

## ESCALA DE AVALIAÇÃO DA QUALIDADE DOS SERVIÇOS PRESTADOS POR ACADEMIAS DE GINÁSTICA (QUASPA)

### RATING SCALE FOR QUALITY OF SERVICES PROVIDED BY GYMS (QUASPG)

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#### RESUMO

Com o intuito de identificar fatores que interferem na escolha, permanência e desistência dos clientes de academias de ginástica, o objetivo do estudo foi de construir e validar um instrumento de avaliação da qualidade dos serviços prestados por academias de ginástica. O estudo apresentou quatro etapas (identificação das questões, avaliação da clareza, importância e relevância da matriz de análise, análise da fidedignidade das questões do instrumento e análise das questões frente ao constructo do instrumento). 51 critérios foram identificados e considerados importantes para a qualidade dos serviços. A criação da Matriz Analítica apresentou as dimensões: estrutura, gestão, marketing e acessibilidade. Na avaliação das questões e da matriz foram eliminadas 19 questões. A avaliação da fidedignidade eliminou uma questão e a dimensão acessibilidade. O modelo da Análise Fatorial Confirmatória evidenciou ajustamento adequado após a exclusão de oito questões e a realização de seis correlações. A Fiabilidade Compósita, a Variância Extraída Média, a Validade Discriminante e o alfa de Cronbach apresentaram valores aceitáveis. Assim, conclui-se que o instrumento denominado “Escala de avaliação da qualidade dos serviços prestados por academias de ginástica (QUASPA)” possui propriedades psicométricas satisfatórias, sendo composto por 21 questões distribuídas em três dimensões, as quais são: Ambiente, Gestão e Marketing.

**Palavras-chave:** Academias de ginástica. Gestão administrativa. Desempenho.

#### ABSTRACT

In order to identify factors that interfere with gym clients' choice, permanence and withdrawal, the aim of this study was to build and validate an instrument to assess the quality of services provided by gyms. The study has four stages (question identification, evaluation of the analysis matrix clarity, importance and relevance, reliability analysis on instrument questions, and question analysis as to the instrument construct). A total of 51 criteria were identified and deemed important for service quality. The Analysis Matrix was composed of the following dimensions: structure, management, marketing and accessibility. The question and matrix evaluation ruled out 19 questions. The reliability evaluation excluded one question and the accessibility dimension. The Confirmatory Factor Analysis model evidenced adequate goodness of fit after the exclusion of eight questions and performance of six correlations. Composite Reliability, Average Variance Extracted, Discriminant Validity, and Cronbach's alpha showed acceptable values. Thus, it is concluded that the instrument called “Rating Scale for Quality of Services Provided by Gyms” (QUASPG) has satisfactory psychometric properties, being composed of 21 questions distributed into three dimensions, namely: Environment, Management and Marketing.

**Keywords:** Gyms. Administrative Management. Performance.

#### Introduction

Gyms are inserted in a market where interventions are determined by trends, which lead them to continuously seek innovations. Fitness centers that do not adjust to the market have allegedly loyal clients who actually signed up only for convenience, for living nearby and for the professionals that work there, and not necessarily for the quality of the services provided<sup>1</sup>.

A way to follow market trends and have loyal customers is to gather information on the quality of the service provided by listening to customers who have a great knowledge about the company. Information can be leveraged to enhance products and services so that users' requirements are met. In addition, it can also help to discover new services, which makes companies grow their business<sup>2</sup>.

For companies to meet their customers' expectations, the former's missions and goals need to be put into practice, and actions are fundamental for quality strategic planning<sup>3</sup>. From

this perspective, Campos<sup>4</sup> presents quality as a product or service that meets a customer's needs in a safe, reliable, accessible and timely manner.

In order to assist gym clients, scales to assess the quality of services provided by fitness centers were developed in several countries, including Turkey<sup>5</sup>, Korea<sup>6</sup>, Spain<sup>7-11</sup>, South Africa<sup>12</sup>, Canada<sup>13</sup> and Greece<sup>14</sup>. It is worth noting that the instruments were designed considering the culture of each region, which increases the specificity of results found by these instruments.

Concerns about the quality of services provided by gyms is reflected on high turnover rates<sup>15</sup>. In addition, managers also worry about withdrawal from physical exercise, which may be related to poor service provision involving inadequate customer service, insufficient workout equipment and failure to promote socialization among gym users.

Thus, considering reasons for gym clients' turnover or withdrawal, the objective of this study was to build and validate an instrument to evaluate the quality of services provided by fitness centers for the Brazilian reality.

