



GENDER-DEPENDENT FITNESS- AND HEALTH CENTRE EVALUATION BY RESIGNED MEMBERS

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Abstract:

The aim of the study is to examine if and to what extent the evaluations of fitness studios by persons who have recently resigned from their membership are related to general studio conditions such as studio atmosphere, facilities, trainer's competence and other features. In the evaluations and statistical analyses presented here, it is examined to what extent male and female dropouts differ in their evaluations of the fitness studios. Assuming that the sports studio evaluation may have played a role in the quitting decision to a certain extent, the question of gender differences concerning the quitting decision is therefore also indirectly posed. In other words, the question is whether there are typical [prioritisations](#) on positive or negative evaluations by dropouts from fitness sport. A total of 225 people, who had terminated their contract with a fitness studio, were questioned. The survey was conducted as a telephone inquiry about their actual decision. The study was conducted in a health-oriented fitness centre in East Cologne. The fitness facility was opened in 1994 and has a size of 1,100 square metres. At the time of the study, the gym had up to 1,151 memberships. Among them, 59% of the members were women and 41% were men. The average age of the respondents was 43.5 years. The average duration of membership added up to 4.4 years. On the whole, the various aspects of the studio offer and its surroundings were largely rated as "good". The respondents particularly expressed their appreciation for the coaches (friendliness, helpfulness, competence), followed by opening hours, trial training and the first impression. The membership costs and individual aspects such as space, music and ventilation are evaluated more critically, if not really badly. In practice, there were no significant differences between the genders in the studio evaluation. Purely descriptive, both subgroups are very close to each other in their mean values in all 19 aspects of the studio evaluation. The most significant difference lies in the evaluation of the studio location, which is also significant at the 5% level, but still remains small at the absolute level of the difference.

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1. Introduction

The fitness line is characterized both by an almost stagnating number of fitness clubs and an annual fluctuation of total membership numbers within the fitness studios. We therefore examine whether there are typical priorities in the drop-out justification and which reasons are used, in a statistically significant way, more or less or not at all. The collected data should help to derive recommendations for action in order to increase the customer satisfaction in fitness companies and to reduce the long-term drop-out rates by an adequate service offering (Zarotis et al. 2017, Zarotis 1999 & Rampf 1999).

In the evaluations and statistical analyses presented here, it is examined to what extent male and female dropouts differ in their evaluations of the fitness studios. Assuming that the sports studio evaluation may have played a role in the quitting decision to a certain extent, the question of gender differences concerning the quitting decision is therefore also indirectly posed.

High drop-out rates in sports programs, both in health-related sport and in the therapeutic field, are no exception. The long-term commitment of sport active people poses a problem. This also applies to fitness training in studios, as about half of the members end their training prematurely (Rampf, 1999).

The question concerning the reasons for dropping out hasn't, so far, been studied in Germany, so the knowledge about it is only incomplete. Problematic therefore is also the indication of average drop-out rates in German fitness studios because they are not recorded or published.

Oldrige (1982) analysed ten sports programs in the context of preventive measures, setting cancellation rates from 13% to 75%. Analyses of another 18 prevention programs showed drop-out rates from 3% to 87%.

In the study by Oldrige (1979), 42% of the dropouts from a rehabilitation program for patients with coronary diseases mentioned "psychosocial reasons" (e.g. lack of interest, problems in the family). 25% of the dropouts mentioned "unavoidable reasons" (e.g. occupational conflicts, change of employment, change of residence), 22% gave medical reasons and 11% other reasons for quitting.

Brehm and Eberhardt (1995) questioned fitness studio members about their reasons for quitting training because they had not renewed their membership when their contract ended. The "lack of fun in the sporting activities" was mentioned as a priority factor for quitting the activity. In addition, "motivation problems" (e.g., laziness), "lack of time" (often due to heavy workload) and "financial reasons" (too expensive membership fees) were mentioned as reasons for quitting. In an open question, the members were asked for a specific reason for quitting. On this occasion criticism about the "studio atmosphere" (too impersonal) was mentioned, as well as "lack of social support" (e.g. no contact with other members, partner has quit the training, etc.) and "high membership costs" (also for additional services like childcare).

