is an undividable part of the society.

Physical education is characterized by flexibility in syllabuses and easiness in adjustment of activities, and it is considered as the most appropriate school programme for successful integration of individuals with mental disability who have the ability to learn (Al-Matar, 2002). Participation in physical activities contributes to the improvement of their health and fitness. In addition to that studies have shown the importance of participation in physical activities for the development of some psychological aspects for children; such as reaching the competence (Shaw, 1982), in addition to some social aspects like establishing friendship (Jansma & French, 1994), though the level of the movement skills of most children with mental retardation is considerably lower than the one of their normal peers at the same age (Holland, 1987).

Many studies supported this perception, as (Salen, 1998), points that children with disability who participate in integration activities in ordinary schools acquire academic and functional skills faster than they do in isolated spaces, in addition to improvement of behavior, self-esteem, motivation to learn, in addition to the increase of overlapping with peers (Azab, 2002)

Moreover, studies about integration in physical education are few and very limited (Vogler, DePaepe, & Martinek, 1990) as compared to studies about educational integration, and most of them might be based on comparison of pupils' behaviours and teachers in integration environments versus the other educational environments (Al-Matar, 2002).

Through reviewing scientific references that deal with teaching children, it was found out that normal children at the age phase 9 to 12 tend to learn life skills and learn ethical standards and values and get ready for holding responsibility, as they are characterized by respect of others and tending to offer help. Moreover, they show positive attitudes towards supporting and collaborating with handicapped individuals. Also through teaching physical education and sport as a subject in a mentally handicapped children care centre and through our participation in some entertainment programmes in which mentally handicapped children were grouped with their normal peers we remarked an acceptance from each of the two to collaborate and interfere with each other. We also remarked insistence of the disabled ones to imitate their normal peers and their attachment to them; this was confirmed by educators and psychological assistants who accompanied them. In the light of this we tended to determine the effect of integrating children with simple mental disability with their normal peers in the activity of basketball on the development of social integration for the category of mentally disabled individuals.

Based on what has been stated previously, researchers wondered about the effect of children with simple mental disability with their normal peers in the activity of basketball on the development of social integration for the category of mentally disabled individuals.

2. Methodology

2.1 Research methodology

We used the experimental method with pre and post design and two experimental groups, one integrated and the second non-integrated.

2.1 Research Community and sample

The researcher randomly chose 15 children with simple mental disability with a ranging age between 9 and 12, as a sample, all of them are pupils at the centre of mentally disabled children in the city of Mostaganem (Algéria), in addition to 10 normal children who are pupils at a middle school in the same city.

2.2 Research tools

Goodnough's test of intelligence

Goodnough's drawing test is considered as one of the tools of measurement of mental capacity, and it can be classified among the personality measurement tools as one of the projective tests. This test aims at measuring the mental capacity of children ranging in age from 3 to 15, and knowing their character traits:

$$\text{Intelligence rate} = \frac{\text{Mental age}}{\text{Chronological age}} \times 100$$

Application of the test takes from 10 to 15 minutes, the tester is given this lapse to draw a leg on a paper with one pen and for correction and interpretation as well (Shousha, 2009).

2.3 Social interaction scale for children with mental disabilities

This scale has been established on the basis of a set of standards for social interaction suggested by many researchers; it measures the level of social interaction of children with simple mental disability with their normal peers ranging in age from 9 to 12. This scale consists of 50 expressions, 28 of them are positive and 22 negative, these expressions are to be answered by the specialist (appears, always, frequently, sometimes, rarely, doesn't appear), the tested kid can obtain a degree ranging from 50 to 200, while high degrees are interpreted as high degrees of social interaction and vice versa.

2.4 The scientific coefficient of the scale

The exploratory study was conducted in order to make sure of the scientific coefficients of the social interaction scale during the period from 05/03/2014 to 14/03/2014 through making an exploratory experiment on a sample consisting of 5 children among those having simple mental disability, and the results were as shown in table 1 down:

Table 1: Measurement and re-measurement results of the exploratory experimental group of children with simple mental disabilities (9-12 years)

Number	Sex	Age in years	Pre test	Post test	Pearson coefficient (R)
01	female	12	105	102	0.97
02	Male	10	146	144	
03	female	9	120	123	
04	Male	11	151	163	
05	female	12	170	167	
Arithmetic mean			138.4	139.8	
Standard deviation			25.83	27.41	

A. Reliability coefficient

Reliability coefficient was calculated through the application and reapplication of the scale after 10 days on the same exploratory sample - which consists of 5 children with simple mental disability-in a random way. And through calculating Pearson coefficient of correlation (0.97 R =) we found out the stability coefficient as R= 0.97 and this approaches 1 and proves hereby the stability of the scale.

B. Self-honesty coefficient

The researcher calculated the coefficient of self-honesty of the scale, it was found equal to the square root of the coefficient of stability. Honesty was found 0.98, being close to one (+1) showing the sincerity of the scale.

2.5 The suggested educational programmes

Going back to the previous studies and scientific references, considering opinions of experts and specialists in basketball and disabled individual sports, and with consideration of the characteristics of the study sample, we did our best to make the content of the educational programme adequate with the characteristics, abilities and wants of the children who represent the research sample (mentally disabled and the normal children).

This programme consists of a set of little and anticipatory games for teaching basketball skills. These games were selected for their adequacy with the mental age of the research sample (mentally disabled children), to realize complete collaboration among participating children.

The programme relies also on pair and group training within an adequate lapse of time. It was also meant to have an adequate space, being empty of obstacles with respect of the gradation of difficulty, from easy to difficult.

The tools used with the members of the sample were also adequate, considering security factor, while ensuring support from helping agents in an adequate number and making sure each of them accomplishes his/her task within the planned frame.

2.6 The principal experiment

The pre-measurements of the social interaction scale were done.

The principle experiment was executed (application of the educational programmers), the programmers consisted of 11 units to be covered throughout a period of 11 weeks, on a basis of 2 sessions a week i.e. the programmer gets covered within 22 sessions while each session lasts 45 minutes. The post measurements of the social interaction scale were done.

3. Results

3.1 Presentation of the pre-test results on the social interaction scale for the control and experimental samples

Table 2: Homogeneity of the control and experimental samples in the pre-test results using Student Test (t), children with simple mental disability

Test / Sample	Experimental sample		Control sample		Calculated T	Tabular T	Significance degree	Freedom degree	Significance of differences
	X1	Y1	X2	Y2					
Pre test	117	35.37	105.2	35.36	0.58	2.77	0.05	08	Statistically non significant

On the basis of the pre-test on the social interaction scale we conclude that the control and experimental samples are homogenous.