## Methods

This is a psychometric research composed of four stages. It has as main objectives to describe characteristics and measure individual or group variables. Thus, using a psychometric instrument as research method presents its advantages, such as sourcing of information on a large group of people in a short period of time, coverage of a large geographical area, and uniformity. The same instrument is applied to all subjects and ensures anonymity, which can make interviewees more comfortable with their answers, providing more coherent information and facilitating data analysis<sup>17</sup>.

The investigation was reviewed and approved by the Ethics Committee on Research Involving Humans of the State University of Londrina (Legal Opinion CEP/UEL: 555.415). All participants involved in the research phases signed a free and informed consent form, which briefly presented research objectives, methods and purposes.

### *1<sup>st</sup> Stage: Identifying Items and Designing the Analysis Matrix*

For the first stage, 90 clients and 30 gym managers from the city of Londrina (Paraná, Brazil) were invited to answer an open-ended questionnaire that aimed to identify aspects regarded as important in gym service provision.

Data were tabulated and categorized by means of content analysis<sup>18</sup> to establish criteria considered as relevant for gym service provision. This analysis allowed building the items that were part of the subsequent phases of the study.

To build the instrument matrix analysis, a content analysis on the items elaborated was performed<sup>17</sup>. The preliminary building of the instrument dimensions and indicators was done by the researchers of this study. It is worth noting that in this phase, three management professionals were consulted as well; they worked in business consulting and helped confirm the building of the matrix analysis items and dimensions. The analysis matrix items and dimensions were categorized after data collection

### *2<sup>nd</sup> Stage: Assessing the Clarity, Importance and Relevance of the Instrument Items and Analysis Matrix*

This stage sought to eliminate possible inadequacies identified in the questions and the analysis matrix during the previous study stage. Thus, ten evaluators received a questionnaire, with four being Physical Education instructors working as gym coordinators, three

administration undergraduate course professors, and three Physical Education professors with academic and/or professional knowledge in administration.

The instrument sent to the experts sought to evaluate language clarity and question importance and relevance. The evaluators should answer with the aid of a 0-10 liker scale, considering that with 0-7 points the question was discarded, and with 8-10 points the item was deemed valid<sup>19</sup>. Moreover, the analysis matrix built in the first study phase was verified by the experts, who analyzed the association between question and dimension<sup>19,20</sup>. For the question to reach an acceptable index, the item should have an agreement of 70% among the evaluators<sup>21</sup>.

Therefore, for the questions to be accepted to compose the third study stage, the items should reach a minimum mean of eight points for clarity, importance and theoretical relevance, and a minimum of 70% of agreement on the analysis matrix among the evaluators.

### *3<sup>rd</sup> Stage: Assessing Instrument Reliability*

This stage sought to assess the temporal stability of the scores of the instrument questions and dimensions that met the criteria established in the second study stage. To do so, the instrument was applied to 76 gym clients in Londrina (Paraná) on two occasions, with minimal interval of seven days, and maximum of 14 days between the first and the second applications. During both applications, the respondents were requested to identify themselves so that they could be contacted for questionnaire application in the second moment of this stage. For all instrument statements the participants should report their concept with the aid of a 5-point Likert scale, which represented the following concepts: 1 – Terrible; 2 – Bad; 3 – Regular; 4 – Good; 5 – Excellent.

For this stage data analysis, the intraclass correlation coefficient (ICC) was adopted to analyze instrument reliability. For the questions and dimensions to be considered acceptable, ICC indexes should reach a score equal to or higher than 0.6<sup>22</sup>.

### *4<sup>th</sup> Stage: Construct Analysis*

In this stage, Londrina's gym clients answered a questionnaire covering the sample sociodemographic aspects and the questions that reached acceptable indexes in the instrument reliability evaluation. For each instrument statement, the clients should use the Likert scale employed in the study previous stage.

Construct analysis used the instrument confirmatory factor analysis, which intends to confirm pre-established structural patterns. This was performed considering that, in this stage, there was previous information on the factor structure<sup>23</sup>, that is, the opinion of the experts investigated in the second stage, who qualitatively described the corresponding evaluation between items and dimensions.

The statistical analysis checked item normality, considering as acceptable those actimetry (sk) and kurtosis (ku) values inferior to 2 and 7, respectively. The existence of outliers was assessed through the Mahalanobis squared distance ( $D^2$ )<sup>23</sup>. In addition, the factor weights of the questions were assessed, and  $\lambda \geq 0.4$  values were excluded<sup>24</sup>.

