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# Motivation in public management: Herzberg's perspective under the multicriteria analysis

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Abstract: Human motivation in the context of work can be conceptualized as a voluntary, conscious and self-regulated action capable of boosting the subject to reach their own and collective goals. Although it is a private drive, it is admissible that motivation is stimulated through intrinsic or extrinsic factors to the worker. In this sense, the present theoretical-empirical study aimed to identify, from the perspective of Frederick Herzberg, alternatives that contribute to the process of stimulating public servants in a Federal Higher Education Institution. The development of the research included, first, a bibliographic review and, after the formation of the analysis constructs, a survey was applied to the sample of 96 civil servants, whose judgments were submitted to the Analytic Hierarchy Process (AHP) method. The results revealed that human development and leadership development are potential alternatives to boost the workforce and raise reflections on this topic in other areas of public management.

Key Word: Two factor theory; Multicriteria; Analytic Hierarchy Process.

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## I. Introduction

Human motivation can be understood as the process responsible for the intensity, direction and persistence of the subject's efforts to reach a certain goal (Lawler, 1973) and, in the organizational field, the complexity and relevance of this phenomenon instigated classical researchers (Barnard, 1945; Kahn, 1990; Lewin, 1939; Maslow, 1943; Mayo, 1930) to seek to understand not only its effects on labor productivity, but also the causalities that influence the individual's behavior and reveal in itself the meaning of work at work. over time (Bergamini & Coda, 1990).

Evidences on studies of motivation in the work context have raised perspectives that seek to establish greater meaning to work, something that potentially suggests the mediation of leaders to promote actions such as strengthening multifunctional teams, expanding the potential of remote work, consolidating communication dynamics, and admission of decentralized decision-making, that is, strategies required in the contemporary organizational environment (Afsar & Umrani, 2020; Andersen et al., 2018; Mattos et al., 2019; Wagner & Hollenbeck, 2020).

Within the scope of the Brazilian public service, however, the design and implementation of innovative strategies conducted by civil servants with leadership skills are still incipient, even though the ideals of Public Governance defend professionally prepared organizational arrangements to serve the interests of society (Denhardt & Denhardt, 2015). Such logic presupposes breaking with aspects of patrimonialist models that are based on authoritarianism, centralization of power, nepotism, exemption of merit, and subjective indications, elements that still coexist in the reality of public organizations today (Barlach, 2012; Denhardt & Denhardt, 2015; Melo & Silva, 2019; Rodrigues et al., 2014).

In this sense, the premise of this study considers that reflections of the antagonism between anachronistic organizational arrangements and dynamic environmental factors are incompatible to positively influence human behavior towards a motivated condition and, consequently, compromise the meaning of work in the long term (Alves et al., 2016; Klein & Mascarenhas, 2016; Tan & Rajah, 2019; Vieira et al., 2011; Wagner & Hollenbeck, 2020; Xu et al., 2018). We argue that the identification of inducing elements for motivation within the public

service is a path that leads to actions to establish policies that make it possible to raise the level of motivation and promote greater engagement of servers with work (Barlach, 2012; Cruz et al., 2014; Mattos et al., 2019; Vermeeren, 2017).

Thus, the present study aimed to identify, from the perception of public servants, alternatives that contribute to inducing motivation at work in a higher education institution (HEI) of the Federal scope. The diagnosis was carried out based on the assessment of the elements by the institution's employees (survey) and, subsequently, submitted to the Analytic Hierarchy Process (AHP), an instrument that made it possible, through peer comparisons, to highlight the alternative of greater adherence to the research unit. The choice of the research unit is based on the academic representativeness of the institution nationally and regionally in the east of the State of Minas Gerais, as it is a recent institution, and that had not yet carried out studies aimed at the motivation of its employees.