3.2 Presentation of pre and post test results on the social interaction scale for the control sample

Table 3: Results of the pre and post-tests using Student Test T for the control sample of children with simple mental disability

Test Sample	Pre test		Post test		Size of the sample	Calculated T	Tabular T	Degree of freedom	Level of significance	Significance of differences
	X1	Y1	X2	Y2						
Control Sample	116.8	34.68	117.2	35.37	0.5	0.66	2.77	04	0.05	Statistically non significant

On the basis of the pre and post-tests of the control sample we conclude that there are no statistically significant differences.

3.3 Presentation of the results of the pre and post tests on the social interactive scale for the experimental sample

Table 4: Results of the pre and post tests using the Student Test T for the experimental sample of the children with simple mental disability

Test Sample	Pre test		Post test		Size of the sample	Calculated T	Tabular T	Degree of freedom	Level of significance	Significance of differences
	X1	Y1	X2	Y2						
Experimental sample	105.2	35.36	147.4	12.93	0.5	3.64	2.77	04	0.05	Statistically non significant

We note the existence of statistically significant differences between the pre and post tests on the social interaction scale in favour of the post test for the experimental sample.

3.4 Presentation of the results of the post test for the control and experimental samples on the social interaction scale

Table 5: Results of the post tests using Student Test T for the control and experimental samples of children with simple mental disability

The test The sample	Post test		Size of the sample	Calculated T	Tabular T	Degree of freedom	Level of significance	Significance of the differences
	Arithmetic average	Standard deviation						
Control sample	116.8	34.68	10	3.73	2.77	08	0.05	Significance
Experimental sample	147.4	12.93						

We note the existence of statistically significant differences in the social interaction results between the control and experimental samples, in favor of the experimental one.

4. Discussion

Table 4 confirms the existence of a positive effect on the level of social interaction of children with simple mental disability, this effect is due to the integration of these children with their normal peers in the activity of basketball during a limited period, and this is confirmed by the theories of socialization, and especially the theory of social learning, according to which socialization is an educational pattern that helps the individual to act social roles, and that social development, in the light of the same theory, happens in the same way learning other skills happens.

Advocates of this theory give a considerable importance to reinforcement in the social learning process such as Dolard and Miler, as they indicate that the individual's behaviour gets supported or changes according to the kind of reinforcement that targets it, while Bandora and Walter, and though their agreement on the principle of reinforcement, they point out that reinforcement alone is not sufficient for explaining learning or some behaviours that appear suddenly in the child. The concept of the model of learning through observation relies on an assumption stating that Man is a social being that gets affected by others' trends, their feelings, actions and behaviours; this assumption implies a considerable educational importance, considering teaching in its main concept as a social process (Haroosh, 2005).

And this agrees with the studies of (Shousha, 2009), which confirm that integration of mentally disabled children with their normal peers in sport activities has

a positive and efficient effect on the psychological and social aspects of mentally disabled children, and so does the study of (Siperstein, 2002), which notes the existence of a remarkable improvement in the social values and sport skills for players of the special Olympiad (The unified sport).

According to table N°5, there are statistically significant differences in the post tests in favour of the experimental sample (The integrated sample) as we noted a positive change in the scale of social interaction, while no change was noted in the result of the post test on the social interaction scale for the control sample (isolated) (table N°3). This proves that the positive change that characterized the integrated category is due to the period of integration in the activity of basketball during the period of the application of the suggested programmers and not to the programmers alone or other reasons, and it is the period during which the group of children with mental disability practice basketball activity with their normal peers aged between 9 and 12.

This result has been confirmed by many studies such as the one of (Al-Husseini, Al-Adli, & Tawfiq Abdel Fattah, 2015), which proved that the unified sport contributes to the increase of sport practice opportunities for disabled individuals with their normal peers through their participation in various sport programmers, as it helps in the integration process of disabled individuals in the society .

And that agrees also with the results of the study of (Shousha, 2009) and (Siperstein, 2002), (Nebras, 2004), as the results of these studies show that physical education programmers that integrate mentally disabled individuals with their normal peers have a significantly positive effect on motor performance and general adaptation, in addition to the considerable contribution of social games programmes in the development of social interaction for children in general and especially girls.

Thus we can say that integration of children with simple mental disability in the integrated activity of basketball with their normal peers has a positive effect on the development of their social interaction, and this improvement can increase by lengthening the period of integration, and this is confirmed by many previous studies, such as Odom et al, 2002, Gulnarick, 2001, Holahan et al, 2000, that were mentioned by (Frazier, Elizabeth K, Lois, & Gen, 2004). All these studies showed that children with simple mental disability can gain a considerable advance in their growth in general within the integrated environment as compared to the isolated (special) one.

According the (Odom, et al., 2004) anglo saxon review 'Litterature', there are more social interactions for children with simple mental disability in the integrated environment as compared to the special one, though this level of interaction remains

less for normal children (Rose & Doumont, 2007). (Deirdre, Martin, & Peter, 2009) confirm that excessive physical education and sport with various activities is regarded as the adequate environment for pedagogical and educational adjustments in order to find out solutions for the realization of integration. According to (Qiab & Amy, 2012), physical education and sport are regarded as adequate social activities for positive social interactions among children, and they are also regarded as the subject in which the participant can realize results and compare it with others'. Nevertheless, (Marcellini, 2003) has an opposed perception to the previously stated one, as he sees that physical education and sport provide a vast social space that might lead to social isolation (Tant, 2014).

5. Conclusion

According to the research conducted by the researcher and in the light of the obtained results and after having analysed it statistically, the following conclusions were drawn:

- Integration of normal children with those having simple mental disability in the activity of basketball at an early age (9-12 years) has a positive effect on the development of the level of social interaction for the members of the experimental sample (The category of those with simple mental disability).
- Using the collaborative method as a tool for integration throughout the integrated activity of basketball contributed in the development of the social interaction for members of the experimental sample (The category of those with simple mental disability).
- There are statistically significant differences between the results of the pre and post-tests of the level of social interaction for children with simple mental disability (Those with learning ability) in favour of the post test.
- There are statistically significant differences in the results of pre and post-tests of the level social interaction between the control and experimental samples in favour of the experimental one.

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WHICH TRAINING IMPROVES THE ABILITY TO CONTROL AND MANIPULATE THE BALL WITHIN THE GOALKEEPER IN FOOTBALL?