Then, structural equation analysis was conducted; for goodness of fit evaluation, the following tests were performed: Chi-Square goodness of fit ( $X^2$ ), and the lower the value the better the goodness of fit; Chi-Square on degrees of freedom ( $X^2/g.1$ ), considering as acceptable values those inferior to 5; Goodness-of-Fit Index (GFI) and Comparative Fit Index (CFI), whose values should be higher than 0.9; Penalty of Comparative Fit Index (PCFI) and Penalty of Goodness-of-Fit Index (PGFI), considering as ideal goodness of fit all values above 0.6; and finally, Root Mean Square Error of Approximation (RMSEA), whose values

should be inferior to 0.08<sup>23</sup>. Modification indexes were checked so that due adjustments could be made to the first- and second-order models.

After adjustments to goodness-of-fit values, initial degrees of freedom values were compared to final ones in order to assess whether the final model goodness of fit was better than that of the initial model, considering that, for improvement, the value obtained in  $X^2_{0.95}$  should be lower than the  $X^2_{dif}$  value. In addition, composite reliability (CR) was calculated to assess instrument reliability, considering that values equal to or higher than 0.7 present adequate reliability<sup>23</sup>

Mean Extracted Variance (MEV) was calculated for model convergent validity, in which values equal to or higher than 0.5 indicate acceptable convergent validity<sup>24</sup>. Discriminant Validity (DV) was calculated in order to assess whether the items that integrate a factor does not correlate with other factors. It is worth stressing that DV is confirmed when the MEV of the factors are higher than or equal to the correlation square between these factors ( $r^2$ )<sup>24</sup>.

Finally, to evaluate the scale internal consistency, Cronbach's alpha coefficient was employed, which assesses the inter-relation between items in the same domain. Values above 0.7 are deemed acceptable, and values higher than 0.9 are deemed excellent<sup>25</sup>.

## Results and Discussion

In the first stage of the study, 49 items were identified and distributed into three dimensions, namely: Environment (20 questions), Management (18 questions) and Marketing (11 questions). The Environment dimension was also identified in instruments developed for the Turkish, Korean and South African realities<sup>5,6,12</sup>. However, even without presenting direct correlation, Management and Marketing dimensions were identified in other studies by means of items linked to dimensions that covered broad themes<sup>5-14</sup>. The dimensions found in other studies, regardless of having different nomenclature, show that the items that compose them correlate with those identified in this study.

The Environment dimension presented questions associated with stimulus, structure and cleanliness; clients consider as rating criteria all aspects that characterize the place, such as organization and distribution of objects, furniture and equipment, cleanliness of workout spaces<sup>26</sup>, in addition to different physical elements that call their attention<sup>26-28</sup>.

The Management dimension was associated with matters of planning, service, management and qualification, which are part of an integrated project for achieving organizational objectives<sup>29</sup>. These objectives consider a deep analysis on the company internal and external environments<sup>30,31</sup>, the direct relationship between company and client<sup>32</sup>, decision making, organization, leadership and business control<sup>33</sup>, besides knowledge and professional experience for the role<sup>34</sup>.

The Marketing dimension presented items reporting innovation, communication and strategy, which are connected to the establishment of profitable relationships with clients<sup>31,35</sup>, development of products and services<sup>33</sup>, presentation of feedback on the clients' matters of interest, and use of physical, financial and human resources to maximize market opportunities<sup>32</sup>.

Analyzing the answers provided by the consulted evaluators (Table 1), it was possible to identify that only 30 questions reached acceptable levels as to the evaluation of the agreement on the existing relationship between the analysis matrix questions and dimensions ( $\geq 70\%$ )<sup>21</sup>, and as to item clarity, importance and theoretical relevance ( $\geq 8$ )<sup>21</sup>.

**Table 1.** Items with acceptable levels of clarity, importance and relevance as to the analysis matrix questions and agreement, according to the evaluators

