

Multiple Influences Affecting the Women's Choice of a Fitness Club

Author's Contribution

A – Study Design
B – Data Collection
C – Statistical Analysis
D – Data Interpretation
E – Manuscript Preparation
F – Literature Search
G – Funds Collection

Anna Szumilewicz

Jedrzej Sniadecki Academy of Physical Education and Sport
in Gdansk, Poland

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Abstract

Background:

The objective of this study was to find out the most important influences affecting the women's choice of a fitness club and to show that a fitness instructor is one of the significant factors in this decision making process. Comprehensive understanding by instructors of the women's decision making process will help in improving the women's satisfaction level, hence their regular participation in fitness activities.

Materials and methods:

Two different target groups connected with the activity of fitness clubs were studied. In the first one there were 339 female fitness class participants at the age of 13 to 76. There were 188 group fitness instructors at the age of 19 to 59 in the second target group. Both groups filled in a questionnaire constructed for this research project. 17 factors that might affect the women's choice of a fitness club were analyzed.

Results:

The study reveals that fitness instructors' qualifications and the factors connected with their work have a much more important impact on the women's choice of a club than some other promotional activities.

Conclusions:

Maintaining a high level of fitness instructors' qualifications and enabling them to deliver the highest quality of work should have the highest priority in the marketing strategy of fitness clubs. High expectations that women have of fitness instructors prove the necessity of developing training standards for leisure time physical activity instructors in Poland. This is essential to ensure an appropriate level of their professional qualifications.

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Address for correspondence

Dr Anna Szumilewicz, Academy of Physical Education and Sport,
80-336 Gdańsk, Poland, ul. K. Górskiego 1, Phone: +48 554-71-84, e-mail: anna_szumilewicz@awf.gda.pl

Introduction

At the time of an increased interest in women's physical activity [1,2,3] researchers analyse their participation in group fitness sessions. In recent years, group fitness with music has become one of the most popular activities of Polish women of all ages [4].

This phenomenon has brought swift reaction from fitness services providers. More and more fitness clubs appear every year [5]. There are over 50 of them in Tricity alone¹. The existing clubs differ widely in various aspects: location, the standard of their premises and equipment, services offered, prices, personnel qualifications, average attendance, etc. It is therefore interesting to find out why women select a particular club for their fitness activities.

Literature shows that the instructor is one of the significant factors affecting the selection of the club [6,7,8]. The author of this work will pay the most attention to this factor. The novelty of the approach lies in the analysis of the instructors' perception, in addition to the customers' point of view. A comparative analysis of the views of both groups will enable identification of factors affecting women's choice that are over- or underestimated by the instructors. Instructors' comprehensive understanding of the women's decision making process will help in improving the women's satisfaction level, hence their regular participation in fitness activities.

Objective of the study

The objective of this study was to find out the most important influences affecting the women's choice of a fitness club and to show that the fitness instructor is one of the significant factors in this decision making process.

Material and Methods

In order to conduct a comparative analysis, two groups of fitness activities beneficiaries have been surveyed. The selection of people for this research was random.

The first research group consisted of 344 women participating in fitness exercises aged 13 to 76. Half of the participants have not exceeded the age of 29 (Me=29). For statistical analyses *women's age ranges* (Fig. 1) was considered as an independent variable.

There were 188 group fitness instructors (alternatively called *fitness specialists*) at the age of 19 to 59 in the second target group. Half of them have not exceeded 25 years of age (Me=25). In the quantitative analysis, the *length of work experience* as a fitness instructor was taken as an independent variable for this target group. Five categories of the length of work as fitness instructors for the tested instructors were determined using statistical estimators and the specifics of the instructors' professional career (Fig. 2).

