

## Validation of the public management model of the quality of life in Cuba

### Validación del modelo de gestión pública de la calidad de vida en Cuba

### Validação do modelo de gestão pública para a qualidade de vida em Cuba

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#### ABSTRACT

Quality of life is the result of the constant interaction of objective and subjective factors. It is a subject of study of several disciplines, hence its multidimensional and interacting character, where socioeconomic, cultural, psychological, demographic and other aspects are involved, which allow to affirm that it is a construct that is in constant movement. That is why the design and implementation of public policies are focused on the continuous improvement of the quality of life of the population as an end to be achieved. In this sense, the objective of this research is to validate a model for the public management of the quality of life in Cuba, adjusted to the local reality using the Iadov

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method, which allows estimating the level of satisfaction of those involved in its application. This method constitutes an indirect way for the study, it is based on the relations that are established between three closed questions that are inserted in a questionnaire, the survey that is applied and which relation the subject does not know. These three questions are related through what is called the "Iadov's Logical Table". The criteria obtained from the experts ratify the effectiveness of the model of public management of the quality of life, on a local scale in Cuba.

**Keywords:** quality of life; public management; model

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## RESUMEN

La calidad de vida es el resultado de la interacción constante de factores objetivos y subjetivos. Es motivo de estudio de varias disciplinas, de ahí su carácter multidimensional e interactoral, donde se involucran aspectos socioeconómicos, culturales, psicológicos, demográficos entre otros, que permiten afirmar que es un constructo que se encuentra en constante movimiento. Es por ello que el diseño e implementación de políticas públicas están enfocados a la mejora continua de la calidad de vida de la población como fin a alcanzar. En este sentido, el objetivo de esta investigación es validar un modelo para la gestión pública de la calidad de vida en Cuba, atemperado a la realidad local utilizando el método Iadov, que permita estimar el nivel de satisfacción de los implicados en la aplicación de este. Este método constituye una vía indirecta para el estudio, se fundamenta en las relaciones que se establecen entre tres preguntas cerradas que se intercalan dentro de un cuestionario, la encuesta que se aplica y cuya relación el sujeto desconoce. Estas tres preguntas se relacionan a través de lo que se denomina el "Cuadro Lógico de Iadov". Los criterios obtenidos de los expertos ratifican la efectividad del modelo de gestión pública de la calidad de vida, a escala local en Cuba.

**Palabras clave:** calidad de vida; gestión pública; modelo

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## RESUMO

A qualidade de vida é o resultado da interação constante de fatores objetivos e subjetivos. É objeto de estudo por diversas disciplinas, daí sua natureza multidimensional e interativa, envolvendo aspectos socioeconômicos, culturais, psicológicos, demográficos e outros, o que nos permite afirmar que se trata de uma construção em constante movimento. É por esta razão que a concepção e implementação de políticas públicas estão focalizadas na melhoria contínua da qualidade de vida da população como um fim a ser alcançado. Neste sentido, o objetivo desta pesquisa é validar um modelo de gestão pública da qualidade de vida em Cuba, adaptado à realidade local utilizando o método Iadov, que permite estimar o nível de satisfação das pessoas envolvidas em sua aplicação. Este método é uma forma indireta de realizar o estudo, com base nas relações estabelecidas entre três perguntas fechadas que são inseridas em um questionário, a pesquisa que é aplicada e cuja relação é desconhecida para o sujeito. Estas três perguntas estão relacionadas através do que é chamado de "Tabela Lógica Iadov". Os critérios obtidos dos especialistas ratificam a eficácia do modelo de gestão pública de qualidade de vida a nível local em Cuba.

**Palavras-chave:** qualidade de vida; gestão pública; modelo

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## INTRODUCTION

Since the very origins of life, human beings have struggled to raise their quality of life. In the historical development and in each of the economic-social formations there has been a growing concern to achieve certain levels of quality in people. At present, it is a concept that is being used more frequently in areas of society such as health, education, economics, politics and public safety. (Aguilar Agudo, 2020; De Amat Loza, 2017).