Items	Clarity	Importance	Relevance	Agreement
Pleasant music for workout	9.5	8	8	Environment
Gym employees' ethical conduct	9.4	9.8	9.6	Management
Workout assistance from the gym's Physical Education professionals	9.7	9.8	9.8	Management
Provision of a physical structure that helps clients to organize their personal belongings, which can be: personal hygiene material, clothes, shoes, bags, etc.	9.7	9.4	8.4	Environment
Good gym management	9.2	9.5	9.3	Management
Workout in air-conditioned or ventilated spaces	10	9.9	9.7	Environment
Good service from the reception staff	9.7	9.7	9.4	Management
Teamwork among gym employees	9.1	9.2	9	Management
Qualified professionals for customer service	8.8	9	9	Management
Well-defined gym management structure	8.8	8.7	8.5	Management
Gym equipment conservation/maintenance	9.7	9.5	9.2	Environment
Equipment organization in the gym space/environment	9.7	8.9	8.8	Environment
Physical Education professionals willing/excited to guide clients during workout	9.2	9.3	9.1	Management
Marketing strategies that encourage a good relationship between client and gym	8.7	9.2	9.6	Marketing
Adequate space for specific physical activities (gymnastics, spinning, stretching...)	9.9	9.5	9.6	Environment
Balance between number of people and physical space(s) provided by the gym for workout	9.4	9.2	9.2	Environment
Restroom cleanliness	9.6	9.8	9.8	Environment
Raise of clients' awareness on the benefits of exercising for their health and wellbeing	9.7	9	8.9	Marketing
Cleanliness of all gym physical spaces	10	9.7	9.7	Environment
Concern about clients when they do not show up for a considerable period of time	9.4	9.4	9.3	Marketing
Workout guidance must be exclusively provided by professionals with a degree in Physical Education	9.9	8.7	9	Management
Conduction of internal research with clients to evaluate gym performance	9.8	9.7	9.5	Marketing
Policies for good relationship between the gym and autonomous professionals (personal trainers)	9.2	9.1	8.9	Management
Fulfillment of services addressed by gym marketing strategies	9.6	9.3	9.2	Marketing
Work of experienced professionals with great knowledge about the physical activities they provide guidance for	9.7	9.4	9.3	Management
Provision of quality workout equipment	9.9	9.3	9.3	Environment
Adequate number of Physical Education professionals, considering the average number of clients served.	9.9	9.6	9.5	Management
Conduct norms defined for use of gym equipment/spaces	9	8.8	8.1	Management
Provision of motivating elements such as sound and TVs	9.7	8.7	9	Environment
Promptness from the gym in providing services	9.1	9.3	9.1	Management

**Source:** The authors

The instrument reliability evaluation revealed that only "Conduct norms defined for use of gym equipment/spaces" did not show an acceptable temporal stability index (0.56 ICC),

according to Vallerand<sup>22</sup>. The other items evidenced adequate intraclass correlation coefficient values, which ranged from 0.64 to 0.89.

Thus, the evaluation of the instrument reliability as to its dimensions and overall context (Table 2) excluded the question that did not reach an acceptable reliability index in this study stage. Analyses on instrument dimensions and overall assessment evidenced acceptable reproducibility indexes both in the first and second instrument applications (ICC >0.6)<sup>22</sup>.

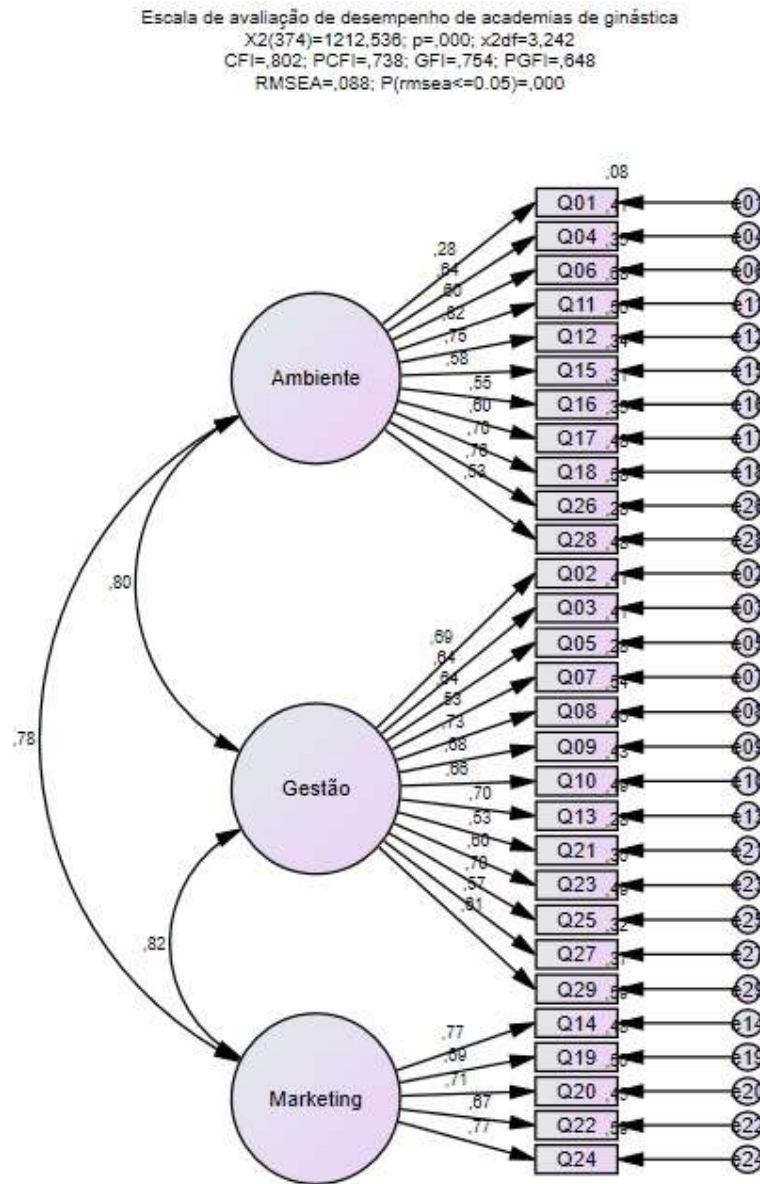
**Table 2.** Intraclass Correlation Index of instrument dimensions and overall evaluation