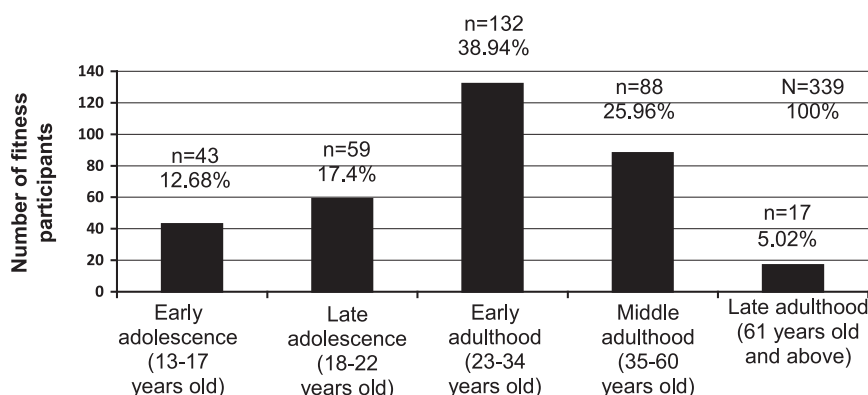


Fig. 1. Distribution of women's age according to stages of psycho-sociological development by Brzezińska [9]

¹ According to the data at http://katalog.trojmiasto.pl/sport_i_rekreacja/silownie_i_fitness_kluby/ [accessed on 2011-10-01]

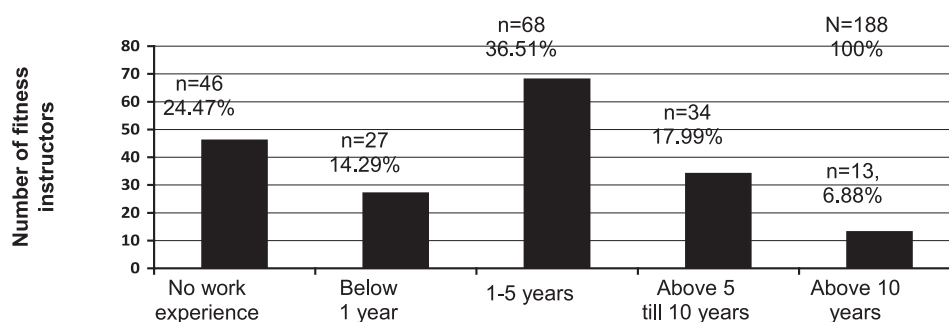


Fig. 2. Fitness instructor's work experience (in the ranges of years)

Professional experience of the instructors with *no work experience* is limited to leading single lessons on their parts, as gained during specialised instructor training courses. A fitness instructor gains full experience only after a full year of work as fitness clubs are subject to significant seasonal changes in client attendance. Therefore, two sub-groups of instructors – those *without work experience* and *with work experience shorter than one year* will be referred to as *instructors without full work experience*. This is in contrast to other fitness specialists who will be called *instructors with full work experience*.

Instructors and participants filled in a questionnaire constructed for this research project. In order to analyze the reasons why women select a particular fitness club 17 factors were taken into account, such as: *highly qualified instructors, high quality of services, high effectiveness of services, the sessions are fun, high standard of premises, high standard of equipment, a wide range of services, prices, nice atmosphere, opportunity to do exercise with friends, opportunity to do exercise with family, good reputation of the club, location, free season tickets (e.g. from the employers), availability of childcare, opportunity to meet celebrities and loyalty to instructors*. The people tested were asked to indicate the importance of each factor on a scale of 1 to 7, where 1 was the least important and 7 – the most important.

The collected data were analysed using a computer program STATISTICA v.8.0. Owing to the distribution from different to normal, confirmed by the normality test of Kolmogorov-Smirnov using Lilliefors probability and the values of skewness and kurtosis, they were characterised using median for the central tendency and range as a measure of variation. The remaining estimators were mode, lower and upper quartile and maximum and minimum values. Owing to the measurement of variables on an ordinal scale and an asymmetric distribution of results, non-parametric statistical Mann-Whitney U test, Kruskal-Wallis H test and the multiple comparisons post-hoc test have been used for analysis.

Results

The results of the research prove that the most important club selection criteria for the participants are the following factors: (Me=7, Fig. 3): *high quality of service, highly qualified instructors, the sessions are fun* and *nice atmosphere*. Fitness instructors rated most highly (Me=7, Fig. 4): *high quality of service, the sessions are fun* and *nice atmosphere*. It is interesting that the instructors attributed a lower value (Me=6) to the variable *highly qualified instructors* than to the three factors listed above.

The length of professional experience of the tested specialists proved the key factor in the analysis of the results. Although the differences of opinion on the importance of the *highly qualified instructors* variable in the Kruskal-Wallis test clearly exceed the statistical significance level ($H=3.57$; $p=0.47$; $d=4$, Tab. 1.), the average values of ranking R for multiple comparisons point to the following distribution: people without professional experience ($R=87.69$) and with experience below one year ($R=87.37$) valued the above variable the lowest compared to all fitness instructors ($R>91.28$).