# II. Herzberg's perspective on public management

When analyzing Motivation from the perspective of classical literature, it is possible to state that human motivation in the work context consists of the predisposition of individuals to carry out attributions, having as counterpart the obtaining of intrinsic or extrinsic rewards capable of guiding their behavior to reach of individual or collective goals (Barnard, 1945; Lewin, 1939; Maslow, 1943; Mayo, 1930). However, in today's era of the fourth industrial revolution, the theme acquires expansion when considering the relationship between the motivational process, the subject's qualification potential and the meaning of work, that is, the means used to stimulate work must evolve as intellectual strength and the development of technologies began to permeate the organizational environment (Tan & Rajah, 2019; Wagner & Hollenbeck, 2020; Xu et al., 2018).

On the other hand, consequences of the lack of motivation in the work context, which can be perceived both in public and private organizations, produce, for Ferreira and Dias (2017), effects such as: absenteeism, low productivity, lack of commitment, and high turnover. Hora et al. (2018) mention that the challenge of avoiding demotivation focuses not only on the ability to avoid worker dissatisfaction, but on the ability of managers to identify the desires of each team member and reconcile them with the organization's objectives, an action that demonstrates the meaning of the work.

This phenomenon is based on the fact that motivation is peculiar to each subject, that is, something that motivates someone may not necessarily be able to motivate another. In this way, knowing the wishes, dreams, and personal goals of the employee is consistent with the definition of strategies for aligning individual goals with organizational goals (Giacomelli et al., 2016).

Tavares (2002) explains that subjects who present a continuous state of dissatisfaction with work evolve into a framework of frustration or lack of motivation, revealing apathetic, restrained, defensive behaviors that inhibit engagement and autonomy. Vazquez et al. (2019) complement that work environment situations with the potential to inhibit personal growth, cause negative impacts on the organizational climate and, as a more serious consequence, the development of work pathologies, with emphasis on the Burnout syndrome.

Since the last century, classic studies have already shown that the motivated subject has greater willingness, dedication and commitment to work (Barnard, 1945; Lewin, 1939; Maslow, 1943; Mayo, 1930) and, in the view of Frederick Herzberg (1987), although the motivational state is peculiar to each subject, motivation can be stimulated through incentives, which are categorized into two aspects: Hygienic Factors – known as extrinsic to the position – aimed at working conditions; and the Motivational Factors – known as intrinsic to the position – and that are related to the nature of the work itself, that is, the content of the position.

The dualist perspective developed by Frederick Herzberg (1987) emerges from the worker's perception of his role within the organization, based on the self-analysis of the position he occupies (Khoshnevis & Tahmasebi, 2016). For these authors, motivational factors – such as social incentives, recognition and development – appear as elements that have the capacity to promote server satisfaction in the work environment. Thus, although hygienic factors – such as material and financial incentives – represent elements capable of avoiding dissatisfaction, for Bakker and Albrecht (2018) they are the motivational factors that should be emphasized to keep employees engaged with work.

Contemporary studies focused on the public sphere have reproduced the classic view by analyzing the relationship between the motivation of civil servants and the effects arising from financial incentives (Bellé & Cantarelli, 2015). The literature points out that, when salary is linked to performance, this does not meet the main objective and, in addition, they found that the intrinsic value perceived by employees in fulfilling their own work exceeds the importance attributed to material and financial rewards (Bellé & Cantarelli, 2015; Rodrigues et al., 2014). International findings on the subject confirm this perception by refuting the direct relationship between salary and motivation (Rahman; et al., 2018; Suyanto et al., 2019; Wang et al., 2018).

Complementarily, qualification, professionalization and development of servers appear as elements capable of inducing a motivational effect, and are more effective than financial incentives (Alves et al., 2016; Cavalcante, 2019; Ferreira et al., 2015). And, through the influence of transformative leaders, these factors proved

to be stimulus enhancers when adopted in people management strategies (Andersen et al., 2018; Mattos et al., 2019; Rocha et al., 2020).