<b>Moment</b>	<b>Environment</b>	<b>Management</b>	<b>Marketing</b>	<b>Overall</b>
<b>First</b>	0.83 (0.77-0.88)	0.90 (0.86-0.93)	0.75 (0.64-0.83)	0.94 (0.92-0.96)
<b>Second</b>	0.87 (0.82-0.91)	0.93 (0.90-0.95)	0.81 (0.74-0.87)	0.96 (0.94-0.97)

Source: The authors

Finally, the confirmatory factor analysis was run with 29 questions distributed into the following dimensions: Environment (11 items), Management (13 items) and Marketing (5 items). The question normality analysis showed asymmetry values ranging from -1.402 to -0.153, and kurtosis values from -1.145 to 1.853, presenting normal distribution. Besides, after the normality analysis conducted through the Mahalanobis distance, the option was for keeping all individuals, assuming the normal distribution of the subjects' data<sup>23</sup>.

The confirmatory factor analysis initial model (Figure 1) presented inadequate adjustment quality in CFI (0.802), GFI (0.754) and RMSEA (0.088) indexes. However,  $\chi^2/df$  (3.242), PCFI (0.738) and PGFI (0.645) indexes showed acceptable values in this construct evaluation phase<sup>23</sup>.

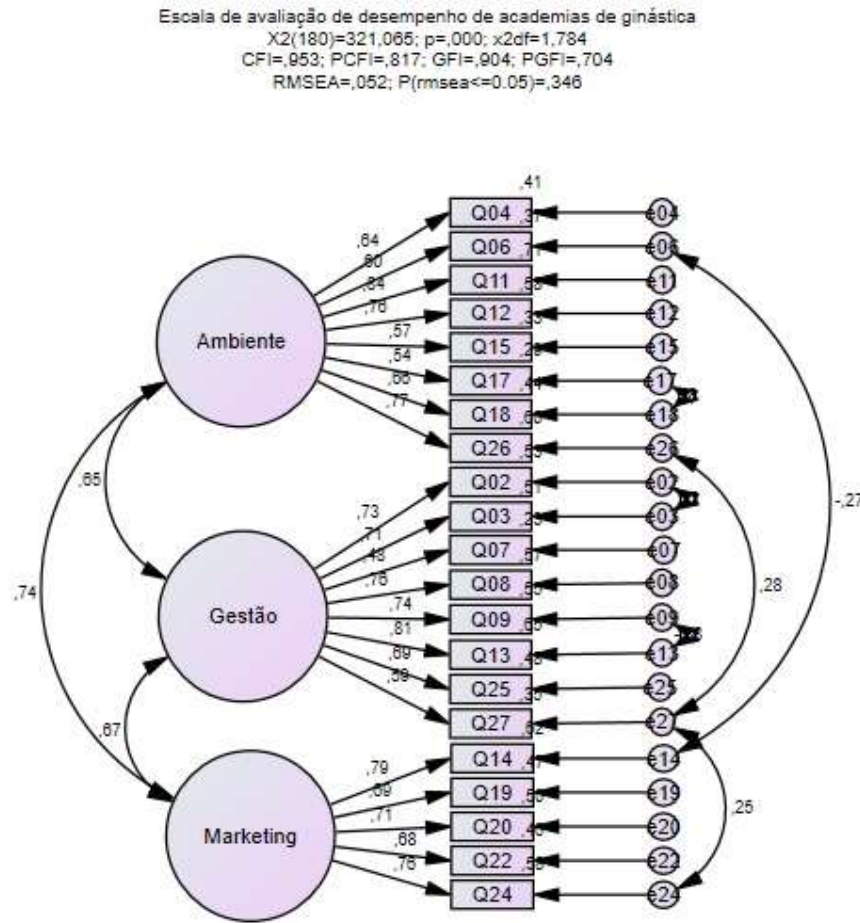


**Figure 1.** First-order Confirmatory Factor Analysis initial phase of the gym performance evaluation construct

Source: The authors