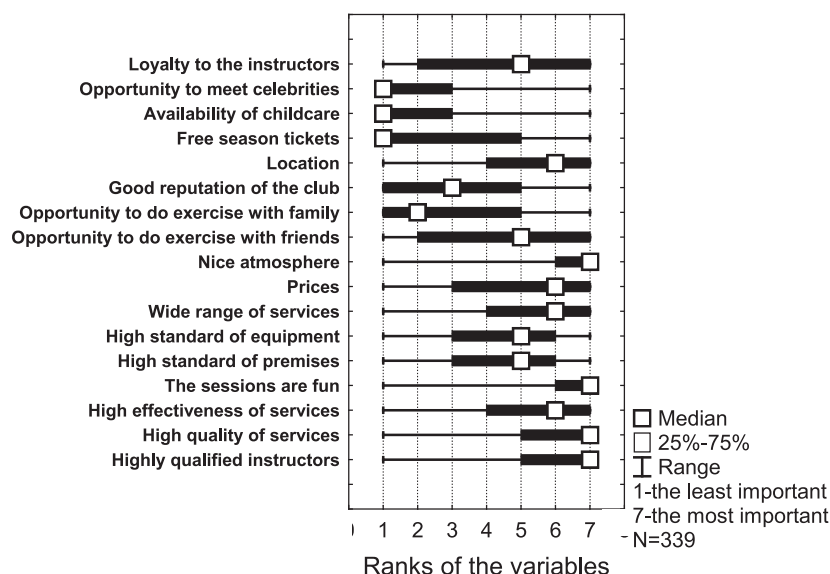


Fig. 3. The influences affecting the women's choice of a fitness club in the participants' opinions

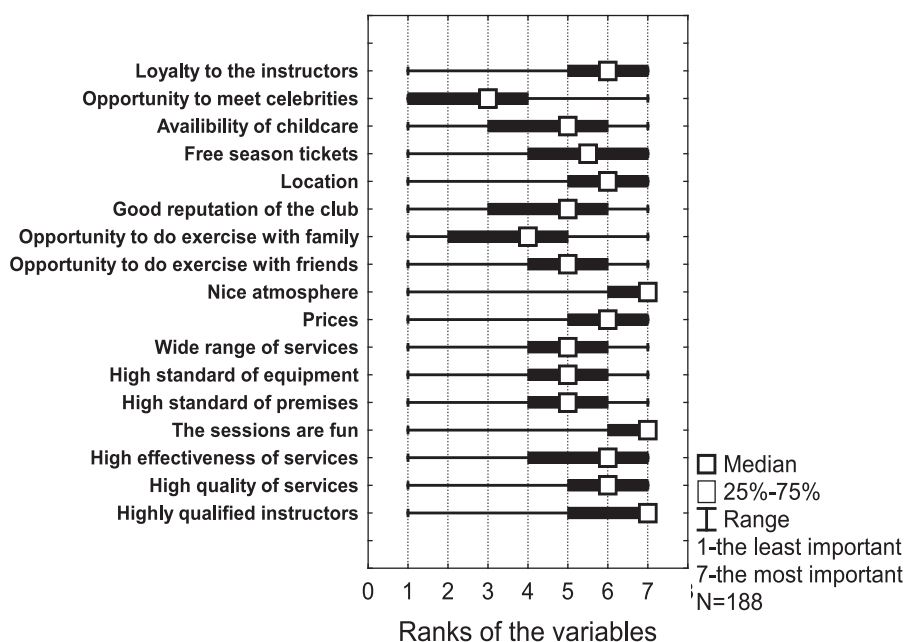


Fig. 4. The influences affecting the women's choice of a fitness club in the instructors' opinions

Taking into account the above data in the analysis of responses, a division into two groups has been applied – ranking given to the variable *highly qualified instructors* has been taken separately for the instructors without full professional experience and for those with full professional experience. The research shows that instructors with at least one year of professional experience, similarly to the participants, considered *highly qualified instructors* as one of the most important factors in the choice of a fitness club (Fig. 5).

