ATTITUDES TOWARDS LEISURE TIME MOTIVATION AT PLAYERS IN 'SOKAZ' **TABLE TENNIS RECREATIONAL LEAGUES**

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Original scientific paper

Abstract

Recreational sport describes a continuum between top-level sport and sport recreation. It is not the opposite of the top sport. There is an assumption that table tennis players competing in the higher levels of competition or those with better position on the league rank list have similar motivation to those of top athletes, namely a pronounced motive for achievement. Furthermore, it is possible that amateur table tennis players possess specific motivations for playing table tennis as well, depending on their age, or playing experience. This research is concerned with the following problems: to identify the correlations between all main motives for participation in recreational table tennis leagues and demographic variables, and to find structure of motivation factors for leisure sports involvement (part of the survey). A sample of 185 table tennis players, competing in various table tennis leagues in SOKAZ, was tested using the questionnaire Attitudes toward competition in SOKAZ, during the December of 2009. The results show that metric characteristics of the questionnaire Attitudes toward competition in SOKAZ satisfy with reliability and construct validity principles. There are some statistically significant intercorrelations between the results in all sport recreation motives of table tennis players competing in table tennis leagues in SOKAZ. Mainly among those who share similar type of motivating factors (competition, friendship). There are only a few and fairly low significant correlations between the recreation motives and demographic variables. The variable "position on the ranking list" can be successfully predicted by all leisure motives of table tennis players, but with unexpected variables. Differences between each of leisure motives for particular categories of demographic variables are minor. Suggestions for the future research have been given.

Keywords: competition level, locus of control, motivation for achievement, table tennis

Introduction

The Association of Recreational Table-Tennis Players in Zagreb (SOKAZ) has been gathering many table-tennis fans in Zagreb and its periphery, as well as from some more distant towns (Stubica, Zabok, Novska, etc.), for almost 60 years. Presently, SOKAZ includes 1200 sportsmen and sportswomen, distributed in 20 male leagues (12 teams in average) and one women's league with 12 teams. Although the nominal goal of competition in table-tennis leagues is identical to those of sports recreation, there are a series of indicators to believe that SOKAZ attracts not only recreational players, but also sportsmen who, according to their previous sports achievements, could be classified as elite table-tennis players. Namely, although a large number of former "active" players competes in weaker SOKAZ leagues as well (e.g. in 11th, 12th and weaker), several top ranked SOKAZ leagues include the best players according to match results, who are often members of the most successful Croatian teams (1st and 2nd Croatian league), or top teams in neighboring countries (Slovenia and Bosnia and Herzegovina), as well as in Austria or Germany (Sindik & Vidak, 2009a, 2009b). It may be concluded that from the standpoint of recreational goals of SOKAZ and from the standpoint of "motivation of top sportsmen" too, the recreational players have to be motivated to persevere in competition (to avoid boredom), and thus to reach the goals of keeping themselves healthy or socializing.

The sportsmen can be motivated to keep the high level of achievements in sports, to advance in their table-tennis performance. Table-tennis is a complex poly-structural kinesiological activity. Except for the technique area, i.e. motor abilities, table-tennis is demanding as far as information (tactical) knowledge is concerned, as well as relevant conative properties necessary for a successful result in competition (Grujić, 1975; Hudetz, 1984; 2000). Majority of authors defines leisure as the synthesis of the time we have spend and we were not paid for it together with activities we want and we are offered and we perform them during our unpaid time (Arbunić, 2004; Previšić, 2000).

According to Adams (1976, from Arbunić, 2004) there are four dimensions that strongly articulate activities correlated to leisure: freedom to choose motivation, activities, inner pleasure relaxation. An option for spending its free time is engaging in different physical activities. In fact, there are many indications that active lifestyle is desirable, as it reduces the risk of many chronically diseases. In addition to that it relieves the state of stress and depression, improves mood, selfconfidence and life-satisfaction. However, today we face so called epidemic sitting lifestyle. Modern technology eliminates needs for a human to be physically active and the consequences are reflected in reduction of physical and physiological potential factors.

Biological and genetic human's need for motor activities is related to the physical status of individual and society in general (Sindik, Andrijašević, & Ćurković, 2009). "Achievement motive" is usually defined as a commitment of an individual to excel before others, but also before oneself (Frančesko, Mihić & Bala, 2002). The assumption of the authors of this work is that desire for success and competitiveness is one of the most important factors to be attributed to people who are striving for their own development.