Before starting the adjustment process based on the modification index, question Q01, referring to “Pleasant music for workout” was excluded from the CFA, since the correlation value presented was 0.28, which is considered as insignificant according to Hair et al.<sup>24</sup>. Moreover, in order to reach an acceptable goodness of fit in the first-order analysis, it was necessary to eliminate eight questions (Q23 “Policies for a good relationship between the gym and autonomous professionals (personal trainers)”, Q29 “Promptness from the gym in providing services”, Q10 “Well-defined gym administrative/hierarchical structure”, Q5 “Good gym management”, Q21 “Workout guidance must be provided exclusively by professionals with a degree in Physical Education”, Q16 “Balance between the number of

people and physical space(s) provided by the gym for workout”, and Q28 “Provision of motivating elements such as sound and TVs”), as well as to make six correlations in the factor analysis (Figure 2).



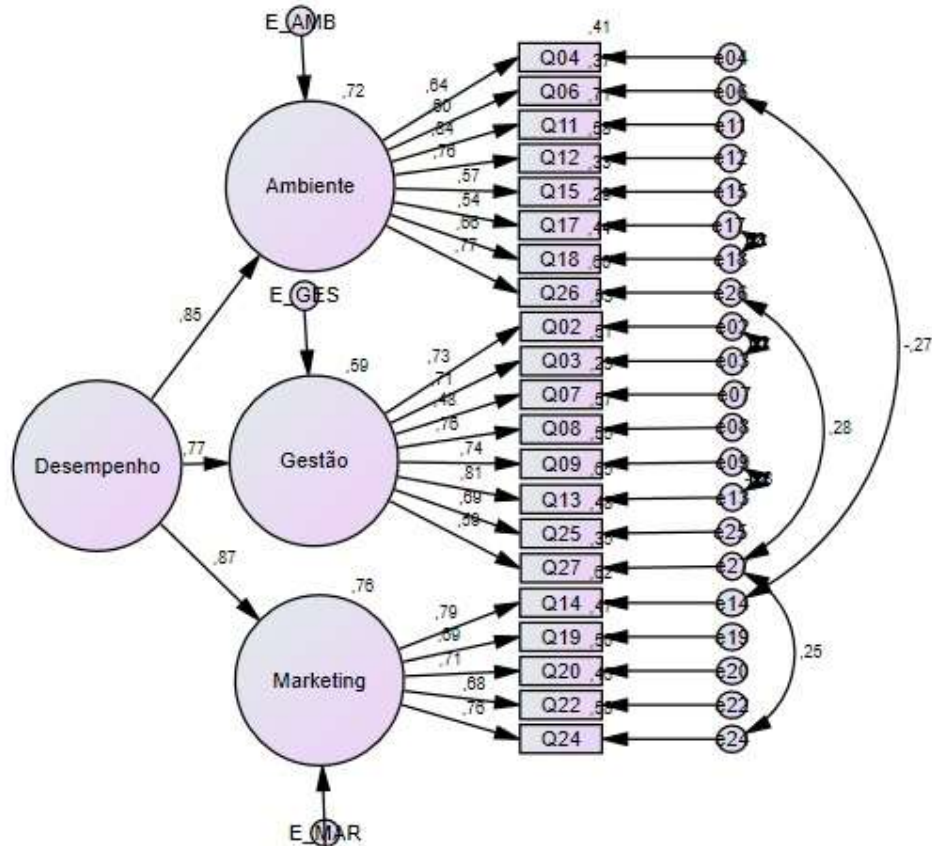
**Figure 2.** Final phase of the first-order Confirmatory Factor Analysis of the gym performance evaluation construct.

Source: The authors

In order to assess the correlation of Environment, Management and Marketing dimensions with Overall Evaluation, the second-order confirmatory factor analysis was adjusted (Figure 3). The second-order model presented the same results as the first-order CFA final model, which were considered as acceptable (Table 3).