Hadjar Kh. M.¹ⁱ, Koutchouk S. M.², Mime M.³,
Zerf M.⁴, Zereg Fateh⁵

^{1,2,3,4} Sports Training Department laboratory OPAPS,
Physical and Sports Education Institute Mostaganem,
University Abdel Hamid Ibn Badis Mostaganem, Algeria

⁵Russian State University of Physical Education, Sport, Youth and Tourism (SCOLIPE), Russia

Abstract:

A goalkeeper is special because he is the team's last line of defence and the first line of offense. Being the last person on the defensive gives him the privilege to handle the ball [1]. Since the changes to the laws of the football game [2] it does not allow the goalkeeper to take the ball back from the defender by hands. Where the pass back to the goalkeeper will now be punished with a free kick if the keeper picks it up? From the props, our study focus on the demand goalkeeper due to the changes in the laws of the football game where our background confirms that The goalkeeper should work hard in these conditions [3] for this reason, this study has to answer the question: Which training improves the ability to both control and manipulate the ball with both feet since the foot controls the ball most of the time, it is essential for goalkeepers? [4]. Where our results confirm the need to integrate the goalkeeper in the sessions ball control case the Algerian coaches.

Keywords: ability to both control and manipulate ball to feet, goalkeeper, soccer game

Introduction

The goalkeeper is a specialist player but nevertheless an integral part of a football team, with considerable influence and responsibility within the team [5]. Talking about

ⁱ Corresponding author: Hadjar Kh. M., e-mail: mohadjar@hotmail.com

goalkeepers means talking about a “*unique, unusual, but above all a wonderfully perfumed flower*”. It is their distinctiveness that makes them rare, unpredictable and sets them apart [6] whereas a goalkeeper's job is to keep the ball from traveling over the goal line. To do this, a goalkeeper utilizes a different set of skills than a field player and is therefore implemented as a separate class [7].

Once the ball is in the goalkeeper's hands or at his feet, the goalkeeper becomes an orchestrator [8] where the good distribution of the football is crucial for a goalkeeper and his team meanwhile the goalkeeper has control of the ball during a match [9]. From the proof, our study focus on the demands goalkeeper due to the changes in the laws of the football game where our background confirms that the goalkeeper should work hard in these conditions (Alex Welsh, 2014) for this reason.

This study has to answer to the question: Which training improves the ability to both control and manipulate ball with feet since the foot controls the ball is essential for goalkeeper (Jerry Kindall, John Winkin, 2000)? Where our coaches engaging a specialist goalkeeping coach training session for each week, which held guard job away from the rolls as much as the last line of defence. From the above, the research objectives focus on which training improves the ability to both control and manipulate the ball with both feet since the foot controls the ball most of the time, it is essential for goalkeepers?

Material and Methods

Search approach

The researchers used the experimental approach in this study with two groups, a group that trains with coach goalkeepers and the other with both coaches for the last the four weeks during the period of preparation.

The research sample

Represents all youth under 20 years from the Mostaganem football league for the 2013-2014 sports season, with a total of 12 goalkeepers, holds in their posts their homogeneity is calculated based on age range training age and tests skill used in the current study see table 1.

Testing Protocol

1. Tests skill

The tests were performed on the same natural grass soccer field and the subjects were wearing soccer specific sportswear. As the pre-test was performed as the re-test.

2. Test Extinction ball, The reception of a high ball, Test the control ball from the running and Test Control of the ball directed

The objective of these tests that “*the player controls the next balls either ground or higher or half high in the framework of the rules of the game*” skill suppression (mute or pause or absorption of the ball) to control it and put it, where those skills are basic skills and they are important for the player to follow the suppression of the ball with the change of direction that is moving with the ball [10] [11].

Training units proposed

A total of 12 goalkeepers were divided in two groups, a group that trains with coach goalkeepers and the other with both coaches for the last the four weeks during the period of preparation.

Statistical Analyses

The T student was used to compare the results of the pre and post tests used for the experimental and control groups. The statistical methods are based on the arithmetic average standard deviation, in addition to the equation of the progress ratio to know the output throughout the basic experiment in the research.

Results

Table 1: The homogeneity of the sample in pre-tests

TESTS	T Counted	T Tabulated	Statistical Significant
Age	1.37	2.23	Insignificant
Weight	0.71		Insignificant
Tallness	0.34		Insignificant
Training age	1.02		Insignificant
Test Extinction ball	1.36		Insignificant
Test The reception of a high ball	0.41		Insignificant
Test The control ball from the running	1.75		Insignificant
Test Control of the ball directed	0.22		Insignificant

Table 2: The comparisons between the pre-test and post-test samples groups

		Control	Empirical	T Counted	T Table	P≤0.05
Test Extinction ball	Mean±SD	3.66±2	4.33±2.35	2.33	2.03	Significant
Test The reception of a high ball	Mean±SD	2.05±0.76	2.61±1.54	2.55		Significant
Test The control ball from the run	Mean±SD	1.88±1.16	2.77±1.47	2.06		Significant
Test Control of the ball directed	Mean±SD	2.33±1.52	2.77±2.47	2.09		Significant

Depending on the data collected and the significant the comparisons between the pre-test and post-test researcher using the means of collecting data used in this study, the most important results have revealed that the goalkeepers which trains with both coach is better than the group which trains with coach goalkeepers in the ability to control and manipulate the ball.

Since that, we have agreed that the abilities of control require specific training for the goalkeepers, where our results line indicate [12] that goalkeeper fitness training should focus on developing the ability to control and manipulate the ball. Where [13] confirm it in an assured first touch and ball control. Meanwhile [14] indicate that the goalkeepers are concerned to master the ball under their control with all parts of the body that the laws permit.

Conclusions

The researchers concluded basis of their results that goalkeeper fitness training should focus on developing the ability to control and manipulate the ball. Where [15] confirms that players in each position must train to perform the specific physical requirements of their positions the case of the goalkeepers. From the proof we agree that the goalkeeper training sessions can be devised in two sections [16] keeping skills and fitness training ability to control and manipulate the ball. Though the above where the applications of the laws goalkeeper are the first aim of every training session, our coaches must improve the ability to both control and manipulate the ball among goalkeepers where these skills are essential for goalkeeper as keeping skills [17]. We recommended to our Algerian coaches as well to that they need to integrate the goalkeeper ball control sessions.

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SPECIFICITIES PRESENTED IN SOME BASIC AND SPECIFIC MOTOR SKILLS OF VARIABLES TO YOUNG BASKETBALL PLAYERS

Prof. Dr. Hazir Salihu¹, Mr.sc. Dardan Dehari²

¹Faculty of Physical Education and Sports, University of Prishtina, Republic of Kosovo

²Faculty of Physical Education, University of Tetova, R. Macedonia

Abstract:

On the basis of the number of 62 entities aged 15-16 years, male gender, address space is composed of the locomotive and the space of ten tests. Factorial procedures are addressed in all basic and specific locomotives, together as results have gained 3 dimensions latency:

- Factor of specific speed and accuracy;
- Factor complex locomotive specific typical for game and basketball;
- Factor of speed and explosive force to the upper extremity.

Such a mix of factors, may be justified because the age in question is in phase puberty, nothing is as defining in the locomotive, as are developing.