It is clear, therefore, that the process of stimulating public servants permeates personnel management compatible with actions to value the workforce, similarly to motivational actions in the private sector (Grin, 2013; Vermeeren, 2017). These actions, therefore, result in the promotion of efficiency in contemporary public management, which places emphasis on the development of leaders capable of stimulating teams to seek satisfactory results (Barlach, 2012; Alves et al., 2016; Vieira et al., 2011).

# III. Multicriteria analysis with the Analytic Hierarchy Process (AHP)

The diffusion of mathematical models applicable to decision-making has been increasing in organizations since the 1960s (Gonçalves, 2016). Among the mathematical models with greater adherence to situations involving the choice of qualitative alternatives, there are the methods of multicriteria decision analysis (MCDA - Multicriteria Decisions Analysis) (Zatta et al., 2019). The wide applicability of MCDA covers contexts that evaluate a finite number of independent criteria, explicitly, contributing to the solution of organizational problems (Longaray et al., 2016).

The MCDA's are convergent when pointing out that most judgments for decision-making are based on evaluating options using, for this, dimensions and variables that may be antagonistic, but relevant for problem solving (Gonçalves, 2016). The literature indicates the existence of several MCDA's that offer varied solutions according to the objective to be achieved. The most cited are: TOPSIS (Technique for Order Preference by Similarity to Ideal Solution), ELECTRE (ELimination and Choice Expressing the REALity) and AHP (Analytic Hierarchy Process), which is the pioneer and most used instrument in terms of to decision problems involving multiple criteria (Longaray et al., 2016; Zatta et al., 2019).

In this sense, the choice of the AHP as an instrument for this study is based on the characteristics and applicability of the model, since it is based on the areas of mathematics and psychology using quantitative and qualitative properties, which is relevant in the analysis of subjective factors, such as, for example, surveying opinions about the elements that interfere with work motivation. Therefore, the use of this method allows obtaining consensus of preference from decision makers by providing concordance of judgments (Alvim et al., 2015).

The AHP brings in its essence the purpose of supporting the manager in the decision-making process, in which the choice of alternative starts from the elucidation of preferences, through the quantification of subjective judgments of participants, assigning a weighting factor, "weights", using a numerical scale, which indicates the degree of importance relative to the analysis criteria, shown in Table 1.

**Table 1** - Numerical scale for operationalizing the AHP

Numeric scale	Verbal scale
1	Elements of equal importance
3	Moderate importance of an element
5	Strong importance of an element
7	Very strong importance of an element
9	Extreme importance of an element
2, 4, 6 e 8	Intermediate values between adjacent opinions

Source: Saaty (2008).

The AHP is better elucidated by the arrangement of three distinct phases, namely: (i) decomposition of the elements of a problem as a hierarchy formed by criteria, sub-criteria, and alternatives, according to the opinion of the specialists involved; according to figure 1; (ii) pairwise comparison of judgments of criteria, subcriteria, and alternatives in the hierarchy levels, later consolidated in a generic matrix, obtained by calculating equation 1; (iii) calculation of weights and analysis of logical consistency (Saaty, 2008).

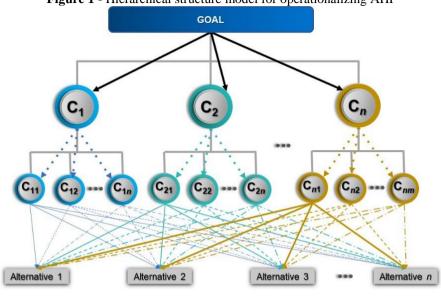


Figure 1 - Hierarchical structure model for operationalizing AHP

Source: Saaty (2008).

The generic matrix of judgments is obtained through the following calculation:

$$n(n-1)/2$$

(1)

Where n is the number of elements of matrix A, which according to Saaty (2008) is defined as follows (Figure 2):

Figure 2 - Representation of the AHP judgment matrix

$$A = \begin{bmatrix} 1 & a_{12} & \cdots & a_{1n} \\ 1/a_{21} & 1 & \cdots & a_{2n} \\ \vdots & \vdots & \cdots & \vdots \\ 1/a_{n1} & 1/a_{n2} & \cdots & 1 \end{bmatrix}$$

Source: Saaty (2008).