Escala de avaliação de desempenho de academias de ginástica  
 $X^2(180)=321,065$ ;  $p=,000$ ;  $x2df=1,784$   
 CFI=,953; PCFI=,817; GFI=,904; PGFI=,704  
 RMSEA=,052;  $P(rmsea<=0,05)=,346$



**Figure 3.** Second-order Confirmatory Factor Analysis of the evaluation on Quality of Services Provided by Gyms construct

Source: The authors

**Table 3.** Goodness of fit values of the first- and second-order Confirmatory Factor Analysis

Analyses	X <sup>2</sup> <better	X <sup>2</sup> /g.l. <5	CFI >0.9	PCFI >0.6	GFI >0.9	PGFI >0.6	RMSEA <0.08
1 <sup>st</sup> Order - Initial	1212.536	3.242	0.802	0.738	0.754	0.645	0.088
1 <sup>st</sup> Order - Fit	321.065	1.784	0.953	0.817	0.904	0.704	0.052
2 <sup>nd</sup> Order	321.065	1.784	0.953	0.817	0.904	0.704	0.052

Note: X<sup>2</sup> (chi-square); X<sup>2</sup>/g.l. (Chi-Square on degrees of freedom); GFI (Goodness-of-Fit Index); CFI (Comparative Fit Index); PCFI (Penalty of Comparative Fit Index); PGFI (Penalty of Goodness-of-Fit Index); RMSEA (Root Mean Square Error of Approximation).

Source: The authors

The model fit analysis by means of Chi-Square difference tests (233.994) showed a X<sup>2</sup><sub>diff</sub> (891.471) value higher than X<sup>2</sup><sub>0,95</sub>(194), which evidenced that the final model adjusted better to the correlational structure observed among the sample items compared to the initial one.

The composite reliability (CR) and average variance extracted (AVE) analysis presented acceptable indexes in relation to those established by the literature for Environment (CR=0.918; AVE=0.588), Management (CR=0.925; AVE=0.610) and Marketing (CR=0.905;

AVE=0.656) (MARÔCO, 2010). With the AVE values of dimensions, it was possible to calculate discriminant validity (DV). The results allow stating that all dimensions presented discriminant validity because the DV scores showed lower values compared to AVE indexes<sup>23</sup> (Table 4).

**Table 4.** Discriminant Validity (DV) evaluation on the dimensions of the rating scale for quality of services provided by gyms

Dimensions	DV	Result
Environment – Management	0.423	Discriminant for both dimensions
Environment – Marketing	0.548	Discriminant for both dimensions
Management – Marketing	0.449	Discriminant for both dimensions

Source: The authors

Subsequently, the internal consistency of the instrument overall evaluation and dimensions was analyzed. As for the construct overall analysis, Cornbrash's alpha stood at 0.927, which is rated as excellent. Considering the instrument detailed evaluation, there were internal consistencies classified as good in Environment (0.871), Management (0.872) and Marketing (0.837) dimensions<sup>25</sup>.

Concerning the values obtained in the instrument construct validation process, it was possible to confirm the three dimensions evidenced in the content analysis in the matrix identification. However, some items corresponding to stimuli (Environment dimension), planning, administration (Management dimension) and innovation (Marketing dimension) were suppressed throughout the analyses. In fact, the indicators seemed to be linked more to the criteria approached by managers than to gym users.

Thus, the construct correlated with the dimensions as follows: Environment, based on structure and cleanliness indicators; Management, related to service and qualification indicators; and Marketing, represented by communication and strategy indicators. It is worth nothing that the matters confirmed through confirmatory factor analysis were also mentioned in international investigations that aimed to build rating scales for services provided by gyms<sup>5-14</sup>.

## Conclusions

These results allow concluding that the Rating Scale for Quality of Services Provided by Gyms (QUASPG) presented acceptable psychometric values. The instrument was composed of 21 questions distributed into Environment (8 items), Management (8 items) and Marketing (5 items) dimensions.

After the many stages for building the instrument, it was possible to observe that the items about client stimuli, as well as gym planning, administration and innovation, were excluded during the study phases. Such aspects may be related to the users' personal options and to related factors that are of gym managers' interest specifically.

Thus, the analysis matrix final model presented three dimensions, namely Environment, Management and Marketing, in addition to six indicators, with them being Structure, Cleanliness, Service, Qualification, Communication and Strategy, comprehending all criteria considered important for the quality of the services provided. Therefore, there is a concern about workout environment, how the gym is managed, and interpersonal relationship between the gym and its clients. Moreover, other relevant aspects include organization and distribution of objects, furniture, spaces, equipment, space cleanliness, service, professionals' knowledge and experience, provision of information to clients, and development of good relationships with those involved with the gym.