National and international authors such as Ferriss (2006); Kreitler (2007); Bustelo Graffigna (2008); Torres Tovar (2010); Carreño et al. (2013); Cantú Martínez (2015); Mirabal Sarria et al. (2018); Castillo Santamaría et al. (2020); Muñoz (2020); Moreira Zambrano and Orozco Santos (2020) approach the subject of Quality of Life from different perspectives and purposes. They highlight different dimensions or indicators to

be valued, according to the discipline of study. They propose systems of indicators to evaluate the quality of life, mostly linked to the medical sciences. In making a critical analysis of their conceptual contributions, the authors identified the following limitations:

- reductionist or sectorialized elements are visible
- the objective or subjective dimension is defended or even equated with the term happiness, well-being or human development
- not all dimensions are integrated, so its holistic and integral approach is limited
- the proposed tools focus on the application of quality of life indicators and not on their management

The World Health Organization (1994) defines Quality of Life as the way in which the individual perceives his or her life, the place he or she occupies in the cultural context and value system in which he or she lives, the relationship with his or her goals, expectations, standards, criteria and concerns, all of which are permeated by daily activities, physical health, psychological state, degree of independence, social relationships, environmental factors and personal beliefs.

This concept is approached from different perspectives in many areas of life. At the same time, there is a tendency to mix its meaning with the concepts of human development or well-being. Over time, there has been an attempt to find a definition of Quality of Life that is as comprehensive as possible, combining subjective and objective components where the common point is well-being.

In the specialized literature, models of quality of life can be identified, focused from different sciences, mainly psychology, sociology and medical sciences, which allow comparing different approaches when studying the quality of life and not limiting its analysis only to indicators. (Somarriba Arechavala, 2008).

They focus on how to study the quality of life as a phenomenon, they focus on the individual and the surrounding area. They homologate the term quality of life to that of happiness or well-being. They consider the quality of life as an equation in which the satisfaction of needs is in balance and which includes the valuations of well-being together with the objective components, as a function of social character, but takes into account the valuations of the individuals (Somarriba Arechavala, 2008).

When analyzing these, the strategic vision of this process and its participatory character are declared as important aspects, but there is an absence of mechanisms and procedures to materialize them from local government management; even in those sources consulted, where reference is made to the management of the quality of life, the process of public management from local spaces is not conceived and the proposals that are made are fundamentally based on capitalist social relations of production, with greater or lesser influence of neoliberal currents, which differ from those prevailing in progressive contexts or of socialist orientation.

This issue is particularly important for Cuban society, which, since the triumph of the Revolution, has identified as one of its priority objectives the improvement of the quality of life of the population, based on an integrated concept of the development of economic, social, political and cultural objectives, aimed at promoting the integral and full development of human beings, which is embodied in a single social policy governed by the principle of meeting the ever-growing needs of citizens, on the basis of development with equity and social justice.

Finally, in this context, it is necessary to know the acceptance or not by national decision makers of this proposal, so the objective of this contribution focuses on validating a model for the public management of quality of life in Cuba, adjusted to the local reality, using the Iadov method, which allows estimating the level of satisfaction of those involved in its application.

## **MATERIALS AND METHODS**

The following methods were used in the research:

- The **historical and logical method** made possible to analyze the references that surround the theory and praxis of the models of public management of the quality of life, as well as the procedures used for their validation by means of the Iadov method
- The **method of analysis and synthesis** made possible to identify, understand and structure the sequence of phases, based on the consultation of various materials to validate the model for the public management of quality of life

- For the validation from a practical point of view, the **Iadov method** (based on user criteria) was used as a scientific methodological procedure for processing the results. This technique constitutes an indirect way to study customer satisfaction
- The **Anochi method** made possible to know the Group Satisfaction Index of the users of the Public Management Model for Quality of Life (MGPCV in Spanish)

## RESULTS AND DISCUSSION

As part of the process of updating the Cuban economic and social model, strategic documents for the nation were generated at the 7th Congress of the Communist Party of Cuba (PCC in Spanish), which were approved, after popular consultation, by the 3rd Plenary Session of the Central Committee of the PCC and endorsed by the National Assembly of People's Power: 1) Conceptualization of the Cuban Economic and Social Model of Socialist Development; 2) Bases of the National Plan for Economic and Social Development until 2030: Vision of the Nation, Axes and Strategic Sectors; 3) Guidelines of the Economic and Social Policy of the Party and the Revolution for the period 2016-2021.