Mann-Whitney test results (Tab. 2) show a statistical agreement in the opinions of participants and fitness specialists that the four above listed variables are the most important in the choice of a fitness club by the participants: *high quality of service* ($z=0.4$, $p=0.69$), *highly qualified instructors* ($z=0.95$, $p=0.345$), *the sessions are fun* ($z=-0.85$, $p=0.394$) and *nice atmosphere* ($z=-0.7$, $p=0.483$).

Tab. 1. The variable: highly qualified instructors and women's choice of a fitness club in the opinions of instructors with different work experience

Variable	Highly qualified instructors				
Tested people	Instructors ($n=186$) with different work experience:				
	no work experience ($n=46$)	below a year ($n=27$)	1-5 years ($n=67$)	above 5 till 10 years ($n=34$)	above 10 years ($n=12$)
Results of the Kruskal-Wallis test	$H=3.57$; $p=0.47$; $d=4$				
Value of the mean ranks R (results of the multiple comparisons)	87.69	87.37	97.31	91.28	114.58

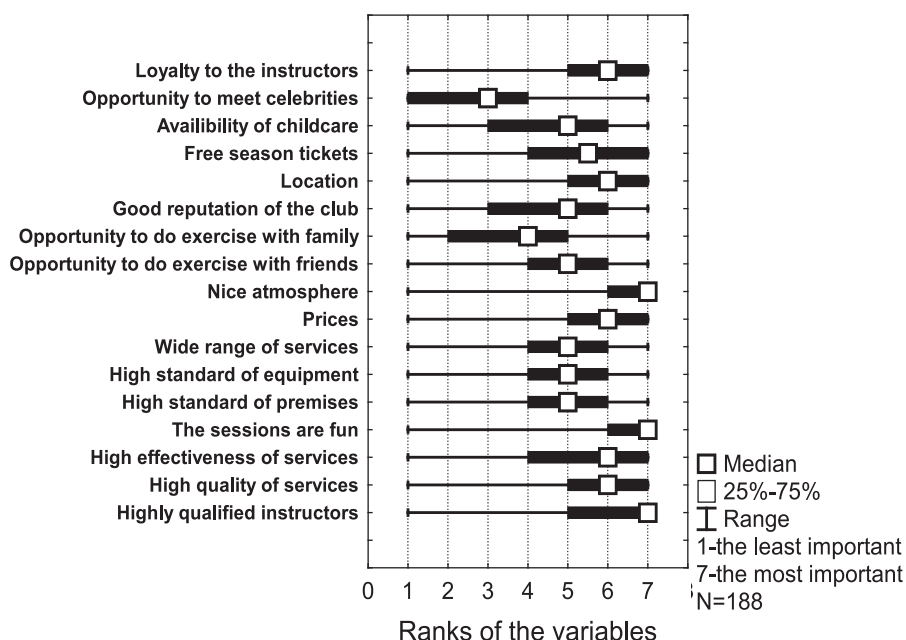


Fig. 5. The importance of highly qualified instructors in the women's choice of a fitness club in the views of fitness participants and instructors with full professional experience

Considering other factors, women pay statistically significantly less attention than the instructors to such factors as *high standard of premises* ($z=-2.43$; $p=0.015$), *high standard of equipment* ($z=-2.04$; $p=0.042$), *prices* ($z=-4.32$; $p=0.000$), *opportunity to do exercise with family* ($z=-4.07$; $p=0.000$), *good reputation of the club* ($z=-5.18$; $p=0.000$), *free season tickets* ($z=-8.46$; $p=0.000$), *availability of childcare* ($z=-11.16$; $p=0.000$), *opportunity to meet celebrities* ($z=-6.7$; $p=0.000$) and *loyalty to instructors* ($z=-3.93$; $p=0.000$). The differences were highly significant in 7 from 9 factors mentioned above. There is only one factor: *wide range of services* ($z=2.01$; $p=0.044$), which is regarded to be more important by fitness participants than by instructors.

It is interesting that participants in fitness exercises rated *loyalty to instructors* lower ($Me=5$) than the instructors ($Me=6$) in a highly significant statistically way. Particular attention is drawn to a wide spread of the quartiles for the ranking given to this factor by fitness clubs clients ($Q1=2$; $Q3=7$; Fig. 3). In the further analysis these women were divided by age categories.