Keywords: basketball, entities, basic motor-specific variables, analysis factor, measuring instruments, tools and sports requisites

Introduction

Basketball, day after day is taking echo to all ages around the globe, therefore, is more attractive to millions of sports fans in the world, but recently also in us. Based on the dynamics of the game, it requires proper motivation for physical preparation and technical-tactical, given the charges which have to face basketball. Implementation of the results of the experiment with a relatively sufficient number of variables provides accurate baseline information on the anthropological status of the youth of this age. Of all the actors of this sport attractive, it is required more and more, to fix the infrastructure for achieving the contemporary level of the game of basketball.

The objectives of research

The aim of this experiment is noticing some relevant motile and specific characteristics among young basketball players. In other words, the objective of this study can be defined as verifying the values of verifying some motile and specific characteristic among young basketball players.

Its implementation study - a sample of entities

The experiment covers 62 entities of young males, around 15-16 years old, who have been practicing basketball in the city of Pristina. The testing is done during March and April of 2016. Furthermore, the motile tests have been done during the basketball practice time. The author of this study should be able to demonstrate appropriately in order to make sure for the students to realize the tests in the best way.

All the tests have been done in the sports center including all primary schools in Pristina.

Basic hypothesis

Considering the previous studies, the actual hypotheses will be based on the existence of factors and its connections at the motile, basic and specific level among young basketball players.

To extract the factors with relevance in the motile structure.

The motile tests

In the mobile area, it has been applied 10 tests, where five of them are basic tests and the other five belong to situated and mobile tests.

The basic tests

JFMSPD - The jump from the main spot to a distance

JFMSH - The jump from the main spot to a highness

20 MRU - The 20 meters running

TFPHSSM - The test for the physical strength of the stomach muscles

THMBD - Throwing the medicinal ball in a distance

The situated tests

DBHC - Dribble by hitting in the cage

FRHI - Free hitting

HICWJ - Hitting the cage with a jump

THBID - Throwing the ball in distance

GOCOD - Going and coming dribble

The methods of elaborating the results

The results are elaborated in the following programs, SPSS version 20.0 and statistics, which is a version for windows.

The analyses are done in the manifesto and latent area.

The factorization of motile, basic and specific tests.

Results and interpretation

Factorial analysis

The characteristics of basic motor space-specific latency

As far as the 1. Table, is concerned, there are obvious the LAMBDA radices and partial % and cumulative % contribution for the explanation of the changeability in general. By choosing the correlative matrix, we win 10 characteristic radices and the same number of characteristic vectors which according to Hotellingut method and GK criteria are showed as three motile and letant dimensions which explain the 65% variability in general.

Considering the first and statistic matrix of the factorization of the motile tests, we can notice that the first characteristic radix with the value $L=3.986$, explains 38% of the variability in general, and the second characteristic radix for the system with the value $L=1.879$ and explains the 17% of the variability in general. The third characteristic radix for the system with the value $L=1.246$ and explains dhe 12% of the variability in general.

Considering the previous studies, the actual hypotheses will be based on the existence of factors and its connections at the motile, basic and specific level among young basketball players.

Table 1: The characteristic and main radixes, partial and cummulative contribution

Components	The characteristic and main radix	% Variability	% Cumulative
1	3.986	37.743	37.743
2	1.879	16.833	53.438
3	1.246	11.761	64.676
4	.795	8.714	66.524
5	.771	7.364	74.444
6	.692	7.013	81.470
7	.563	5.555	88.939
8	.410	4.100	93.409
9	.334	3.327	96.551
10	.159	1.489	98.989

Through the Table 2, it is featured the matrix of the main components with three factors and communalities. In the first component are projected the variables which test the explosive force of the lower part of the body such as, jumping from a certain place to a distance, jumping from e certain place to a highness, and the 20 meter running with coefficient from .65 - .78.

Next, we have tests that show repetitive force with coefficient .68, and tests that show specific speed during the basketball play. After that we have the dribble with hitting the cage and the going and coming dribble, a tests, which show resistance in the speed with coefficient that have value from -.64 - -.70.

On the second component are projected the tests, which show the explosive force of the upper part of the body by throwing the medicinal ball and throwing the basketball to a distance with a coefficient from .71 – 74.

On the third component, the projections are realized through the tests, which show preciseness in the area of free hitting and hitting through the jump with the coefficient from .57-78.

Communality towards all tests have the coefficient with the value .48-.74, but how much qualitative information will bring each variables, it depends on the volume of communality.

Table 2: The matrix of the main components and communalities

	1	2	3	H ²
JFMSPD	.738	-.222	-.100	.605
JFM SH	.764	-.061	-.220	.635
20 MRU	-.647	.492	.211	.681
TFPHSSM	.475	.714	-.020	.738
THM BD	.393	.745	-.112	.714
DBHC	.693	-.161	-.046	.495
FRHI	-.711	.076	.087	.492
HICWJ	.255	.016	.784	.662
THBID	.395	-.191	.572	.495
GOCOD	-.643	-.211	-.169	.478

In the structure of the motile areas, the main components are projected in the inclined solutions, rotations, and according to the normalization of the criteria (Kaiser-it) and these transformations, we have come up with three matrixes:

- The matrix of the parallel projections, which shows parallel projections of the variable vectors to factors.
- The matrix of the orthogonal projections, which shows the correlative and orthogonal projections between variable vectors and factors.
- The correlative matrix of the isolated factors.

Table 3: The matrix of the parallel projections

	1	2	3
JFMSPD	.771	.013	.046
JFM SH	.769	.188	-.083
20 MRU	-.878	.279	.069
TFPHSSM	.033	.846	.020
THM BD	-.013	.869	-.093
DBHC	.677	.052	.088
FRHI	-.657	-.142	-.042
HICWJ	-.153	.036	.848
THBID	.169	-.109	.656
GOCOD	-.319	-.384	-.273

In view of the table 3, there is showed the matrix of the parallel projections, which covers the parallel projections of the motile variables. By observing this matrix we can notice that high projections on the first factor have realized the following tests, jumping

from a certain place to a distance, jumping from a certain place to a highness, the 20 meter running, which show the explosive force of the lower part of the body with coefficient starting from .77-.88. Moreover, we have the tests FRHI and the dribble with hitting the cage which shows the specific speed during the basketball game with coefficient that has the value starting from -.66 - .68. According to these projections, the first motile factor can be defined as a **complex and motile factor**.

On the second component, the high projections have been realized by the tests, which show explosive force of the upper part of the body such as, throwing the medicinal ball, throwing the ball in a distance with coefficient from .85-.87. According to the projections showed here, the second factor could be defined as a **factor with an explosive force of the upper part of the body**.