Pahmeier (1997) also investigated which factors influence the decision to quit a sports program and found that among 65 respondents each gave an average of 3.6 reasons. The main problems that affected the quitting decision in this case were time management and factors of living and working conditions.

These studies show that quitting a sports program always depends on several factors. The features of quitting a sports activity may be personal and situational characteristics (Rampf, 1999).

It is often possible to identify reasons which ultimately lead to dropping out, but the participation behaviour is influenced by a complex factor structure.

Dishman (1982) several times remarks critically on the often unsystematic approach of many studies and describes them as atheoretical. He criticizes the limited data base and imputes it to the lack of uniform models that could simplify research.

Due to this lack of standardisation of theories and examination methods, the comparability of the studies is severely restricted.

2. Material and Methods

2.1 Survey methodology

A total of 225 people, who had terminated their contract with a fitness studio, were questioned. The survey was conducted as a telephone inquiry about their actual decision.

The advantages of the telephone survey are the low cost per interview, the possibility of responding to queries and the high external validity. Disadvantages are the lower possible data volume caused by the difficulty to access the responder or lack of interest in a telephone survey, and the possible influence of the interviewer (Homburg & Krohmer, 2008).

The study was conducted in a health-oriented fitness centre in Cologne. The fitness facility was opened in 1994 and has a size of 1,100 square metres. At the time of the study, the gym had up to 1.151 memberships. Among them, 59% of the members were women and 41% were men. The gym faces strong competition. There are competitors who pursue a high price policy, one of which is a provider with a wellness area, but also providers with low price policy. The competitors' pricing is between € 15 and € 129 a month.

The study's fitness centre is located at the edge of the forest and about 250 metres from the nearest bus stop. It is also easy to reach by car or by bike or on foot. There is enough parking available. The members are greeted and welcomed personally at check-in and check-out in the reception area. This creates a personal atmosphere.

The fitness studio offers group programs such as gymnastics for the spine and back, for the abdomen, legs and buttocks, body-styling, spinning courses, energy-step courses, Pilates, Yoga, Zumba, Progressive Muscle Relaxation according to Jacobson and rehabilitation sports courses. The group programs are held daily from Monday to Sunday. Furthermore, there is a wide range of strength and endurance equipment, vibration devices, electrical muscle stimulation (EMS) devices and a small space for free

weights. There is a sauna and a solarium, and a small wellness space with shiatsu massage armchairs and water massage. The gym offers chargeable drinks.

The training and group program staff consists mainly of persons with sports science education. The fitness centre is open almost 360 days a year. The opening hours are Monday to Friday from 9 am to 11 pm and on weekends and on holidays from 10 am to 7 pm. Membership fees are graded according to the type of membership (course membership or equipment membership or both), duration of membership (12 or 24 months), and payment method (monthly or advance payment). The monthly fee ranges thus from 30 to 57 Euros. In addition, there is a registration fee of 80 Euros.

The survey was conducted by telephone in July 2016. The respondents are persons who have terminated their membership in the period between 01/07/2015 and 30/06/2016. In the aforementioned period, 305 members departed. Of those 225 persons were found and questioned. 54 people could not be found, probably due to relocation or change of the telephone number. 26 persons did not wish to participate in the survey (Zarotis et al., 2017).

The persons were asked about different aspects of the training possibilities, equipment, support and environment factors of the fitness studio. Each evaluation aspect was queried on a 5-point Likert scale. The scaling ranged from "excellent" (coded with the numerical value 1) to "inadequate" (coded with the numerical value 5). The scaling corresponds to a school note scaling without the grade 6, the intermediate stages are correspondingly with "good", "satisfactory" and "sufficient" verbally anchored.

In this way it is questionable in the strict metrological sense whether the distances between the scale stages can be regarded as equidistant and therefore whether the items have an interval scale level, or whether one would not have to assume an ordinal scale level here.

However, it can be shown that when using Likert scaled rating scales the use of parametric procedures can lead to statistically correct decisions even if the distances between the scale stages are not exactly equidistant.