McClelland, Atkinson and others (1953) are the authors who emphasized the importance of achievement motives. This complex motivational disposition contains two components: human tendency to setting goals and the competition with other people. Table tennis athletes participate in competitions of various recreational levels, ranging from the leagues where quality of the participating players equals the quality of federal league players, to those completely recreational, the outcome of whom is of minor importance. So, authors assumed that table tennis players can have a few main motives for engaging in a table tennis competition in SOKAZ leagues: achievement motives (related to individual or team), spending free time, tendency to live healthy, wish to see their old friends and to find some new friends.

Therefore, it could be assumed that athletes competing in different levels of league competition differ also by commitment to achievement and in relation to other motives of playing table tennis in SOKAZ recreational leagues. Thus, it is assumed that the table tennis athletes who compete in the "higher" levels of competition have a similar motivation as the top athletes, and consequently the higher motive for achievement. On the other hand, it is possible that the table tennis athletes possess some specific characteristics in the various dimensions of motivation for such type of leisure. It is likely that the achievement motives will be more dominant to the recreational players in the competitive achievements in "higher" leagues and with better position on the ranking list (Sindik & Vidak, 2009a, 2009b).

Problem and aim

The problems facing in this research were: to find main metric characteristics for the questionnaire Attitudes toward competition in SOKAZ (1) to establish the correlation between sport recreation motives of table tennis players competing in table tennis leagues in SOKAZ, between all sport recreation motives and demographic variables (2); to predict variables league and rank list with the all leisure motives of table tennis players competing in table tennis leagues in SOKAZ (3); to find differences between each of leisure motives for the categories of demographic variables at table tennis players competing in table tennis leagues in SOKAZ (4).

Methods

A sample of 185 table tennis players competing in various table tennis leagues in SOKAZ was tested using questionnaire Attitudes toward competition in SOKAZ, during the December of 2009. Respondents in occasional sample were mostly male (183), 4 % in the age group less than 20, 30 % of them in a age group 21-30, 25 % of them in a age group 31-40, 22 % of them in a age group 41-50, 18 % of them in a age group 51-60, and finally 1 % of them in a age group more than 60 years. By playing experience, 32 % of the subjects play less than 5 years in some competitions, while 25 % play 6-10 years, 17 % 11-20 years, 16 % 21-30 years, 6 % 31-40 years, and 4 % 41-50 years. Most of the players play in the strongest and weakest leagues: $^{\circ}$ 36 $^{\circ}$ in $^{\circ}$ 1st $^{\circ}$ 1eague, $^{\circ}$ 16 $^{\circ}$ in $^{\circ}$ 10th league, 15 % in 11^{th} - 15^{th} league, 33 % in 16^{th} - 21^{st} league. Most of the players are highly ranked on the ranking list: 36 % from the 1st to 5th place, 17 % from 6th-10th place, 17 % from 11th-15th place, 7 % from places 16-20, as same as for 21-25 and 25-30. Only 1 % of players are ranked from 31st-35th, and 8 % behind 36^{th} place on the ranking list. All the variables in this correlation type research are deduced from the questionnaire. Name of the questionnaire made by Sindik (first time used in this article) was Attitudes toward competition in SOKAZ. The items were: 1. How old are vou. (categories, ranging from «age less than 20»=1, to «more than 60»=6), 2. How many years are you playing table tennis in any form of competition (SOKAZ, city / local leagues, the federal leagues, tournaments)? (categories, ranging from "less than 5 years"=1, to "more than 60"=8), 3. I am playing in a SOKAZ competition in the team that is competing in (categories, ranging from "1st-5th league"=1 to "16th to 21st league", 4. Which position you currently hold on the ranking list in the league SOKAZ in the play? (categories, ranging from «1st to 5th place»= 1, to "behind 36th place"=9), 5. Table tennis is the main way of spending my free time. 6. The basic reason to engage in the table tennis is the preservation of their health, 7. Table tennis in SOKAZ I play to met new friends, 8. Table tennis in SOKAZ I play to see my usual friends, 9. The main goal that interested me in SOKAZ is achieving the highest result (a score), 10. The main thing that interested me while competing in SOKAZ is to achieve better team results, For all the questions from No 5 to No 10, we used scale ranging from 5 (strongly agree) to 1 (do not agree). The questionnaire was given online, using the tool Survey Monkey. The subjects were informed about questionnaire on the official website of the SOKAZ leagues (www.sokaz.hr). Correlation between variables was calculated using Pearson's correlation coefficient (Petz, 1997). Reliability of the questionnaire is determined on the basis of the coefficient Cronbach (Kaiser & Caffrey, 1965, according to Dizdar, 1999; Mejovšek, 2003). Differences between the categories were calculated using Kruskall-Wallis test, and factor analysis using method of Principal Components.