On what:

$$a_{ij} > 0 \rightarrow positive;$$
  
 $a_{ij} = 1 :. \ a_{ji} = 1;$   
 $a_{ij} = \frac{1}{a_{ji}} \rightarrow reciprocal;$   
 $a_{ik} = a_{ij} \cdot a_{jk} \rightarrow consistency$ 

According to Zatta et al. (2019), after normalizing the judgment matrix, normalized tables are obtained. These tables are calculated from the sum of the elements of the columns of the matrix of judgments that will be divided by the values of each element of the referred column, complement these authors. Next, the average of each line of the normalized table is calculated. Finally, the stage of relative judgments is closed by calculating the global priorities (Saaty, 2008).

The analysis of logical consistency is elaborated as proposed by Saaty (2008), by determining the Consistency Ratio (CR), equation 2, whose purpose is to verify the consistency of the established judgments, based on the equation:

$$CR = \frac{CI}{RI}$$

(2)

Where *RI* represents the Random consistency Index for a reciprocal matrix of order n, elaborated with non-negative elements, in a random way (Zatta et al., 2019). In order to configure a coherence relationship, Saaty (2008) establishes that the *RC* assumes a value less than or equal to 0.10, otherwise, the judgments must be

reviewed and recalculated. The *CI*, Global Consistency Index (Equation 3), must assume values closer to zero for the analysis to be consistent, being obtained as follows:

$$CI = \frac{(\lambda_{m\acute{a}x.} - n)}{n-1}$$
(3)

Where  $\lambda_{max}$  represents the judgment matrix eigenvector.

The application of the AHP model in the context of this study considers the elements referring to the hygienic and motivational factors of Frederick Herzberg (1987) as guides to support the choice of alternatives that may be adopted by managers as possible solutions for stimulating servers in the researched unit. For this purpose, criteria and sub-criteria identified in the literature were appreciated by the experts, without disregarding the nature, profile and environmental variables of the institution under analysis.

# IV. Methodological approach and research development

The development of this research consists of a hybrid approach – qualitative and quantitative – in which social phenomena are analyzed, and descriptive statistics techniques are applied to the investigated universe (Gil, 2010; Richardson, 2008). The qualitative approach raised a set of factors and constructs associated with the satisfaction of civil servants based on contemporary literature and, fundamentally, on the analysis of Frederick Herzberg (1987). Sequentially, the quantitative aspect started from a survey whose data conversion and treatment used statistical techniques, spreadsheet and SPSS software (Statistical Package for Social Science) Statistics Desktop 23.0, trial version. The route was divided into five stages in order to optimize the course of the research.

In the first stage, factors that provide job satisfaction were investigated, based on Herzberg's (1987) motivational theory, as well as recent literary reviews (Duarte et al., 2019; Hora et al., 2018; Matias & Moura, 2019), which enabled the conceptual update of the factors for defining constructs that served as a preliminary archetype in the preparation of the form.

In the second stage, we proceeded with the characterization and sample calculation to dimension part of the population to be submitted to the investigation, and, for its accomplishment, the calculation proposed by Santos (2013) was applied – illustrated by equation 4 – by it is a simple random sample, in which all elements have the same probability of selection (West, 2016). In addition, a 90% confidence interval was used, with a critical value of 1.64 for the normal variable, a margin of error of 10%, with a minimum estimated value of 90% for sampling (Cooper et al., 2006; Hulland et al., 2018; Murata et al., 2018).

$$n = \frac{N \cdot Z^2 \cdot p \cdot (1 - p)}{Z^2 \cdot p \cdot (1 - p) + e^2 \cdot (N - 1)}$$
(4)

Where n is the calculated sample; N represents the population; Z is equivalent to the standardized normal variable associated with the confidence level; p symbolizes the probability of the event e, and the sampling error. In the researched unit, an n of 60 civil servants were obtained to compose the sample of respondents, making up 12.7% of the total population that is formed by 471 effective civil servants, being 273 professors (57.9%) and 198 technical-administrative in education (42.1%).