Such scaling can thus be evaluated as being "sufficiently similar" in practice as an "interval scale", so that mean values and parametric procedures can be used accordingly.

In the case of a person interviewed, all information concerning the evaluation of the studio is missing. Apart from that, in most of the questionnaire items there were no response refusals, so that in 15 of the 19 questionnaires there are valid values even $N = 224$. In the case of four items, there was a further missing value, so that $N = 223$ valid values exist in these items.

The age of the interviewees was recorded in whole years; here, in one case, there was a missing value, so that in $N = 224$ cases; the information about the age is in years. In the data analysis, the sample characteristics are initially depicted in terms of gender distribution, age and duration of membership in the studio.

Subsequently, the mean values of the 19 aspects of the studio evaluation are presented descriptively with respect to the two gender groups.

To ensure the inferential statistic of the differences between the sexes, T-tests are used for independent samples. The model assumptions of the variance homogeneity are tested by Levene tests, and in the case of significant variance differences, the T-test is calculated with corrected degrees of freedom and T-values (Welch-Test).

The conventional significance level of $p < .05$ is applied. When values are lower from the significance threshold, it can be assumed that the gender differences can be generalized beyond the sample to the population and are not mere random effects of this specific sampling.

3. Results

3.1 Sample description

The sample consists of N=164 female respondents and of N=61 male respondents. The age range is between 16 and 74 years – 16 and 74 years for women, as well as between 20 and 74 years for men - with a respondents' mean age of 43.5 years (43.5 women; 42.0 men) and a distribution of 13.0 years (11.4 women; 16.7 men).

Table 1: Sample distribution characteristic values

		Gender		
		Female	Male	Total
Age	Mean value	43,3	44,1	43,5
	Median	43,5	42,0	43,0
	SD	11,4	16,7	13,0
	Quantity	164	60	224
Membership duration (years)	Mean value	4,1	5,4	4,4
	Median	3,0	5,0	3,0
	SD	3,7	4,1	3,8
	Quantity	164	61	225

3.2 Descriptive Statistics

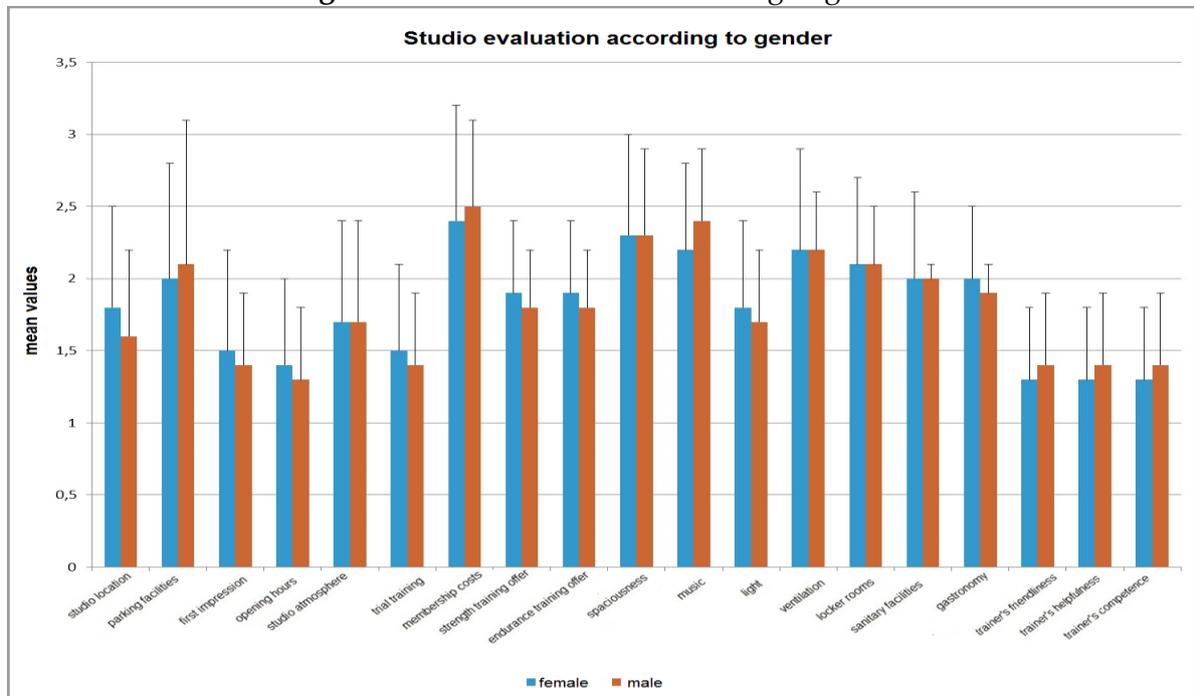
Table 2 shows the mean values, median and standard deviation of the 19 questions for the studio evaluation, both differentiated by gender as well as overall in the sample.