Thus, the continuity of the work with these documents was pending the conclusion of the design of the National Economic and Social Development Plan until 2030, based on the identified bases. Based on this, Presidential Decree No. 19 of September 5, 2017 was issued, which provided for the restructuring of the Government Commission responsible for the elaboration of the National Economic and Social Development Plan until 2030.

This Government Commission is composed of a Steering Group, a Coordinating Group (which has a Macroeconomic Group within it) and nine Working Groups. The Minister of Economy and Planning was appointed to chair the Steering Group of the said Governmental Commission and was also empowered to appoint the members of the Coordinating Group and the Working Groups. The appointment of the members of the Coordinating Group and the Working Groups was made by Resolution No. 59/2018.

In the first paragraph of the aforementioned resolution, the names of the nine Working Groups appear, with their respective Heads. The following is a list of the groups created for this purpose:

- Working Group No. 1 "Productive, Technological and Services Potential"
- Working Group No. 2 "External Sector"
- Working Group No. 3 "Monetary, Financial and Fiscal"
- Working Group No. 4 "Infrastructure"
- Working Group No. 5 "Sociocultural"
- Working Group No. 6 "Territorial"
- Working Group No. 7 "Demographic"
- Working Group No. 8 "Environment and Natural Resources"
- Working Group No. 9 "Government, Defense and Internal Security"

For its part, Resolution No. 59/2018 of the Minister of Economy and Planning, in its Fourth Paragraph, lists the names and surnames of the colleagues appointed to integrate each of the aforementioned Working Groups.

The designation is made on the basis of the proposal of each of the Central State Administration Agencies, which were asked to define who their agency's expert on the topics addressed by each Working Group was.

In addition, national experts of recognized prestige and significant contributions to the topics addressed in the different groups were invited. In all cases, it is guaranteed that the people selected meet the following aspects: 1) proven scientific training; 2) practical experience and expertise; 3) they are decision-makers; 4) access to relevant information for decision-making.

For the specific case of this research, the authors, with the approval of the members of the Coordinating Group, defined that the Working Groups that were directly linked to the issues of public management of quality of life at the municipal level were the following: Working Group 1 "Productive, technological and service potential"; Working Group 4 "Infrastructure"; Working Group 5 "Socio-cultural"; Working Group 6 "Territorial"; Working Group No. 1 "Productive, technological and service potential"; Working Group No. 4 "Infrastructure"; Working Group No. 5 "Socio-cultural"; Working Group No. 6

"Territorial"; Working Group No. 7 "Demographic"; Working Group No. 8 "Environment and natural resources"; Working Group No. 9 "Government, defense and internal security".

The Coordinating Group decided that, in a more direct and systematic way, it would be the "Territorial" Working Group that would deal with these aspects linked to the quality of life on a municipal scale, as it is this group that, by its very nature, is responsible for specifying the work of the rest of the eight groups on a municipal level, in addition to the fact that in its composition there is a presence of all the Organisms of the Central State Administration and other national experts.

Based on the elements described above, it is based on the fact that for the validation of the Model, the experts that make up Working Group No. 6 "Territorial.

The 40 members of Working Group No. 6 "Territorial" are asked for their opinions and evaluations of the MGPCV and the proposed procedure, based on a summary of both documents, sent together in a spreadsheet where the criteria of interest of the consultation appear. These criteria are defined on the basis of an adaptation made by the authors of those used by Fernández de Castro et al. (2020).

After receiving all the answered forms, the information is processed (Table 1), which shows the value of the mean of the experts' ratings for each evaluation criterion, weighted from 1 to 5, the latter being the maximum rating.