On the third component, high projections have realized the tests which are as a pointer of the preciseness such as, free hitting, hitting through jumping with coefficient that has the value .66 - .85. According to these projections, the third factor can be defined as a motile and situated factor of the preciseness –very typical for the basketball game.

Table 4: The matrix of the orthogonal projections

	1	2	3
JFMSPD	.776	.200	.261
JFM SH	.773	.355	.154
20 MRU	-.775	.084	-.132
TFPHSSM	.237	.845	.146
THM BD	.164	.839	.024
DBHC	.696	.221	.280
FRHI	-.686	-.300	-.241
HICWJ	.090	.118	.801
THBID	.325	.023	.681
GOCOD	-.486	-.498	-.416

Concerning the table 4, there is showed the orthogonal projections, which contain orthogonal projections of the manifesto-motile tests, and as e result, we have three factors. According to all predictions, the structure of this matrix does not change from the parallel projections.

Table 5: The inter-correlative matrix between the factors

	1	2	3
1	1.000		
2	.242	1.000	
3	.289	.156	1.000

On the table 5, it is shown the correlative matrix of the motile factors and we can notice that the correlation of the factors is with coefficient from .16-.29. According to this correlation, we can conclude that motile factors possess dependence among themselves.

Analysis and verification of the hypothesis

In this study is only the hypothesis raised:

Which is fully implemented on the basis of the results obtained, it is extracted three dimensions of basic motor latency in the specific area.

Conclusions – summary

Based on the number of 62 entities aged 15-16 years old, male, was treated motor space of ten tests. In factorial procedure are treated all basic motor and specific tests, together as a result, gained three latent dimensions:

- **The factor of preciseness and specific speed**
- **The complex, motile, situated and typical factor of the basketball game.**
- **The factor of the speed and explosive force of the upper extremities.**

Based on the age of the youth, and acquired factors, may be justified because the age in question is at the stage of puberty, nothing is definitive in terms basic motor, as well as in terms of situational, since youngsters of this studies are still in progress. Therefore, as a result, we expect that in the near future, these young people will prosper in every aspect of the game.

The function of the result is about:

- Securing the information about the youth and their development of the morphological and motile characteristics. The aim is to expose the values of the educational process during the teaching process concerning the physical education and sport.
- Selection and orientation of youth with different sport activities.

- Application of the new concepts in terms of scientific and professional bases of the program, methodology and adequate evaluation.

To attain these results, enables us to future experimentation-research, other factors disclosed important to us and directly affect the scope of this study.

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THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND TRANSFORMATIONAL LEADERSHIP STYLE IN THE FEMALE SPORTS COACHES FROM HAMEDAN PROVINCE

Shirin Aghamohammadi^{1*}, Seyed Ebrahim Mosaviyan², Mohammad Heidari³

¹MA Sport Management, Department of Physical Education, Borujerd Branch, Islamic Azad University, Borujerd, Iran

²Ph.D Student Sport Management, Department of Physical Education, Mazandaran University, Mazandaran, Iran

³Ph.D Student Sport Management, Department of Physical Education, Shomal University, Amol, Iran

Abstract:

The aim of this study was to investigate the relationship between Emotional Intelligence and Transformational Leadership Style in the female sports coaches from Hamedan Province. This study, according to its purpose, is an applied research and a correlational study. The population of this study included all female sports coaches of Hamedan province in 2013, their number is 250. To determine the sample size, the Morgan table was used. The sample was calculated according to Table 148. To gather intelligence, emotional intelligence questionnaire Saber Yashring (1986) was used which has 33 questions in Likert scale of five options and includes aspects of self-awareness, self-regulation, self-motivation, empathy and social skills and Bass and Avolio Multifactor Leadership Questionnaire (2000) which measures the transformational leadership style, exchange and avoidance and consists of 45 questions that deals with the assessment indicators of transformational leadership, transactional and avoid. The validity of the questionnaire was confirmed by experts and Cronbach's alpha reliability of 0.80 and 0.85 were approved. The data was analysed using Pearson and the SPSS software. Results show that there are significant relationship between Emotional Intelligence and Transformational Leadership Style in the Female Sports Coaches from Hamedan Province

Keywords: emotional intelligence, leadership style, coaches

Introduction

Skill in emotional control and other emotions is one of the important aspects in management. Goleman's research showed that managers who have high emotional intelligence and technically have the necessary experience, are more readily than others, to resolve conflicts and weaknesses in the organization (Goleman, 1995). Emotional intelligence includes the ability to understand, express, understand and control their emotions and others (Akbarzadeh, 2004). This concept gives a new depth of human intelligence and has expanded the ability to assess general intelligence itself. Emotional intelligence is the ability to understand the meanings of emotions and their relationships and problem solving is based on them (Meyer et al., 2004). Emotional intelligence is the intelligent use of emotions. Person knowingly uses his emotions and his thoughts and behaviors in order to strengthen their objectives to reach interesting results (Goleman, 1998). So far, many aspects of emotional intelligence have been introduced. One of the best known and most famous models is Goleman 5-dimension that includes: 1. Self-awareness, 2. Self-regulatory, 3. Self-motivation, 4. Sympathy, 5. Social skills.

On the other hand, transformational leadership is considered one of the newest approaches to leadership that little research has been done about it. Theory of transformational leadership style is one of the theoretical frameworks in the world that has been proposed by Burns (1978) and Bass (1985). According to Bass (Bass and Avoliv 1985, 1990), who developed a theory of bronze (1978), transformational leadership of the four main aspects of the effect of the ideal, inspirational motivation, personal attention and mental stimulation has been established (Rahim et al, 2006).

Transformational Leadership forms vision into an engaging manner and clear and how to achieve it expresses the vision. And he acts with confidence and optimism and confidence in subordinates transfer the values emphasized by symbolic actions, directs with the template, and empowers employees to reach prospects (Stone et al, 2004: 352). Transformational leadership tries on efficiency rather than effectiveness, using the organization's human resources effectively in order to achieve their organizational goals.

On the other hand, the research findings of Plicheronyo (2009), James, et al (2009) and Rezai (2011) show a balanced relationship between some of the components of emotional intelligence, such as empathy, self-awareness, motivation and social skills with demonstrated transformational leadership; while the Weinberger research (2004) did not find any relationship between these two structures in his research when considering individual components of emotional intelligence and transformational

leadership. He pointing to the fact that the theories and measures of emotional intelligence is still in its infancy live, considers necessary research that is more empirical.

The research results of Mortazavi (2004) showed that gender variable in determining the relationship between emotional intelligence and transformational leadership is very important because this relationship is higher for men than women. And while Mandel and Faravani (2003) states that there is no significant difference between men and women is not transformational leadership. With regard to the relationship between emotional intelligence and leadership style of coaches in sports are considered less, on the other hand, with increasing attention to the study of emotional intelligence in various fields and as well as management of transformational successful management style in organizations today and also considering the contradiction in research on sex determination in emotional intelligence and transformational leadership people, the study aims to describe the dimensions of emotional intelligence of female sports coaches, describe the transformational leadership style in women sport coaches, and on the other hand, seeks to answer the question of is there any relationship between emotional intelligence and its dimensions to leadership styles in population or not?