Table 2: Mean values, median and distribution of the quitting reasons

	Gender											
	Female				Male				Total			
	Mean value	Median	SD	Quantity	Mean value	Median	SD	Quantity	Mean value	Median	SD	Quantity
Studio location	1,8	2,0	,7	164	1,6	2,0	,6	60	1,7	2,0	,7	224
Parking facilities	2,0	2,0	,8	164	2,1	2,0	1,0	60	2,0	2,0	,9	224
First impression	1,5	1,0	,7	164	1,4	1,0	,5	59	1,5	1,0	,6	223
Opening hours	1,4	1,0	,6	164	1,3	1,0	,5	60	1,4	1,0	,6	224
Studio atmosphere	1,7	2,0	,7	164	1,7	2,0	,7	60	1,7	2,0	,7	224
Trial training	1,5	1,0	,6	164	1,4	1,0	,5	60	1,5	1,0	,6	224
Membership costs	2,4	2,0	,8	164	2,5	2,0	,6	60	2,5	2,0	,8	224
Strength training offer	1,9	2,0	,5	164	1,8	2,0	,4	60	1,9	2,0	,5	224
Endurance training offer	1,9	2,0	,5	164	1,8	2,0	,4	59	1,9	2,0	,5	223
Spaciousness	2,3	2,0	,7	164	2,3	2,0	,6	60	2,3	2,0	,7	224
Music	2,2	2,0	,6	164	2,4	2,0	,5	60	2,3	2,0	,6	224
Light	1,8	2,0	,6	163	1,7	2,0	,5	60	1,8	2,0	,6	223
Ventilation	2,2	2,0	,7	163	2,2	2,0	,4	60	2,2	2,0	,6	223
Locker rooms	2,1	2,0	,6	164	2,1	2,0	,4	60	2,1	2,0	,6	224
Sanitary facilities	2,0	2,0	,6	164	2,0	2,0	,1	60	2,0	2,0	,5	224
Gastronomy	2,0	2,0	,5	164	1,9	2,0	,2	60	2,0	2,0	,4	224
Trainer's friendliness	1,3	1,0	,5	164	1,4	1,0	,5	60	1,3	1,0	,5	224
Trainer's helpfulness	1,3	1,0	,5	164	1,4	1,0	,5	60	1,3	1,0	,5	224
Trainer's competence	1,3	1,0	,5	164	1,4	1,0	,5	60	1,3	1,0	,5	224

Figure 1, the mean values and distributions of the studio evaluations, differentiated according to gender, are depicted as grouped bar graphs.

Figure 1: Studio evaluation according to gender



3.3 Significance test of the differences between genders in studio evaluation

Table 3 shows the results of the significance tests of the differences in mean values between the genders. The difference of the mean values between the genders, the significance and the T-values, as well as the degrees of freedom (df) are reported, thus the test quantities.