Results

Table 1. Descriptive statistics for all the variables in research

Variables	Mean	SD	K-G	р
league	2,42	1,28	2,36	p<,01
Ranklist	3,01	2,19	1,98	p<,01
Age category	3,23	1,20	1,86	p<,01
age playing	2,51	1,44	2,09	p<,01
leisure	3,16	1,16	2,05	p<,01
healthcare	3,31	1,05	2,64	p<,01
new friends	2,99	1,12	2,34	p<,01
see friends	3,38	1,08	2,67	p<,01
own result	2,79	1,12	1,70	p<,01
team result	3,98	1,04	2,28	p<,01

SD=st. deviations, K-G= Kolmogorov-Smirnov Z, p=significance

Table 2. Construct validity and the reliability of the questionnaire

Variables	F	h2				
healthcare	,87	,75				
new friends	,73	,53				
see friends	,66	,43				
own result	,40	,16				
team result	,10	,01				
Explained variance	1,88 (Eigen)	37,56 %				
Reliability (Cronbach α)	,60 (all variables)	,63 (without team result)				
Kaiser-Meyer-Olkin Measure of Sampling						

Adequacy = ,55
F=factor structure, h2=communalities

Table 3. Correlations between all the items of the questionnaire

Var.	1	2	3	4	5	6	7	8	9	10
1	1,00	,52	-,12	,22	-,01	,45	,06	-,03	,01	,04
2		1,00	-,52	,14	,07	,27	,02	,10	-,20	-,02
3			1,00	-,20	-,18	-,04	-,07	-,10	,01	-,18
4				1,00	-,06	,11	,28	,06	,19	,07
5					1,00	,17	,35	,20	,24	,13
6						1,00	,47	,22	,20	,01
7							1,00	,50	,23	-,04
8								1,00	-,04	-,08
9									1,00	,38
10										1,00

1. How old are you. (categories, ranging from «age less than 20»=1, to «more than 60»=6), 2. How many years are you playing table tennis in any form of competition (SOKAZ, city / local leagues, the federal leagues, tournaments)? (categories, ranging from "less than 5 years"=1, to "more than 60"=8), 3. I am playing in a SOKAZ competition in the team that is competing in (categories, ranging from "1st-5th league"=1 to "16th to 21st league", 4. Which position you currently hold on the ranking list in the league SOKAZ in the play? (categories, ranging from «1st to 5th place»= 1, to "behind 36th place"=9), 5. Table tennis is the main way of spending my free time., 6. The basic reason to engage in the table tennis is the preservation of their health, 7. Table tennis in SOKAZ I play to met new friends, 8. Table tennis in SOKAZ I play to see my usual friends, 9. The main goal that interested me in SOKAZ is achieving the highest result (a score), 10. The main thing that interested me while competing in SOKAZ is to achieve better team results, For all the questions from No 5 to No 10, we used scale ranging from 5 (strongly agree) to 1 (do not agree).

Table 4. Predictive value of the variables league and ranklist by criteria – all the leisure motives

Criteria variable	R	R2	F	р	Predictors	β	В	t	р
				>,20	team result	-,21	-,26	-1,93	<,10
					Healthcare	-,01	-,02	-0,11	>,10
Loague	,28	no	1,30		Leisure	-,17	-,18	-1,52	>,10
League	,20	,08	5 1,30		See friends	-,09	-,02	-0,61	>,20
					Own result	,13	,15	1,16	>,20
					new friends	,15	-,01	-0,09	>,20
				<,05	team result	,05	,10	0,46	3 <,10 1 >,10 2 >,10 1 >,20 6 >,20 9 >,20 6 >,20 6 >,20 2 <,05 9 >,20 7 >,20
					Healthcare	-,05	-,10	-1,46	
Rank	,38	11	2 56		Leisure	-,21	-,40	-2,02	<,05
list	,30	,14	2,56		See friends	-,07	-,14	-0,59	>,10 >,20 >,20 >,20 >,20 >,20 >,20 >,20 <,05 >,20
					Own result	,14	,27	1,27	>,20
					new friends	,38	,75	2,95	<,01