In the third stage, the data collection instrument was elaborated from a structured questionnaire, which was applied online. Respondents were sent an introduction letter by email, inviting them to participate via access link, with general instructions, and a brief presentation of the purpose of the research (Alvim et al., 2015; Gonçalves, 2016), highlighting to its preparation in accordance with Resolution nº 510/2016 of the National Health Council, observing the ethics adopted in the Social Sciences.

Thus, the first block of the questionnaire, through ten objective questions, categorized the participants in gender; age range; career; length of time in office; accumulation of rewarded function or management position; organizational environment in which the capacity sector is linked; and whether the civil servant's level of education has remained unchanged since joining the researched unit.

Subsequently, in the second block, the servants were asked about their own perception of intrinsic and extrinsic factors related to job satisfaction or dissatisfaction (Herzberg, 1987). Participants answered 24 objective questions, divided into two clusters: 12 about extrinsic factors and 12 about intrinsic factors. Each question offered nine response options, in the Likert scale format, with level "1" corresponding to the minimum degree and level "9" the maximum degree of perception.

The third and last block of the questionnaire, consisting of 21 comparative questions, aimed to assess preferences in an equal way, two by two, following the intent of multicriteria methods, in this case, the Analytic Hierarchy Process (AHP). Faced with the chosen option, the respondent attributed the degree of importance, also

varying between "1" and "9" in Likert scale format. The framework of questions in the third block came from the second block of the collection instrument, with the necessary adaptations, which unfolded into criteria, sub-criteria and alternatives, in order to maintain consonance with the multicriteria analysis proposed by Saaty (2008).

In the fourth stage, the finalization of the collection instrument intended to make adjustments to the form regarding the purposes of the research. Thus, the 55 questions that made up the questionnaire were evaluated through two phases (pre-test and test) that simulated the application. The pre-test was carried out with experts in the study area. These professionals have training compatible with the attribution, work in the institution, and have the know-how to verify whether the constructs met the interests of this study and, also, whether they would be applicable to the research unit. Finally, following the assumptions of Gonçalves (2016), the data collection instrument test was applied to 8% of the sample size. And, with that, it identified possible opportunities for adjustments in the structure and wording.

Thus, after the questionnaire was submitted to adaptations and adjustments, the fifth stage began: application of the questionnaires. During the period between 12/2019 and 02/2020, the collection instrument remained available for access, via the Google Forms platform, without any means of identifying the respondent. The data were organized in an electronic spreadsheet and subsequently processed, treated and analyzed using SPSS software (Statistical Package for the Social Sciences) Statistics Desktop 23.0, trial version, to then proceed with the sixth and final step: elaboration of the results. Figure 3 summarizes the five stages of Research Development.

Sample characterization Theoretical review Elaboration of the Conducting the collection instrument survey Test and pre-test with experts

Figure 3 – Illustrative summary of the research stages

Source: Authors (2023).

# V. Results

The online questionnaires were applied to 20.3% of the total population of the research unit, which represented a random sample of 96 effective civil servants. The inclusion criterion considers the employees of the institution's effective staff. Even with the incidence of 27 outliers and a missing value, an n compatible with the sample calculation was obtained, totaling a valid sample of 68 respondents. Cronbach's Alpha was measured at 0.905, which gave the instrument a consistency greater than 90% (Cronbach, 1951). Table 2 represents the number and valid percentage of respondents, referring to the first block of the questionnaire, which disregards the incidence of outliers and missing value.