Table 3: Mean value differences, significance and test quantities of the T tests

Independent samples test				
	T-Test for the mean value equality			
	t	df	Sig.	Mean value difference
Studio location	2,113	222	,036	,218
Parking facilities	-,949	222	,344	-,123
First impression	,479	134,908	,633 ⁱⁱ	,040
Opening hours	1,232	120,906	,220 ¹⁴	,098
Studio atmosphere	-,286	222	,776	-,031
Trial training	1,440	123,703	,152 ¹⁴	,114
Membership costs	-,748	140,337	,456 ¹⁴	-,078
Strength training offer	1,171	222	,243	,087
Endurance training offer	1,063	221	,289	,083
Spaciousness	-,193	222	,847	-,020
Music	-1,954	222	,052	-,176
Light	1,359	221	,176	,118

Ventilation	,881	168,755	,379 ¹⁴	,066
Locker rooms	,291	173,805	,771 ¹⁴	,020
Sanitary facilities	1,176	197,167	,241 ¹⁴	,059
Gastronomy	1,262	222	,208	,080
Trainer's friendliness	-1,324	100,629	,188 ¹⁴	-,097
Trainer's helpfulness	-1,065	222	,288	-,078
Trainer's competence	-1,198	98,432	,234 ¹⁴	-,086

4. Discussion

In general, the mean values of the evaluations vary between 1.3 and 2.5, i.e. all are consistently in the positive evaluation range of the scale. Most items are a little below or slightly above the value of 2, which is "good".

Clearly, the best scores are found in the last three items, in which the studio trainers are evaluated. Also, the items opening hours, trial training and first impression are in the mean value closer to the evaluation level "very good" than at the evaluation level "good." The - relatively speaking - worst ratings appear at the features of membership costs, spaciousness, music and ventilation.

In the research made by Rampf (1999) it becomes also evident that 19 % of the respondent group stated "too high cost for membership" as the main single reason for quitting the sports program. However, the real amount of cost is not the actual problem but rather the negative cost/benefit balance.

There is also evidence in other studies that financial aspects of dropout play an important role. In the survey by Breuer et al. (2013), even 45.1% of the 149 respondents cite as a reason "membership costs", which is why they discontinue fitness training.

Financial aspects are also mentioned in a study by the IHRSA (2012) as main arguments for the termination of membership in a fitness club. 52.2% of the 1,000 respondents surveyed said they were no longer able to afford their membership or rated them as expensive. Therefore, in future work, the collection of the income should be considered in order to assess its impact on the dropout.

It is important that the customer feels comfortable in the training area and in all other parts of the fitness-club. Comfortable feelings are for example guaranteed by not crowding the training area with training equipment. Sufficient space for movement during training, facilitates a positive training experience. Background music also creates a positive atmosphere. Sufficient ventilation is of special significance in that regard (Rampf 1999).

A concentration of negative aspects in terms of training will over time lead to an abandonment of the activity. Overall, these results confirm the assumption that drop-outs are more critical towards general conditions and thereby support the results of other studies released on this topic (Pahmeier 1994 & Brehm /Eberhardt 1995).

With regard to gender differences, there are only very small differences in mean values of 1/10 of a scale interval, or even less, in practically all aspects of the study evaluation. The direction of gender differences is uniform. However, in the case of the

small extent of the differences, a detailed consideration of the difference direction is also not appropriate.

Only in the evaluation of the studio location is the gender difference slightly larger; the male respondents rate this aspect about 1/4 of a scale interval better than female respondents. This evaluation aspect is also the only one in which the gender difference can be secured against chance at the 5% level with $p = .036$ ($t: 2.113$; $df: 222$). In all other 18 aspects, the (minor) gender differences cannot be secured against chance and could thus be purely random variances of the concrete sampling.

5. Conclusions

On the whole, the various aspects of the studio offer and its surroundings were largely rated as "good". The respondents particularly expressed their appreciation for the coaches (friendliness, helpfulness, competence), followed by opening hours, trial training and the first impression. The membership costs and individual aspects such as space, music and ventilation are evaluated more critically, if not really badly.

In practice, there were no significant differences between the genders in the studio evaluation. Purely descriptive, both subgroups are very close to each other in their mean values in all 19 aspects of the studio evaluation.

The most significant difference lies in the evaluation of the studio location, which is also significant at the 5% level, but still remains small at the absolute level of the difference.

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