Material and Methods

This study, according to its purpose, is an applied research and correlational study. The population of this study included all female sports coaches of Hamedan province in 2013, their number is 250. To determine the sample size, the Morgan table was used. The sample was calculated according to Table 148.

To gather intelligence, emotional intelligence questionnaire Saber Yashring (1986) was used which has 33 questions in Likert scale of five options and includes aspects of self-awareness, self-regulation, self-motivation, empathy and social skills and Bass and Avolio Multifactor Leadership Questionnaire (2000) which measures the transformational leadership style, exchange and avoidance and consists of 45 questions that deals with the assessment indicators of transformational leadership, transactional and avoid.

The validity of the questionnaire was confirmed by experts and Cronbach's alpha reliability of 0.80 and 0.85 were approved. The data was analyzed using Pearson and the SPSS software.

Findings

Testing Main Hypothesis

There is a relationship between transformational leadership and emotional intelligence.

Table 1: Results of the main hypothesis

Independent variable	Dependent variable	Correlation coefficient	Significance level
Transformational Leadership	Emotional Intelligence	<i>0.322</i>	<i>0.001</i>

Based on the table above, it can be said that due to the significant level of test which is 0.001 and is less than 0.05, the null hypothesis is rejected and the alternative hypothesis is accepted i.e., there is a significant relationship between emotional intelligence and leadership style. According to the calculated correlation coefficients in the table above which is 0.322, it can be said that there is a positive relationship between these two, i.e., the higher the emotional intelligence, the more capable of leading coaches.

Testing Secondary Hypotheses

There is a relationship between the dimensions of transformational leadership and emotional intelligence.

Table 2: Results of secondary hypothesis

Independent variable	Dependent variable	Correlation coefficient	Significance level
Self-awareness	Transformational leadership style	<i>0.404</i>	<i>0.046</i>
Self-regulatory		<i>0.534</i>	<i>0.016</i>
Self-motivation		<i>0.539</i>	<i>0.014</i>
Sympathy		<i>0.532</i>	<i>0.013</i>
Social skills		<i>0.540</i>	<i>0.002</i>

Based on the table above, it can be said that due to the significant level of trial and error level, the null hypothesis is rejected and the alternative hypothesis is accepted i.e., there is a significant relationship between the dimensions of emotional intelligence and leadership style. Considering the calculated correlation coefficients in the table, we can say that there is a positive relationship between the variables i.e., the higher the dimensions of emotional intelligence, the more leadership among the coaches.

Discussion and Conclusion

The results showed that there is a significant positive relationship between emotional intelligence and transformational leadership style dimensions between female coaches in the Hamedan province i.e., the instructors emotional intelligence is that women tend to use transformational leadership style has increased. If the emotional intelligence of coaches is higher, their transformational leadership style is increased. Palmer et al (2001) stated in their study that the emotional intelligence is known as a tool to identify potential leaders, as well as a tool to foster effective leadership skills. Their findings show that emotional intelligence which is measured through a person's ability to monitor and manage emotions in oneself and others is the core competence of emotional intelligence.

The evidence indicates that emotional intelligence is a necessary factor for better performance, higher productivity, team works and exceptional leadership. It seems that the success of the organization depends on having capabilities such as self-awareness, empathy, confidence and motivation. This concept gives a new depth of human intelligence and has expanded the ability to assess general intelligence itself. Emotional intelligence is the ability to understand the meanings of emotions and their relationships and problem solving is based on them. The manager who have high emotional intelligence and technically have the necessary experience, more readily than others, to resolve conflicts and weaknesses in the organization. According to the results, which indicates a significant positive relationship between emotional intelligence and its dimensions and leadership style among coaches, coaches should pay close attention to their emotional intelligence skills that could enable them to provide their team management skills and be successful.

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DEVELOPMENT OF MARKETING USING SYSTEMIC PROCESS OF COMPETITIVE INTELLIGENCE AND FORESIGHT – FUTURE STUDIES

Behrooz Sadoogi¹, Mohammad Rahim Najafzadeh²

^{1,2}Department of Physical Education and Sports Science, Sports Management, Malekan Branch, Islamic Azad University, Malekan, Iran

Abstract:

Development of competitive intelligence and foresight (future studies) leads to the creation of a perfect image of the current status and future of competition scene facing managers for better decision making. Utilizing competitive intelligence and foresight (future studies) leads to the recognition of short-term and long-term strategies in marketing. Here, the research methodology is correlation-descriptive and has been carried out as field study. Statistical population of this research includes all managers at General Department of Youth Affairs and Sport in West Azerbaijan consisting 43 persons. In this research statistical sample equals the statistical population. Questionnaires of this research have been designed in three parts as competitive intelligence, foresight (future studies) and marketing system. In this research correlation and regression methodology have been used. Based on obtained information and analyzing the data about the relationship between competitive intelligence and development of marketing it was found that: creating intelligence has a positive connection with customer relationship. Intelligence distribution is positively associated with the customer relationship. Responsiveness is positively associated with customer relationship. Also about the relationship between foresight (future studies) and development of marketing it was found that: foresight (future studies) is positively associated with customer relationship. Decision-making is positively associated with the creation of differentiated products.

Keywords: competitive intelligence, foresight (future studies), marketing, marketing strategies

Introduction

In today's world, achieving the competitive intelligence is one of the undeniable requirements for most organizations. So that they can increase their capabilities by data acquiring and data analysis, increasing knowledge and creating awareness. Dr. Ben Gilad a university professor and a theorist known for competitive intelligence has stated that: competitive intelligence is the whole knowledge that a company has from the environment in which it competes. And it is the result of analyzing the countless particles of information that bombard the company daily. It is in the light of this knowledge that a perfect image of the current and future status of the competition scene will be formed facing the managers, so they can make better decisions (Rutgers, 2007).

Also, contemporary world is the arena of dramatic developments and accelerated dynamism. Changes arrive so surprisingly and rapidly that the least insufficient attention to it, can terminate to the high cost of strategic surprise in all political, economic, social and even cultural fields. In this kind of environment full of changes and instability and full of uncertainties, the only approach and policy which probably may have more success, is the effort for the architecture of future. Although, these efforts have been associated with high risk. However, accepting this risk is more wisely than watching for future developments (Khazaei, 2008).

Micro look at the today's world and its main players, indicates the existence of effective institutions of foresight (future studies) in the centers of power and decision-making of major and developed governments of the world. Perhaps their future approach to issues of the world and planning for future, will strengthen their roots of dominance on the future world more than ever.