Ta	ble 2 –	Chara	acter	izati	on	of	the	Valid	Samp	le	
				_	-						

Question	Description	Respondents	(%)
Gender	Male	25	37
	Feminine	43	63
Age group	18 to 34 years.	22	32
	35 to 59 years.	46	68
	Over 60 years old.	0	0
Time in office	Up to 3 years.	15	22
	From 3 to 5 years.	16	24
	More than 5 years.	37	54
Career	Higher education professor.	31	46
	Technical-administrative in education.	37	54
Do you have GF or MP?	I never accumulated positions with GF or MP	59	87
	Yes, I accumulate or have already accumulated.	9	13
Degree of training in	Has the same degree of training.	15	22
relation to the minimum	It has a higher degree, since it is graduated.	4	6

requirements	for	the	It has a higher degree, since it is a specialist.	17	25
position			He has a higher degree, since he is a master.	14	21
			He has a higher degree, since he is a doctor.	14	21
			Completed a postdoctoral internship.	4	6
Organizational			Administrative Sectors.	10	15
environment			Academic units.	58	85

Legend: Gratuified Function (GF). Management Position (MP). **Source**: Authors (2023).

Through the judgment of the participants, the questions in the second block made it possible to collect data to assess the degree of perception of the servers regarding satisfaction with the work they perform in the institution.

Thus, the epistemological perspective of Frederick Herzberg (1987) was the basis for formulating the questions, consisting of a set of factors capable of influencing the satisfaction of civil servants. Contemporary findings on this topic reinforced the relevance of the subject and made it possible to break down the cluster into criteria and sub-criteria and, therefore, propose alternatives that emerge as the corollary for inducing motivation in the context of work (Duarte et al., 2019; Homberg et al., 2015; Lopes et al., 2018; Matias & Moura, 2019; Vargas & Teixeira, 2018).

Table 3 illustrates the results of the second block of questions and which subsidized the structuring of judgments in the third block. The provision of constructs (subcriteria) subordinated to the respective cluster (criteria) is highlighted, according to the assumptions of Herzberg (1987).

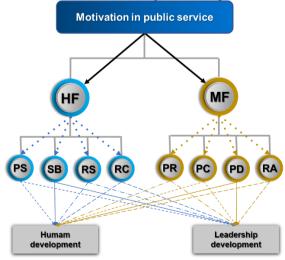
**Table 3** – Analysis framework for AHP

Criteria	Subcriteria	Alternatives
Hygiene Factors (HF)	Physical Structure (PS)	
	Salaries and Benefits (SB)	
	Relationship with Superiors (RS)	II d
	Relationship with Colleagues (RC)	Human development
Motivational Factors (MF)	Professional Recognition (PR)	Leadership development
	Position Content (PC)	Leadership development
	Professional Development (PD)	
	Responsibility for Assignments (RA)	

Source: Authors (2023).

The logic of the multicriteria method is based on the unfolding of the overall objective in a framework of hierarchically organized criteria and subcriteria that can be analyzed, based on the parity comparison of potential alternatives (Rodrigues & Corso, 2020). In this study, the criteria represented Frederick Herzberg's (1987) Hygienic and Motivational factors, the sub-criteria represented constructs aimed at the nature of the research unit's activities, and the alternatives illustrated promising solutions recommended to the institution in an attempt to enhance the stimulus for motivation, or otherwise, mitigate the impacts of dissatisfaction at work. The lines that intersect the alternatives, the sub-criteria and the criteria, show the links that these dimensions establish with each other, in a hierarchical way and subordinated to the objective of the investigation: Motivation in the Public Service, illustrated in Figure 4.

Figure 4 - Hierarchical structure resulting from the operationalization of AHP



The selection of alternatives was based on the support of the literature that points to the performance of immediate leaders as a preponderant element in the processes of stimulating and engaging servers (Andersen et al., 2018; Mattos et al., 2019; Repinaldo, 2015; Rocha et al., 2020) which appear as potential solutions to induce participants' motivation and, consequently, improvement in organizational results (Alves et al., 2016; Barlach, 2012; Vermeeren, 2017; Vieira et al., 2011).