The instrument seeks to assess the quality of services provided by gyms, considering the services and products provided by these companies in the current market. Thus, it is evident that constant market changes, in addition to regional characteristics, can change users' perceptions and feelings about the services provided by gyms. Hence the importance of developing exploratory studies in order to enhance the instrument model proposed.

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## APPENDIX

### **Analysis suggestion concerning the Rating Scale for Quality of Services Provided by Gyms (QUASPG)**

The “**Rating Scale for Quality of Services Provided by Gyms (QUASPG)**” is composed of 21 items distributed into three dimensions, namely:

- **Environment:** Quality is related to the following indicators: *structure*, which is associated with the organization and distribution of objects and furniture within the gym space (Questions: 3, 4, 8, 9, 12, 20); and *cleanliness* of spaces that gym users have access to (Questions: 13, 14).
- **Management:** Quality is related to the following indicators: *service* provided to clients by the company, which forms a bond between company and client and should be considered in all gym departments, in accordance with conduct norms and ethical matters (Questions: 1, 2, 5, 6, 21); *qualification*, which refers to knowledge and experience required for gym professionals’ roles (Questions: 7, 10, 19).
- **Marketing:** Quality is related to the following indicators: *communication*, which is action, effect or means of information for clients, as well as feedback on the clients’ topics of interest (Questions: 15, 16, 17); *strategy*, concerning usage of physical, financial and human resources to maximize market opportunities, which includes the organization’s competition plan for success, with the development of good relations between those inserted in the gym environment (Questions: 11, 18).

Each QUASPG question should be answered with the aid of a 1-5 Likert scale; the client should attribute a value to each statement listed on the instrument. The values describe the following concepts: 1 – Terrible; 2 – Bad; 3 – Regular; 4 – Good; 5 – Excellent.

### Rating Scale for Quality of Services Provided by Gyms (QUASPG)

Carefully read each one of the statements and check the number that best represents how you evaluate the quality of the services provided by the gym

**Answer Scale:** 1 – Terrible; 2 – Bad; 3 – Regular; 4 – Good; 5 – Excellent

Questions	Reposts				
1. Gym employees' ethical conduct.	1	2	3	4	5
2. Workout assistance from the gym's Physical Education professionals.	1	2	3	4	5
3. Provision of a physical structure that helps clients to organize their personal belongings, which can be: personal hygiene material, clothes, shoes, bags, etc.	1	2	3	4	5
4. Workout in air-conditioned or ventilated spaces.	1	2	3	4	5
5. Good service from the reception staff.	1	2	3	4	5
6. Teamwork among gym employees.	1	2	3	4	5
7. Qualified professionals for customer service.	1	2	3	4	5
8. Gym equipment conservation/maintenance.	1	2	3	4	5
9. Equipment organization within the gym space/environment.	1	2	3	4	5
10. Physical Education professionals willing/excited to guide clients during workout.	1	2	3	4	5
11. Marketing strategies that encourage a good relationship between client and gym.	1	2	3	4	5
12. Adequate space for specific physical activities (gymnastics, spinning, stretching...).	1	2	3	4	5
13. Restroom cleanliness.	1	2	3	4	5
14. Cleanliness of all gym physical spaces	1	2	3	4	5
15. Raise of the clients' awareness on the benefits of exercising for their health and wellbeing.	1	2	3	4	5
16. Concern about clients when they do not show up for a considerable period of time.	1	2	3	4	5
17. Conduction of internal research with clients to evaluate gym performance.	1	2	3	4	5
18. Fulfillment of services addressed by gym marketing strategies.	1	2	3	4	5
19. Work of experienced professionals with great knowledge about the physical activities they provide guidance for.	1	2	3	4	5
20. Provision of quality workout equipment.	1	2	3	4	5
21. Adequate number of Physical Education professionals, considering the average number of clients served.	1	2	3	4	5

To calculate the scores of the scale dimensions:

- First: Sum all values of the questions referring to the dimension;
- Second: Divide the first step sum value by the number of questions of the evaluated dimension.

To calculate the scale overall evaluation score:

- First: Sum the scores of the dimensions that compose the instrument;
- Second: Divide the score sum value by the number of dimensions in the instrument.

The classification of the dimension and overall assessment scores of the Rating Scale for Services Provided by Gyms can be as follows:

- Terrible: Score mean value between 1.00 and 1.50
- Bad: Score mean value between 1.51 and 2.50
- Regular: Score mean value between 2.51 and 3.49
- Good: Score mean value between 3.50 and 4.49
- Excellent: Score mean value between 4.50 and 5.00

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Received on Dec, 20, 2017.

Reviewed on Mar, 23, 2018.

Accepted on May, 05, 2018.

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