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RESEARCH ARTICLE

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MEASURING MUNICIPAL PERFORMANCE: FROM THE PERSPECTIVE OF THE PUBLIC VALUE THEORY

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ABSTRACT

The article intends to present the results of a research carried out with four municipalities, Brazilian and Italian, comparing the respective ways of using multidimensional performance measurement systems (MPMS's) from the perspective of the Theory of public value creation. Public value means the value created for society by an organization. The subjects covered are presented in the respective literature review. The purpose of this paper is to analyze whether municipality halls, by the use of MPMS's, are able to evidence the public value created. It is a descriptive study, based on comparative research of multiple case studies. Data were obtained through questionnaires and interviews, and their quantitative analysis was performed using descriptive and inferential statistics, using the "R" software, calculating Pearson's linear correlation coefficient, and subsequently, the level of significance. The research illustrates a widespread use of MPMS's in the four prefectures and shows similarities in some critical factors that can influence such measurement. On the other hand, it highlights the superficial implementation of these systems. Furthermore, the results of this study suggest that MPMS's, in the way they are used, do not show the value created by prefectures from the perspective of the Theory of creating public value. At the end, the conclusions and restrictions of the study are presented, as well as recommendations for future research.

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INTRODUCTION

Performance measurement is essential for the modernization of the public sector, but only in the last thirty years has this issue become a priority, including in international doctrine(Bojang, 2020; Sami et al., 2018; Hartley, 2015; Del Bene, 2008; O'Flynn, 2007; Christensen& Laegreid, 2001; Bouckaert et al., 2000; Atkinson et al., 1997; Lapsley & Mitchell, 1996; Carter, 1988; Ridley & Simon, 1943). Achieving the public mission of creating value for society, rather than generating profits, implies one of the main measurement difficulties. Hatry (2002) reinforces the importance and the immanent difficulty of

measuring performance, stating that "unless you are counting the points, it is difficult to know whether you are winning or losing". Osborne and Gaebler (1992) corroborate: "if you cannot recognize the failure, you cannot correct it". As a consequence, managers need accurate information about organizational performance so that they can evaluate, compare and / or correct the same. The importance of measuring performance is suggested when considering the benefit that this process can bring to employees and managers (Baird et al., 2020; Mintrom, & Luetjens, 2015). From the employees' point of view, performance measurement can bring advantages in relation to clearly defined responsibilities and objectives, an objective assessment and, often, greater autonomy. From the manager's point of view, measurement helps to define responsibilities and objectives, in

addition to allowing greater strategic alignment of these. In addition, it allows a better understanding of the process, greater efficiency in the allocation of resources, the possibility of delegation, change in organizational culture and feedback, which, in turn, facilitates the control of the process. According to Poister (2014), performance measures are critical elements of many types of results-oriented management approaches, including strategic management, process improvement efforts and performance management systems. In addition, they produce data that can contribute to more assertive decision making. Measures of production, productivity, efficiency, effectiveness, quality of service and customer satisfaction provide information that can be used by public organizations to manage their programs and operations more efficiently.

They can also help managers to take corrective measures to avoid replicating failures. Ideas, tools and processes are vital resources in measuring performance. Thus, managers need reliable data from an adequate performance measurement. A performance measurement system (PMS) should allow decisions and actions to be taken based on this data, as the system itself quantifies the efficiency and effectiveness of the actions, based on the use of collection, examination, classification, analysis, interpretation and dissemination of appropriate data, thus facilitating communication and decisionmaking (Van Dooren, et al., 2010). Kaplan and Norton (1996) clarify that, although there is a high number of PMS, there is no systematic understanding of why managers use these systems to fulfill their plans. Performance has been measured in several ways, using financial indicators, efficiency, effectiveness, inputs, outputs, and multidimensional performance measurement systems (MPMS) are the most explored (Kaplan& Norton, 2004).

This is due to the completeness that the evolution that these systems have achieved to the present day, comprising internal, external, financial and non-financial indicators. It is observed that the MPMS, are normally designed for use in the private sector and, later, have been brought and adapted to the public reality. While in the private sector they measure the performance of creating shareholder value, in the public sphere, they expand their function, which is why they must be adequate, and they measure the creation of public value (Moore, 1995). Several public institutions have developed their own MPMS, safeguarding their peculiarities and considering the performance variables that best suit their strategy, that is, their government plan. The creation of public management measurement systems is a challenge for the government. It is essential to have adequate MPMSs, which make it possible to measure the public value produced, aiming to increase it, if necessary. In this study, it is intended to understand the effectiveness of these MPMS in highlighting the public value created. And, to broaden perspectives and evaluate empirical results, this article addresses the following question:

How performance measurement systems show the public value created by governments of municipalities in different countries, in this case, Brazil and Italy?.