Thus, the hierarchy made it possible to analyze the parity judgments of the referred criteria, sub-criteria and alternatives through the survey of primary data adequate to the default of the Expert Choice software trial version. The judgments presented Consistency Ratio (*CR*) lower than 0.10, being considered satisfactory for Saaty (2008).

When analyzing the judgments, the basic premise of Herzberg (1987) was verified, since the participants of the researched unit attribute greater importance to Motivational Factors (83.3%), in face of Hygienic Factors (16.7%). Classical theorists such as (Barnard, 1945; Maslow, 1943; Herzberg, 1987) and contemporary researchers (Bergamini, 1990; Robbins, 2005) corroborate the supremacy of intrinsic (motivational) factors over extrinsic (hygienic) factors of the job. In addition, Figure 5 shows the most expressive elements, according to the participants' opinion: Professional Development, which considers both the qualification of the servants and the qualification of the leaders (managers).

Still in relation to the criteria, the greater expressiveness of the Motivational Factors is in line with the findings of Rodrigues, Reis Neto and Gonçalves Filho (2014) who, when investigating a public institution in the education sector, also found that the intrinsic value perceived by employees in the self-fulfillment of work (Motivational Factor) outweighs the importance attributed to rewards (Hygienic Factor). This result is also congruent with the findings of Klein and Mascarenhas (2016), when they confirm the dominance of (intrinsic) motivational factors in favor of employee satisfaction.

However, these authors do not despise the relevance of Hygienic Factors (extrinsic) to ensure balance in the formulation of policies to encourage workers, that is, according to the literature, even though there are employees who are satisfied with factors intrinsic to their position, it may happen that these professionals leave manifest counterproductive effects on the result of work as a result of disparities in extrinsic elements (Cruz et al., 2014; Klein & Mascarenhas, 2016), such as, for example, unsatisfactory remuneration, deficiencies in the physical structure, or unfavorable organizational climate.



**Source:** Own elaboration, using the Expert Choice software.

In the case of the researched institution, this conclusion was evidenced when analyzing the constructs that composed the sub-criteria. With regard to elements linked to Hygienic Factors, the judgments pointed to Salaries and Benefits (64.0%), Relationship with Colleagues (19.4%), Relationship with Superiors (11.0%), and Physical Structure (5.6%), in this order of preference, according to the opinion of the servers. The percentages reflect the degree of importance that public servants attach to the evaluated elements, emphasizing that remuneration is the element with the greatest influence on job dissatisfaction.

And, in relation to the elements linked to the Motivational Factors, the servants showed a predilection for Professional Development (59.3%), followed by Responsibility for Assignments (21.9%), Professional Recognition (11.8%), and finally, Position Content (7.1%). These numbers demonstrate that civil servants define career development as the main driver of job satisfaction.

Thus, based on the preferences of the participants, the AHP pointed to Human Development (83.7%) as the main alternative capable of promoting stimulation to the servants in the research unit. Additionally, Leadership Development (16.3%) figured as an additional alternative capable of raising the motivational level of employees.

# VI. Final considerations

This study aimed to identify, from the perception of civil servants, alternatives that contribute to inducing motivation at work. From the dualist perspective of Frederick Herzberg, the theoretical contribution pointed to constructs subdivided into Hygienic Factors (Physical Structure, Wages and Benefits, Relationship with Colleagues, and Relationship with Superiors) and Motivational Factors (Professional Recognition, Position Content, Professional Development and Responsibility by assignments) which represented the adherent elements to compose the object of analysis. Through the Analytic Hierarchy Process (AHP) the judgment of the servers pointed to the alternatives "Human Development" and "Leadership Development" as the main inducers of motivation to work in the research unit: a Federal Higher Education Institution (HEI).

In addition to evidencing inducers for motivation at work, the results enabled us to infer that establishing a favorable work environment for qualification, improvement and professional development is a condition for the motivation of the server in the investigated unit, which gives the subjects a greater sense of work. Work. This analysis confirms the initial premise of the study by conjecturing that reflexes of antagonism between anachronistic institutional arrangements in dynamic environments are incompatible to positively influence human behavior in the work environment.