**Table 1** - Results of the processing of the experts' opinions on the validity of the Model and the Procedure

Criteria / Experts	Media
Theoretical consistency of the Model	4,83
Theoretical consistency of the Procedure	4,75
Logical coherence of the steps of the Procedure	4,88
Feasibility of applying the procedure in the Cuban municipal context	4,73
Importance of expected results	4,90

Necessity and topicality of the Model	4,88
Necessity and topicality of the Procedure	4,93

Source: Own elaboration based on the definitions of several authors

It is highlighted that the ratings given by the experts to each of the criteria are between the two highest values of the rating scale, whose averages are between 4.73 and 4.93. This ratifies, in this way, the validity of the MGPCV (Mirabal Sarria et al., 2018) and the content of the procedure. On the other hand, these opinions are subjected to a reliability test consisting of determining the coincidence between the experts; for this purpose, the Anochi method is applied.

The result indicates a high or very good reliability by reaching a coincidence index of 0.87. The values obtained in each of the criteria and, in total, as established by the method, are shown in table 2.

**Table 2** - Results of the Anochi method applied to the experts' ratings

	Theoretical Consistency of the Model	Theoretical Consistency of the Procedure	Logical consistency	Feasibility of application	Importance of Results	Necessity and Actuality of the Model	Necessity and topicality of the procedure	Media
Rank discrepancy	231	300	175	319	144	175	111	207,9
Discrepancy Index	0,14	0,19	0,11	0,20	0,09	0,11	0,07	0,13
Matching rate	0,86	0,81	0,89	0,80	0,91	0,89	0,93	<b>0,87</b>

Source: Own elaboration

The validity of the MGPCV and its procedure is proven from the expert test.

## **Analysis of the satisfaction of key agents with the proposed model**

In order to obtain a more comprehensive view of the feasibility of applying the model, a study of the satisfaction of key agents in the implementation of the model was carried out. For this purpose, a questionnaire was applied to the 11 Presidents of the Municipal Assembly of People's Power (AMPP in Spanish) of Pinar del Río province.

Once the information has been processed, the following results are obtained:

- 100% of respondents expressed satisfaction with the model designed
- 90.9% of the respondents say that they do not dislike anything about the model, while 9.1% dislike the fact that the model is not more explicit in the description of the steps of the procedure for its implementation
- It is interesting to note that respondents stated that the following issues were the ones they liked the most about the model:
  - It will help to improve the results in the management that we perform
  - The graph of the model and the results
  - It is a model that helps to improve the management of local governments and administrations
  - It is a useful tool for management
  - The overall structure that taxes compliance with the regulations that apply at the municipal level
  - The output, since it seeks to transform the quality of life of the population from its improvement
  - The principles and premises established by the model
  - The detailed explanation of the steps and techniques to be used in each of them as part of the procedure to apply the model
- 81.8% of the presidents say they like the design of the model very much and 18.2% say they like it more than they dislike it
- When asked if they could freely choose the way to improve the process of public management of quality of life at the municipal level, would they choose a model with similar characteristics to the one proposed, 100% of respondents said that they would choose the model if they had to do so for its implementation

These results were confirmed by the application of the Iadov technique, which allows to estimate the global satisfaction of those involved in the application with the model proposed to them.

The technique of Iadov, Lopez and Gonzalez (2002); Tejedor (2005); Fernández de Castro, Sánchez and Reyes (2020) is an indirect way of studying satisfaction, since the criteria used are based on the relationships established between three closed questions that are inserted into a questionnaire (questions 2, 5 and 6 of the questionnaire) which relationship is unknown to the respondents. These three questions are related through what is called the "Iadov Logical Table", which can be seen in table 3.