Nowadays the main effort and mission of planning in organizations, in addition to pay serious attention to current challenges and providing temporary approaches, is thinking about future challenges and how to encounter and empower in those fields. Now, planning by upgrading its role, seeks to conquer the future with the idea of playing a serious role and demanding for its share of it (Schwartz, 2008). By development of competitive intelligence and foresight (future studies) there would be a perfect image of the current status and future of competition scene facing managers, so they can make better decisions. Currently most successful institutions in developed countries use the competitive intelligence and foresight (future studies) as a powerful tool to acquire more awareness from the environment. The future of utilizing competitive intelligence is very promising. Undoubtedly institutions for surviving in an environment that will be faced with more challenges every day, by relying on the capabilities of competitive intelligence and foresight (future studies) and successful

gathering and analysis of information, and by overcoming the uncertainty about the competitive outlook, will feel more secure.

Nowadays, technology development and world trade growth means that: business environment is changing rapidly and permanently. Managers no longer would be able to rely on enlightenment and intuition for strategic decision-making. In most affairs, the consequences of a wrong decision cannot be ignored. Companies for providing higher value and customer satisfaction in every field, need information. They should have much information from competing companies, business brokers and other forces and factors that are active in the market. Information is considered as one of the important items of strategic assets and marketing tools (Kotler & Armstrong, 2010). Gathering and evaluating the information about the competing companies play vital role in the formulation of strategies. Whatever a company could obtain more information from competing companies, the possibility of effective and successful strategies to be developed and implemented, is higher. Therefore tracking, understanding and reacting to competitors have been considered as a particular aspect of marketing activity. It is necessary that companies implement an effective program called competitive intelligence (David, 2010).

Also by applying a greater outlook and foresight (future studies) of organizations to their environment, the results of this analysis could be used to predict the long-term organizational strategies, and they could achieve to the development of a comprehensive marketing model which includes short-term and long-term marketing strategies. In this research the relationship between competitive intelligence and foresight (future studies) and development of marketing in the General Department of Youth Affairs and Sport in West Azerbaijan is studied. Integration of competitive intelligence with thinking about foresight (future studies) can create more effectiveness for the organizations to develop marketing models. Foresight (future studies) is not possible with just a glance on the future, but rather it requires that these organizations create the process of thinking and collective decision-making in the organization by expanding their scope of vision in business market and by considering the competitive environment and developing and improving the capabilities and process which are available in the organization, and they will take the organizational strategies in the horizon of this foresight (future studies). Considering the fact that most of the research done in the world, is about the techniques of competitive intelligence or foresight (future studies), so the integration of these two techniques can increase the effectiveness of these techniques for the organizations and fill the gap.

Methodology

Research methodology is correlation-descriptive and has been carried out as field study. Statistical population of this research includes all managers at General Department of Youth Affairs and Sport in West Azerbaijan consisting 43 persons. But it should be noted that due to the lack of returning some of questionnaires and removing some of marred cases, the final number of statistical sample that was analyzed equals 40 persons. Questionnaires of this research have been designed in three parts as competitive intelligence (11 questions), foresight (future studies) (10 questions) and marketing system (9 questions). They were distributed among the statistical population. In this research correlation and regression methodology have been used and according to this, it will investigate the changes in one or more factors on the effects of changing of one or more other factors.

Findings

Independent Variable (X)	Dependent Variable (Y)	Type of relationship Cause & Effect	The Regression Equation	R	R ²	The Significance Level Fixed Number	The Significance Level Coefficient	The Significance level Model	Result Accepting or Rejecting the Hypothesis
Intelligence Creation	Customer Relationship	Increasing (X) causes an increase in (Y)	$Y = 2.516 + 0.506X$	0.631	0.398	$\leq 0.050.000$	$\leq 0.050.000$	$\leq 0.050.000$	Passed
Intelligence Distribution	Customer Relationship	Increasing (X) causes an increase in (Y)	$Y = 3.499 + 0.303X$	0.448.	0.201	$\leq 0.050.000$	$\leq 0.050.013$	$\leq 0.050.013$	Passed
Responsiveness	Customer Relationship	Increasing (X) causes an increase	$Y = 2.943 + 0.389X$	0.447.	0.199	$\leq 0.050.000$	$\leq 0.050.013$	$\leq 0.050.013$	Passed

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Intelligence Creation	Creating Differentiated Products	Increasing (X) causes an increase in (Y)	$Y = 4.030 + 0.089X$	0.146.	0.021	≤ 0.050000	$0.05 \leq 0.442$	$0.05 \leq 0.442$	Failed
Intelligence Distribution	Creating Differentiated Products	Increasing (X) causes an increase in (Y)	$Y = 4.163 + 0.066X$	0.128.	0.016	≤ 0.050000	$0.05 \leq 0.499$	$0.05 \leq 0.499$	Failed
Responsiveness	Creating Differentiated Products	Increasing (X) causes an increase in (Y)	$Y = 4.858 - 0.128X$	0.194.	0.038	≤ 0.050000	$0.05 \leq 0.305$	$0.05 \leq 0.305$	Failed
Intelligence Creation	Effectiveness of Activities	Increasing (X) causes an increase in (Y)	$Y = 4.228 + 0.101X$	0.151.	0.023	≤ 0.050000	$0.05 \leq 0.424$	$0.05 \leq 0.424$	Failed
Intelligence Distribution	Effectiveness of Activities	Increasing (X) causes an increase in (Y)	$Y = 4.377 + 0.076X$	0.135.	0.018	≤ 0.050000	$0.05 \leq 0.477$	$0.05 \leq 0.477$	Failed
Responsiveness	Effectiveness of Activities	Increasing (X) causes an increase in (Y)	$Y = 4.100 + 0.133X$	0.184.	0.034	≤ 0.050000	$0.05 \leq 0.33$	$0.05 \leq 0.33$	Failed
Foresight	Customer Relationship	Increasing (X) causes an increase in (Y)	$Y = 3.291 + 0.329X$	0.375.	0.141	≤ 0.050000	≤ 0.050041	≤ 0.050041	Passed
Decision-	Customer	Increase	$Y =$	0.288	0.083	\leq	$0.05 \leq$	$0.05 \leq$	Failed