Table 5. Differences in leisure motives for the categories of demographic variables

Indonendent	Kruskall-Wallis test (dependent variables)								
Independent variable	leisur e	health care	new friends	see friends	own result	team result			
age category	2,48	21,31	,49	3,24	5,15	8,33			
age playing	5,51	6,89	6,40	5,19	6,44	,38			
League	7,15	,14	1,02	4,40	,42	3,54			
Rank list	1,47	8,30	2,56	5,70	4,30	4,00			

Discussion and conclusion

The data in Table 1 enables an insight into the average results of the research variables for all respondents. All the variables significantly depart from normal distribution. On the average, team result achievement motive is the highest ranked in the hierarchy of motives in SOKAZ players. Motive for seeing old friends and wish to live healthy are second and third on the list of the highest ranked motives. Lower ranked motives are individual result (individual achievement motive) and wish to meet new friends.

Subjects participating in the research are mostly younger, who play about 10-15 years in some table tennis competitions that are ranked in-between 10th-15th place on the ranking list, mostly between 11th-15th leagues. Results could be anticipated, from the point of view of the competitive character in the base of this type of the recreation. On the other hand, "old friendship" motive could have had a basis in a previous experience competing together, with players in the same team. Some deviation from anticipated rank is a very low ranked individual achievement motive, what is discrepant from the highest ranked team achievement motive. Possible explanation of this result could be socially undesirable ("egoistic") individual achievement motive. Having that in mind, some answers could be fairly disputable. Leisure motives are measured with a questionnaire Attitudes toward competition in SOKAZ (ATCSOKAZ, Sindik, 2009), the reliability was .60 or .63 (Cronbach α). It is rather low but satisfactory and reads .85. This scale of leisure motives was created as a classic scale of Likert's type of 5 degrees to 5 items.

One and the only factor of this scale explains 37.56% of the total variance, and correlations of the variables with this factor are in range from, 10 to, 87. The communalities were proportional with the correlations with a factor. According to these characteristics, the questionnaire (of course, after some more testing) could be applicable in future researches. Table 3 shows that older players play in «stronger» leagues, and they are better positioned on the ranking list in certain leagues (3 of possible 6 correlations between demographic variables are statistically significant - dark shaded area in the table). The position of the player on the ranking list has only one positive and significant correlation, only with age category of the player. Low but statistically significant positive correlations were found between the most of motives for involving in competition in SOKAZ (9 of possible 15 correlations between motivation variables are statistically significant). Inter-correlations between different motives for involving in competition in SOKAZ vary -.08 to .47. Especially, the positive correlations were found between similar motives: achievement motives (individual and team) and friendship motives (meeting old and new friends). At last, viewing correlations between demographic and motivation variables, only 4 of possible 24 between these variables correlations statistically significant, and mostly very low. The highest significant and positive correlation is found between player's age category and healthcare motive; the similar but lower correlation is found between healthcare motive and years of playing table tennis. Position on the ranking list is positively linked with a wish to meet new friends. Results in general could be expected; from the point of view that table tennis in SOKAZ is mainly recreative. But, authors expected stronger link between league where the player competes, and his position on the ranking list, with achievement motives, team and individual. The reason of very low (or negative) correlation between competitive aims and players competitive ranking, could be explained with two opposite arguments: picking socially desirable answers (1), electing a denial of competitive (especially individual competitive) motives; or with a truly only leisure ("friendly" or "healthy") motives for engaging in SOKAZ leagues (2). With the data available in this research authors cannot make a judgment on what argument is near to truth. In Table 4 we can see the predictive value of two variables: league in which player competes, and his position on the ranking list, using criteria, all the leisure motives. Player's position could be statistical significantly predicted, with two predictors: leisure (table tennis as the main way to spend free time) and meeting new friends (table tennis as the way to find new friends).