Tab. 2. The importance of various influences affecting the women's choice of a fitness club in the views of fitness participants and instructors

Lp.	The influences affecting the women's choice of a fitness club	Results of the U Mann-Whitney test				
		Sum of participants' answers <i>n</i> =339	Sum of instructors' answers <i>n</i> =188	Value <i>U</i>	Value <i>Z</i>	Level of significance <i>p</i>
1.	highly qualified instructors	88953.00	48073.00	30682.00	0.40	0.690
2.	high quality of services	89856.50	47169.50	29778.50	0.94	0.345
3.	high effectiveness of services	85376.00	51650.00	28423.00	-1.76	0.078
4.	the sessions are fun	86882.50	50143.50	29929.50	-0.85	0.394
5.	high standard of premises	84268.50	52757.50	27315.50	-2.43*	0.015
6.	high standard of equipment	84920.50	52105.50	27967.50	-2.04*	0.041
7.	wide range of services	91624.00	45402.00	28011.00	2.01*	0.044
8.	prices	80714.00	54746.00	23761.00	-4.32**	0.000
9.	nice atmosphere	87133.00	49893.00	30180.00	-0.70	0.483
10.	opportunity to do exercise with friends	87478.50	49547.50	30525.50	-0.49	0.622
11.	opportunity to do exercise with family	80741.50	55239.50	24461.50	-4.07**	0.000
12.	good reputation of the club	79721.50	57304.50	22768.50	-5.18**	0.000
13.	location	79977.00	49309.00	27002.00	-1.72	0.085
14.	free season tickets	72496.50	61406.50	16885.50	-8.46**	0.000
15.	availability of childcare	68201.00	66220.00	12590.00	-11.16**	0.000
16.	opportunity to meet celebrities	75470.50	58950.50	19859.50	-6.70**	0.000
17.	loyalty to instructors	79675.50	51652.50	23395.50	-3.93**	0.000

Level of significance: * $p \leq 0.05$; ** $p \leq 0.001$

Tab. 3. The importance of loyalty to the instructors in the women's choice of a fitness club in views of fitness instructors and of participants at different ages

Variable		Loyalty to the instructors					
Tested people		Participants (n=335) in different age					Instructors (n=177)
		Early adolescence (13-17 y.o; n=43)	Late adolescence (18-22 y.o; n=59)	Elarly adulthood (23-34 y.o.; n=128)	Middle adulthood (35-60 y.o.; n=88)	Late adulthood (61 y.o. and above; n=17)	
Results of the Kruskal-Wallis test		H=38.58; p=0.000**, d=5					
Value of the mean ranks R (results of multiple comparisons)		161.35	201.67	262.93	253.14	288.68	291.82
Participants' answers compared to the instructors' answers using the post-hoc test	z	5.19**	4.05**	1.68	2.00	0.08	
	p	0.000	0.000	1	0.66	1	
Level of significance: *p<=0.05; **p<=0.001							

Level of significance: * $p \leq 0.05$; ** $p \leq 0.001$

Post-hoc multiple comparisons test results show that the difference between the ranking of loyalty to instructors in the opinions of participants and instructors were mostly caused by the lowest rankings assigned to this variable by the two youngest age groups (Tab. 3): young adolescence (13–17 years; $R=161.35$) and late adolescence (18–22 years; $R=201.67$). The others, the majority of the test group ($n=233$), similarly to the instructors, at the level of statistical significance, ranked *loyalty to instructors* as an important criterion in the choice of a fitness club ($R \geq 253.14$).

Based upon these findings two additional questions seem to be interesting. Customers of fitness clubs were asked whether they have always had fitness sessions with the same instructor. 36% of these women assume they have always had exercise settings with the same instructor ($n=120$), 53% of them say they are usually instructed by the same person ($n=170$) and only 11% of this sample do not pay attention to who leads their fitness classes ($n=38$). The next question was what women would do if their favorite instructor left the fitness club. 37% of women declare they would move to another club together with their favourite instructor ($n=123$).

Discussion

The obtained results allowed determining which factors are the most important in women's choice of a fitness club. The majority of both respondent groups, the fitness specialists and the participants, rated four variables the highest ($Me=7$). They are all associated with fitness instructors' professional training and their way of leading the exercises (Figures 3, 4 and 5). These data confirm other authors' view [6,7,8] that the staff employed at a fitness club is the major influence on the choice of the physical recreation venue.