In the context of contemporary public management, it is important to point out that, although the development of people has been widely discussed internationally, in the scope of the Brazilian service, articulation on this agenda is still incipient. Indeed, the legal instrument that regulates the career of public servants at the Federal level was instituted in 1990. Since then, few substantial changes have been consolidated that guide the continuous development of civil servants. The recent normative measure on the development of servers was superficially instituted through Federal Decree No. 9,991/2019 and that, despite providing for the regulation of licenses and removals for training, the instrument proposes, in essence, the transfer of responsibility for the implementation of qualification programs for people management units of bodies linked to SIPEC – Federal Administration Civil Personnel System (Brasil, 2019). Only in 2021, the publication of Normative Instruction no 21 of the Ministry of Economy presented criteria based on transversal competences for the establishment of the National Policy for People Development (PNDP), whose focus proposed the improvement of organizational performance (Brasil, 2021) despite not having reached significant projections in the scope of the Brazilian public service.

The establishment of legal instruments makes room for reflections on the need to develop the workforce as a response to the addition of satisfactory results in public institutions at the Federal level. However, as long as there are no significant efforts by government entities, while growth in public careers is not attractive to the public servant, the motivation for work will remain an unattained idealization. Therefore, the findings of this study are aimed at leaders, directors and occupants of management positions and invite them to weave reflections that are related to the assumptions of current government devices, as well as anchored in national and international literature, the that makes it possible to contribute to the institutionalization of people management proposals and policies within the scope of the Federal Public Administration, either through the strategic performance of leaders, or through the development of civil servants.

We emphasize that in relation to Human Development, the alternative contributes to the observance of elements concerning factors intrinsic to the position, characterized by promoting stimulation of the subject's motivation for the performance of their attributions. And, according to the servers' opinion, professional development represents a strong predilection among the constructs evaluated by the participants of the research unit, something that demonstrates consent to obtain qualifications that go beyond the requirements of the position they occupy. Under the theoretical-practical aspect, this action is fundamentally embodied in management by competences which, among its assumptions, involves personnel mobility policies, incentives for education and training, expansion of access to promotion, progression and, consequently, feeling of career achievement (Cruz et al., 2014; Klein & Mascarenhas, 2016; Montezano et al., 2019).

With regard to the contributions of Leadership Development, we highlight that this alternative rests on attending to factors extrinsic to the position, since the endowment of essential competences is associated with the potential to transform managers into leaders, which, consequently, induces the strengthening of relationships humanities at work, as well as expanding opportunities for the development of team members – phenomena capable of establishing links between the employee and the organization, with a positive impact on achieving

satisfactory results (Reatto & Brunstein, 2018; Santos et al., 2021). That said, in the opinion of Barbosa et al. (2016) its conception translates into the development of skills aimed at conflict mediation, strategic thinking, political action, interlocution and conciliation of interests, development of people and teams, and participatory decision-making. It is worth noting, however, that the performance of public leaders requires responsibilities that are not limited to the strict role of encouraging the motivation of employees, but also to make systematic efforts with the Federal Administration to encourage cycles of actions aimed at the development of people, and to ensure, including the integration of bodies and entities involved in the institution's sustainable development.

Finally, this study provides an opportunity to reflect on the theme beyond this research unit. The investigation in a single university campus was the limiting factor of the study, which leads to its replication in other campuses or even in other public administration bodies. Studies compared with other Universities, expansion of the number of samples, application in state and municipal institutions are also new spaces for analysis and future discussions, which may represent the non-exhaustion of this theme.

It should be noted that the results of this study contributed to the promotion of a training program for managers (leaders) and teams, which had the support and consent of the unit's leaders. We emphasize that the experience and participation of effective servants, as well as the support of top management, represent essential conditions to contribute to the applicability of the work.

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