**Table 3** - Iadov's Logical Table applied to the questionnaire

	<b>Question 2.</b> Are you satisfied with the proposed model?								
	<b>Yes</b>			<b>No</b>			<b>I don't know</b>		
	<b>Question 6.</b> If you were free to choose the way to improve the process of public management of quality of life at the municipal level, would you choose a model with similar characteristics to the one proposed?								
<b>Question 5.</b> Do you like the design of the proposed model?	<b>Yes</b>	<b>No</b>	<b>I don't know</b>	<b>Yes</b>	<b>No</b>	<b>I don't know</b>	<b>Yes</b>	<b>No</b>	<b>I don't know</b>
I like it very much	1	2	6	2	2	6	6	6	6
I like it more than I dislike it	2	2	3	2	3	3	6	3	6
I don't care	3	3	3	3	3	3	3	3	3
I dislike it more than I like it	6	3	6	3	4	4	3	4	4
I don't like it	6	6	6	6	4	4	6	4	5
I can't say	2	3	6	3	3	3	6	3	4

Source: Own elaboration

Using Iadov's Logical Table, each respondent is placed in his or her corresponding category (which can be: 1, 2, 3, 4, 5 or 6). To do this, it is proceeded as follows: It is looked for the first respondent's answer to question 2; in this case, he answered "Yes", then it is looked for the "Yes" box of question 6, but below the "Yes", corresponding to question 2 which in turn corresponds with the answer to question 5; in that intercept, there is the category in which that first respondent case is placed.

This is how it is proceeded with each of the cases. In that way, in table 3, it is expressed that 9 respondents answered "Yes" to question 2 and question 5, then when looking for the answer option "Yes" under question 6 (Table 3) and the intercept with the answer to question 5 (I like it a lot), it is already known that in that cell, which corresponds to category 1 in Iadov's Logical Table, there are 9 of the surveyed AMPP Presidents who responded that way to the three open questions and the remaining 2 are in the cell that intercepts the "Yes" answer with "I like it more than I dislike it".

To obtain the Group Satisfaction Index (GSI) with the Model, the elements shown in table 4 are taken into account.

**Table 4** - Satisfaction Index for the Iadov Technique

<b>Subjects with individual index 1; 2; 3 o 6; 4; 5</b>	<b>Satisfaction Indexes</b>	
A	<b>1</b>	Maximum satisfaction
B	<b>0,5</b>	More satisfied than dissatisfied
C	<b>0</b>	Undefined or contradictory
D	<b>-0,5</b>	More dissatisfied than satisfied
E	<b>-1</b>	Maximum dissatisfaction

Source: Own elaboration

Then, formula is applied:

$$ISG = \frac{A * (+1) + B * (+0,5) + C * (0) + D * (-0,5) + E * (-1)}{N}$$

Where:

- A, B, C, D and E, represent the number of subjects with individual index 1; 2; 3 or 6; 4; 5 (indicating the categories of Iadov's Logical Table)
- N represents the total number of subjects surveyed (in this case 11)

Applying the formula, the ISG is obtained with the model.

$$ISG = \frac{9 * (+1) + 2 * (+0,5) + 0 * (0) + 0 * (-0,5) + 0 * (-1)}{11} = 0,909$$

This Group Satisfaction Index of 0.9 expresses the maximum satisfaction of the Presidents of the Municipal Assembly of People's Power with the model to achieve better public management of the quality of life at the municipal level in Cuba. The expert criteria obtained ratify the effectiveness of the model, reaffirming that it manages to improve the process of local public management.

The validation of the MGPCV (Mirabal Sarria et al., 2018) based on the Iadov method, allowed adjustments to be made to the process of public management of quality of life with a multidimensional, participatory and interactive approach, taking into account the acceptance of experts at the national level. Its theoretical consistency was demonstrated, as well as its necessity and actuality.

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#### **Conflict of interest:**

Authors declare not to have any conflict of interest.

#### **Authors' contribution:**

*Yamilet Mirabal Sarria and Carlos Cesar Torres Paez* worked on the analysis and compilation of the data analyzed with the IADOV method. They also worked on the critical and scientific analysis of the literature consulted.

*Carlos Cesar Torres Paez* had a significant participation with the working groups from which the proposed model was validated.

Both authors reviewed the writing of the article and approve the version finally submitted.



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