Fitness instructors without professional experience and with experience shorter than one year ranked high qualifications of the instructors lower than fitness specialists with at least a year of professional experience. The author attributes this result to their insufficient work experience.

High expectations regarding qualifications of fitness instructors revealed by the participants of physical recreation exercises stem from the specific nature of fitness exercises. The women who entrust their health and fitness to an instructor want to be certain that they have placed their trust in a competent person. The gathered views of fitness exercises clients testify to the necessity of maintaining an appropriate level of fitness instructors' professional training.

Research results obtained by Siwiński [10] and Zarębska [11] are of concern. They prove that insufficiently trained instructors work at the Polish recreation clubs. Furthermore, other research, e.g. by Pelc and Zielińska [12] and E. Stępień and J. Stępień [13], shows that fitness instructors are convinced of a large disparity between the quality of education services offered by various institutions. In the light of the data collected in this work and other authors' research there is a clear need to modernise fitness instructors' training in Poland and to introduce uniform standards for this process. This is particularly important in the time of legislative changes removing legal regulations for the profession of instructors of leisure time physical activities [14].

It is worth noting that the need to improve fitness instructors' education system is a current problem not only in Poland. Experts in the recreation discipline, especially in the US and Canada, have been looking for better solutions in this area for many years [9,16,17,18,19].

The session are fun and *nice atmosphere* are two further factors in the women's choice of a fitness club given the highest ranking by both participants and instructors. In the context of recreation activity [compare 19] the obtained results seem understandable. Recreational exercises, which are in theory a free choice activity, should be a source of positive experience.

It is also worth noting that fitness instructors associate good atmosphere more with their own predispositions than with their professional training [20]. Authors state that a recreation instructor should be friendly, well behaved, with good social skills, empathy and a sense of humour and that they should encourage physical effort with their own energy [10,13,21,22,23]. These are important strengths well appreciated by the instructor's trainees [13,21]. Nevertheless, they may be insufficient for the instructor to maintain regular attendance of the clients in the exercises.

Foreign researchers strongly link the planned style of leading the group and instructor's behaviour with the maintenance of participants' attendance in physical exercises that he or she conducts [24,25,26,27,28]. It would be worth looking at this subject in the context of the functioning of Polish fitness clubs.

The highest rankings given by respondents to the variables *the session are fun* and *nice atmosphere* prove that the conscious influence of the instructor on the clients' well being and his ability to affect the atmosphere of the sessions are competences that need to be shaped in the specialist part of the instructor training [compare 20].

Loyalty to instructors was a very important criterion in the women's fitness club selection shown in the views of the test group ($Me=6$). The two youngest groups of participants in fitness exercises – the young and late adolescents (13–22 years) rated that factor lower than the other women, with statistical significance. The obtained results may be explained by girls' different expectations of physical exercises. They may also be due to development stages typical of these ages [compare 9]. At this stage of adolescence belonging to a recreation group may be more important than the person leading the exercises.

The respondents' views show that staff turnover in fitness clubs is a negative phenomenon. The research shows that an ill-thought through change of instructors can lead to a loss of about 1/3 of the clients. One is justified in stating that sport and recreation venues managers need to appropriate human resources policy.

Data analysis shows that the most numerous group of the tested fitness instructors have 1 to 5 years of professional experience. In all, 75% ($Q3=5$) of the tested instructors have not exceeded 5 years' experience. Other researchers: Pelc and Zielińska [12], Siwiński and Tauber [21], Kubicka and Żydek [22], E. Stępień and J. Stępień [13] and Zarębska [11] have obtained similar results.

The knowledge and practical experience of a leader of recreation exercises are desirable competences [10,13,22,23]. Siwiński [10, p. 53], analysing the level of professional adaptation of young physical exercises instructors working in the profession from 1 to 5 years, found that "owing to short service length and recreational activity practice, the tested instructors partly cope with problems, difficult professional situations". One may surmise that the majority of fitness instructors leave the profession before they acquire the full package of specialist competences. A multi-faceted analysis of the reasons for leaving the profession of fitness instructor seems an important research subject.