Making	Relationship	ng (X) causes an increase in (Y)	3.882 + 0.164 X			0.050.000	0.123	0.123	
Foresight	Creating Differentiated Products	Increasing (X) causes an increase in (Y)	Y= 3.896 + 0.136 X	0.203	0.041	<= 0.050.000	0.05<= 0.281	0.05<= 0.281	Failed
Decision-Making	Creating Differentiated Products	Increasing (X) causes an increase in (Y)	Y= 3.839 + 0.157 X	0.362	0.131	<= 0.050.000	<= 0.050.049	<= 0.050.049	Passed
Foresight	Effectiveness of Activities Promotion	Increasing (X) causes an increase in (Y)	Y= 4.302 + 0.089 X	0.122	0.015	<= 0.050.000	0.05<= 0.520	0.05<= 0.520	Failed
Decision-Making	Effectiveness of Activities Promotion	Increasing (X) causes an increase in (Y)	Y= 4.054 + 0.165 X	0.349	0.122	<= 0.050.000	0.05<= 0.0580	0.05<= 0.058	Failed

Table 1: Research Findings

Regarding the fact that the significance level, fixed number, coefficient and model all are less than 0.05, by 95 percent of certainty we can express that the researcher's hypothesis is accepted. Also ($R^2=0.398$) shows that 39.8 percent of changes of dependent variable "customer relationship" is covered with independent variable of "creating intelligence". Regarding the fact that the significance level, fixed number, coefficient and model all are less than 0.05, by 95 percent of certainty we can express that the researcher's hypothesis is accepted. Also ($R^2=0.201$) shows that 20.1 percent of changes of dependent variable "customer relationship" is covered with independent variable of "intelligence distribution".

Regarding the fact that the significance level, fixed number, coefficient and model all are less than 0.05, by 95 percent of certainty we can express that the

researcher's hypothesis is accepted. Also ($R^2=0.199$) shows that 19.9 percent of changes of dependent variable "customer relationship" is covered with independent variable of "responsiveness". Regarding the fact that the significance level, fixed number, coefficient and model all are less than 0.05, by 95 percent of certainty we can express that the researcher's hypothesis is rejected. Also ($R^2=0.201$) shows that 2.1 percent of changes of dependent variable "differentiated product" is covered with independent variable of "creating intelligence".

Regarding the fact that the significance level, fixed number, coefficient and model all are less than 0.05, by 95 percent of certainty we can express that the researcher's hypothesis is rejected. Also ($R^2=0.016$) shows that only 1.6 percent of changes of dependent variable "differentiated product" is covered with independent variable of "intelligence distribution". Regarding the fact that the significance level, fixed number, coefficient and model all are less than 0.05, by 95 percent of certainty we can express that the researcher's hypothesis is rejected. Also ($R^2=0.038$) shows that 3.8 percent of changes of dependent variable "differentiated product" is covered with independent variable of "responsiveness".

Regarding the fact that the significance level, fixed number, coefficient and model all are less than 0.05, by 95 percent of certainty we can express that the researcher's hypothesis is rejected. Also ($R^2=0.023$) shows that only 2.3 percent of changes of dependent variable "effectiveness of activities" is covered with independent variable of "intelligence creation". Regarding the fact that the significance level, fixed number, coefficient and model all are less than 0.05, by 95 percent of certainty we can express that the researcher's hypothesis is rejected. Also ($R^2=0.018$) shows that 1.8 percent of changes of dependent variable "effectiveness of activities" is covered with independent variable of "intelligence distribution".

Regarding the fact that the significance level, fixed number, coefficient and model all are less than 0.05, by 95 percent of certainty we can express that the researcher's hypothesis is rejected. Also ($R^2=0.034$) shows that only 3.4 percent of changes of dependent variable "effectiveness of activities" is covered with independent variable of "responsiveness". Regarding the fact that the significance level, fixed number, coefficient and model all are less than 0.05, by 95 percent of certainty we can express that the researcher's hypothesis is accepted. Also ($R^2=0.141$) shows that 14.1 percent of changes of dependent variable "customer relationship" is covered with independent variable of "foresight (future studies)".

Regarding the fact that the significance level, fixed number, coefficient and model all are less than 0.05, by 95 percent of certainty we can express that the researcher's hypothesis is rejected. Also ($R^2=0.083$) shows that only 8.3 percent of

changes of dependent variable “customer relationship” is covered with independent variable of “decision-making”. Regarding the fact that the significance level, fixed number, coefficient and model all are less than 0.05, by 95 percent of certainty we can express that the researcher’s hypothesis is rejected. Also ($R^2=0.041$) shows that 4.1 percent of changes of dependent variable “differentiated product” is covered with independent variable of “foresight (future studies)”.

Regarding the fact that the significance level, fixed number, coefficient and model all are less than 0.05, by 95 percent of certainty we can express that the researcher’s hypothesis is accepted. Also ($R^2=0.131$) shows that only 13.1 percent of changes of dependent variable “differentiated product” is covered with independent variable of “decision-making”. Regarding the fact that the significance level, fixed number, coefficient and model all are less than 0.05, by 95 percent of certainty we can express that the researcher’s hypothesis is rejected. Also ($R^2=0.015$) shows that 1.5 percent of changes of dependent variable “effectiveness of activities promotion” is covered with independent variable of “foresight (future studies)”.

Regarding the fact that the significance level, fixed number, coefficient and model all are less than 0.05, by 95 percent of certainty we can express that the researcher’s hypothesis is rejected. Also ($R^2=0.122$) shows that 12.2 percent of changes of dependent variable “effectiveness of activities promotion” is covered with independent variable of “decision-making”.

Conclusion

According to the findings, the following cases could be concluded:

- In the case that the general Department of Youth Affairs and Sport in West Azerbaijan is going to develop further relationship with customer in order to develop marketing, it should adopt the following strategies:
- Investigating customers’ viewpoint in relation to goods and services.
- Investigating the effects of competitors and changing market environment on customers.
- Finding the change in customers’ preferences
- Investigating the market process in common meeting between sectors.
- Discussion of marketing department and sales department with other departments about the customer’s needs
- Distributing the information related to customers satisfaction throughout the organization
- Dissemination of information related to the competitors among departments

- Company's appropriate reaction against the competitors' price changes
- Considering the customer's desires in changing goods and services
- Coordination of departments with each other for the customer-orientation
- Pay attention to the customer's complaints and performing corrective actions
- Predicting the status of important economic factors of country and world in future
- Predicting the status of important political factors of country and world in future
- Predicting the process of changes in important factors of cultural, social and environmental of our surrounding in future
- Predicting the process of changes in technology and its effects on the products of organization in future
- Predicting the process of the status of competitors of organization in future
- Predicting the status of the future needs of customers in future
- Predicting the status of the organization's suppliers in future
- In case that General Department of Youth Affairs and Sport in West Azerbaijan is going to develop and create differentiated products in order to develop their marketing, they should adopt the following strategies:
- Performing proper analysis according to the performed predictions and investigating the domestic and foreign environments of the organization in order to make proper decisions for the future of the organization
- Clarifying the outlook and long-term objectives for the organization and its products according to the obtained decisions
- Identify the strategies to achieve the objectives in a strategic plan for units and products of the organization

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