This result is not expected, because it could be more logical that achievement motives can the best predict the league in which some individual play, and his position on the ranking list. The arguments explained above could explain this result, too. Table 5 shows that players do not in generally differ, comparing to their age categories, years of playing, league in which they play and their position on the ranking list. The only single difference was found in healthcare motives of different age categories. Comparing mean ranks of the age categories, it could be concluded that older players have higher healthcare motives. Mean rank for voungest category (less than 20) is 25,25; for age group 21-30 mean rank is 37,32; for age group 31-40 mean rank is 47,54,; for age group 41-50 mean rank is 63,16; for age group 51-60 mean rank is 65,61 and for only one subject in age group over 61, mean rank is 70,50. Almost total absence of differences in leisure motives, and the table tennis as a main type of leisure could reflect real "pure" leisure motives at the SOKAZ players. But, it can also reflect the social desirable responds. The main result in the research is that there is no strong (significant) relationship between the demographic variables and any leisure motives at the recreational table tennis players that play in SOKAZ leagues. Among leisure motives, similar type motives are more correlated with each other, than in general (all motives together). All results could be explained with two opposite arguments, mentioned during explaining low ranked individual achievement motives: socially desirable answers (1) and true only leisure ("friendly" or "healthy") motives for engaging in SOKAZ leagues (2). The most important limitation of the research is the sample of respondents, which is not randomized. In fact, it could happen that players who were subjects in this research are in fact those who are more motivated and competitively more successful in general. More (or completely) randomized sample of subjects could be the best recommendation in future research. Metric characteristics of the questionnaire Attitudes toward competition in SOKAZ satisfy with reliability and construct validity principles. There are some statistically significant intercorrelations between the results in all sport recreation motives of table tennis players competing in table tennis leagues in SOKAZ. Mainly among those who share similar type of motivating factors (competition, friendship). There are only a few and fairly low significant correlations between the recreation motives and demographic variables. The variable position on the ranking list can be successfully predicted with all leisure motives of table tennis players, but with unexpected variables. Differences between each of leisure motives for particular categories of demographic variables are minor.

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STAVOVI PREMA MOTIVACIJI ZA SLOBODNO VRIJEME KOD IGRAČA U STOLNOTENISKIM 'SOKAZ' REKREATIVNIM LIGAMA

Sažetak

Rekreativni sport predstavlja kontinuum između vrhunskog sporta i sportske rekreacije. To nije suprotan pol u odnosu na vrhunski sport. Moglo bi se pretpostaviti da stolnotenisači, koji se natječu u višim razinama natjecanja ili onih s boljom pozicijom na rang-listi u ligi, imaju sličnu motivaciju kao vrhunski sportaši, naime izražen motiv za postignućem. S druge strane, moguće je da amaterski stolnotenisači posjeduju i specifičnu motivaciju za igranje stolnog tenisa, ovisno o njihovoj dobi, ili igračkom iskustvu. Ovo istraživanje se bavi sljedećim problemima: naći korelaciju između svih glavnih motiva za uključivanje u rekreacijske lige stolnog tenisa i demografskih varijabli, i pronaći faktorsku strukturu motivacije za provođenje slobodnog vremena (u dijelu naše ankete). Uzorak od 185 igrača stolnog tenisa u natjecanjima u raznim stolnoteniskim ligama u SOKAZ-u, bio je testiran pomoću upitnika Stavovi prema natjecanju u SOKAZ-u, tijekom prosinca 2009. Rezultati pokazuju da su metrijske karakteristike upitnika Stavovi prema natjecanju u SOKAZ-u zadovoljavajuće, u odnosu na pouzdanost i konstruktnu valjanost. Postoji nekoliko statistički značajnih interkorelacija između rezultata u svim motivima sportske rekreacije za igrače koji se natječu u stolnoteniskim ligama SOKAZ-a, uglavnom između onih koji su sličnog tipa (natjecanje, prijateljstvo). Postoji samo nekoliko i uglavnom niskih značajnih korelacija između rekreacijskih motiva i demografskih varijabli. Varijablu pozicija na rang listi može se uspješno predvidjeti pomoću svih motiva slobodnog vremena stolnotenisača, ali s neočekivanim varijablama. Razlike u motivima za provođenje slobodnog vremena za pojedine kategorije demografskih varijabli su minorne. Dani su i prijedlozi za buduće istraživanje.

Ključne riječi: razina natjecanja, lokus kontrole, motivacija za uspjeh, stolni tenis

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