It is worth noting that one does not encounter many permanently employed instructors in Polish fitness clubs. The most frequent employment method is by temporary contract [29]. This method severely restricts instructors' ability to give full commitment to the work, the development of professional competences and loyalty to the club. This can translate into weak relations with the clients and low effectiveness of the training sessions. Being paid just for the conducted physical activity sessions means that the instructors often work in several clubs or take up other employment, which prevents them from giving enough attention to their trainees.

Clearly outlined professional progress for fitness instructors could prove a strong motivating factor in work and would give fitness specialists a desired social status [17]. It would be linked with a better way of employing specialists in fitness clubs. Consequently, being an instructor or a trainer at a fitness club would become a primary professional employment rather than an additional job.

The current analysis of the importance of 17 variables affecting women's choice of a fitness club has shown that maintaining a high level of instructors' qualifications and providing them with the conditions enabling the highest quality of work should be paramount in recreation companies' marketing strategy. According to the results of the research, this can contribute to the clubs' profitability more effectively than investment in improving the premises and equipment, special promotions or introducing additional services. It is interesting that fitness instructors overestimated the importance of 7 factors unrelated to the staff to a statistically significant degree. The author believes this result to be caused by instructors' frequent participation in the clubs' promotional activities, which hinders their objective assessment of such actions.

Conclusions

Maintaining a high level of instructors' qualifications and providing them with the conditions enabling the highest quality of work should be paramount in fitness clubs' marketing strategy.

High expectations that women have of fitness clubs' instructors prove the need to develop education standards for leisure time physical activity instructors in Poland, in order to ensure an appropriate level of their professional qualifications.

References

1. Garstka-Namysł K. Konsekwencje uczestnictwa kobiet w gimnastyce rekreacyjnej [in Polish] [The consequences of women's engagement in recreational gymnastics]. Poznań: AWF; 2009.
2. Guskowska M, editor. Aktywność ruchowa kobiet. Formy, uwarunkowania, korzyści i zagrożenia [in Polish] [Women's physical activity. Forms, determinants, benefits and threats]. Warszawa: AWF; 2009.
3. Lipowski M. Rekreacja ruchowa kobiet. Motywy zachowań pro-zdrowotnych [in Polish] [Physical activity of women. The motives of pro-health behaviour]. Gdańsk: AWFis; 2005.
4. Pachnowska B. Rynek fitness 2003 [in Polish] [Fitness Market 2003]. *Body & Life* 2004;2:18-20.
5. Mickiewicz A. Kluby fitness w Polsce [in Polish] [Fitness Clubs in Poland]. *Body & Life* 2001;2:8-10.
6. Marciszewska B. Konsumpcja usług rekreacyjno-sportowych [in Polish] [The consumption of recreational and sport services]. Gdańsk: AWF; 1999.
7. Widawska-Stanisław A. Marketing relacji – sposób na sukces rynkowy przedsiębiorstwa sportowo-rekreacyjnego [in Polish] [Relationship marketing – the way to business success for sport and recreation company]. In: Mruk H, editor. Marketing sportowy – teoria i praktyka [Sport marketing – theory and practice]. Poznań: Impact Consulting; 2004, 295-302.
8. Chang K, Kim YK. Competencies for fitness club instructors: results of a Delphi-study. *Int J Appl Sport Sci* 2003; 15(1):56-64.
9. Brzezińska A. Społeczna psychologia rozwoju [in Polish]. [The social psychology of development] Warszawa: Scholar; 2000.
10. Siwiński W. Poziom adaptacji zawodowej młodego instruktora rekreacji ruchowej [in Polish] [The professional adaptation level of the young physical recreation instructor]. In: Dąbrowski A, editor. Uczestnictwo Polaków w rekreacji ruchowej i jego uwarunkowania [The participation of Poles in physical recreation and its determinants]. Płock: Wydawnictwo Naukowe NOVUM; 2003, 36-55.
11. Zarębska A. Aktywność fizyczna "fitness" jako forma oddziaływania usprawniająco-zdrowotnego: rozprawa doktorska [in Polish] [Physical activity 'fitness' as a form of sport conditioning and health treatment: doctoral dissertation]. Gdańsk: AWFis; 2007.
12. Pelc Z, Zielińska M. Pozytywne i negatywne strony uprawiania aerobiku w ocenie instruktorów [in Polish] [Positives and negatives of participating in aerobics in the instructors' views]. In: Szot Z, editor. Sport gimnastyczny i taniec w badaniach naukowych [The sport of gymnastics and dance in the scientific research]. Gdańsk: AWF; 2001, 180-185.
13. Stępień E, Stępień J. Motywy uczestnictwa w zajęciach fitness, w opinii ćwiczących i instruktorów [in Polish] [Motives of participation in fitness classes, in the views of participants and instructors]. In: Nałęcka D, Bytniewski M, editors. Teoria i praktyka rekreacji ruchowej [Theory and practice of physical recreation]. Biała Podlaska: PWSZ w Białej Podlaskiej; 2006, s. 237-244.
14. Ustawa o sporcie [The Sport Act] z dnia 25 czerwca 2010 (Dz. U. 2010 Nr 127 poz. 857).
15. Hayward NL. Instructor certification: making fitness programs safer. *Parks and Recreation* 1986;21,12: 24-29.
16. Group exercise performance standards. National Fitness Leadership Alliance (NFLA). Online November 2005, http://www.bcrpa.bc.ca/fitness_program/courses_workshops/performance_standards/documents/GroupFitnessPerformanceStandards-2005_000.pdf dated on 22. 11. 2008.
17. Personal training licensing survey results. 2006 Report. National Board of Fitness Examiners (NBFE). Online 2006, http://www.nbfe.org/news/press_releases/survey_results103006.cfm dated on 18.09.2008.
18. Herbert DL. New litigation issue may impact certification of fitness professionals. *Exerc Stand Malpract* 2007; 21(6):81-88.
19. Winiarski R. Motywacja aktywności rekreacyjnej człowieka [in Polish] [The motivation for human physical activity]. Kraków: AWF; 1991.
20. Szumilewicz A. Sylwetka zawodowa instruktorów fitness w ich opiniach a oczekiwania uczestniczek rekreacji fizycznej: rozprawa doktorska [in Polish] [Fitness instructor's professional profile in views of fitness instructors and the expectation of physical recreation female participants: doctoral dissertation]. Warszawa: AWF; 2010.
21. Siwiński W, Tauber RD. Rekreacja ruchowa. Zagadnienia teoretyczno-metodologiczne [in Polish] [Physical recreation. Theoretical and methodological issues]. Poznań: WSHiG; 2004.
22. Kubińska Z, Żydek K. Osoba instruktora rekreacji ruchowej ze specjalnością fitness w świadomości uczestników kursu [in Polish] [Physical recreation instructor, specialized in modern form of gymnastics, in the opinion of professional course participants]. In: Nałęcka D, Bytniewski M, editors. Teoria i praktyka rekreacji ruchowej [Theory and practice of physical recreation]. Biała Podlaska: PWSZ; 2006, 245-251.

23. Opoka DM. Sylwetka instruktora fitness [in Polish] [Fitness instructor's profile]. In: Pietrzyk D, editor. Fitness nowoczesne formy gimnastyki [Fitness modern form of gymnastics]. Warszawa: TKKF; 2007, 67-75.
24. Annesi JJ. Effects of a cognitive behavioral treatment package on exercise attendance and drop out in fitness centers. *Eur J Sport Sci* 2003 Apr;3(2):1-16.
25. Annesi JJ. Relationship between exercise professionals' behavioral styles and clients' adherence to exercise. *Percept Motor Skills* 1999 Oct;89(2):597-604.
26. Cameron KA. Leading to lifelong exercise: what can group fitness participants tell us about fitness leadership? Online 2007, <https://dspace.library.uvic.ca:8443/dspace/bitstream/1828/280/1/thesis.pdf> dated on 19.11.2008.
27. Collishaw MA, Dyer L, Boies K. The authenticity of positive emotional displays: client responses to leisure service employees. *J Leisure Res* 2008;40(1):23-46.
28. Mears J, Kilpatrick M. Motivation for exercise: applying theory to make a difference in adoption and adherence. *ACSM's Health Fit J* 2008;12(1):20-27.
29. Żelazek K. Zdrowo się męczyć [in Polish] [Healthy fatigue]. Online 2004, <http://arch.rzeczpospolita.pl/a/rz/2004/09/20040910/200409100006.html> dated on 11.02.2006.