The objective of this research is to highlight the inefficiency of performance measurement systems used in the public sector, specifically in the municipalities, with regard to creating value for society, considering from the entity's internal communication, even the choice of indicators For this purpose. This work begins with a review of the literature regarding public value and systems for measuring organizational performance. The third section presents the methodology used. Empirical results are presented in the fourth section. The work ends with a discussion of the results and the presentation of the main conclusions, limitations and suggestions for future investigations.

LITERATURE REVIEW

Public Value: Public value refers to the value created for society by an organization; in the context of public management, it is equivalent to shareholder value in the private sector(Benington, & Moore, 2011;

Deidda Gagliardo, 2002; Moore, 1995). In its relationship with society, estimating the public value of government policies and actions involves notions of effectiveness, efficiency and economy, but it must initially consider what is defined as an objective, social priority and why. The theory of creating public value was proposed in 1995 by Mark Moore, Professor of Public Administration at Harvard School of Management, in the book "Creating public value: Strategic management in government", where he used and disseminated the term "public value". It is based on creating value for society from services, products and other resources, which the government must legitimize through actions that converge to create value. According to the author, it is not possible to determine a single paradigm, considering that the process of creating public value involves many meanings (Cluley, et al., 2020). The ideal would be to find a definition broad enough to represent the various components of value, thus allowing the absorption of operational models to generate public value in different contexts. Moore advocates that the concept of "public value" should be proposed in an operational model from which each actor could assign the cultural and ideal meaning that he most considered fair to the resources / objects / knowledge. The author believes in the lack, on the part of the government, of flexibility, innovation and creativity, to meet the requests of the stakeholders that is constantly changing. It suggests the adoption of a new model, which can outsource the production of services, thus not having the mandatory production, which can culminate in the delivery of results in a more efficient and effective way.

Three processes are needed to create public value (Moore, 1995): (1) defining valuable purposes for the public; (2) the creation of an authorizing environment; and, (3) the construction of operational capacity. These three elements constitute the "strategic triangle", which is a valuable guide to support intervention strategies of a public agency, to obtain resources, reaching the consensus necessary to achieve its objectives, and setting objectives proportional to the resources (Stewart, 2020). When developing a strategy for a public organization, the manager must consistently align all elements (resources employed, processes, outputs and results), thus providing the necessary conditions to produce public value (Meynhardt, et al., 2020). In the academic literature and in organizational practice there is no uniformity in the concept of public performance. This can be understood as the degree of achievement, in the results, of preestablished objectives (Van Dooren, et al., 2010), due to an efficient management (achievement of pre-fixed, strategic and operational objectives), efficient (optimization of the use of productive factors) and economic (ability of the company to adequately remunerate the productive factors it is using) (Neely, et al., 1995). However, public values can be summed up on three levels: services (quality and efficiency), results and trust or legitimacy (between citizens and government) (Sadiqi, 2018). Benington (2011) contributes to the evolution of the theory, arguing that the public value must be thought of in two ways, sometimes conflicting: the first, must consider what the public defines as valuable, and, the second must consider what adds value to the public sphere. Furthermore, the concept of public value requires that the focus of measurement be placed on processes and results (impact) (Douglas, & Overmans, 2020), and not only on the resources employed and deliveries, because, for citizens, the main is the real result. This statement corroborates that for the creation of public value "the outcome is an important component" (Bozeman, 2020; Sami, et al., 2018; Alford, &O'Flynn, 2009).

Performance Measurement Systems – PMS: Performance measurement systems (PMS) are management tools, used in planning and control (Neely, et al., 1995). Chart 1 shows, in chronological order, the most widespread PMSs, in doctrine and practice, and their respective authors. There are two types of PMS: traditional and multidimensional. Traditional PMS (TPMS) use only physical indicators, financial resources and efficiency. In contrast, Multidimensional PMSs (MPMSs) consider non-financial, external indicators, critical factors, among others (Irfani, et al., 2019). Each model has weaknesses and strengths, and makes a multidimensional reading of business dynamics, which allows a global view of organizational performance (Endrikat, et al., 2020).

Board 1. Some Performance Measurement Systems

SYSTEM / AUTHOR / YEAR

Tableaux de Bord de Gestion / Satet e Voraz (apud Malo) / 1932

Management by Objectives / Peter Drucker / 1954

Gerenciamento pelas Diretrizes / Akao / 1960

Melhoria de Desempenho / Sink e Tuttle / 1989

Pirâmide de Desempenho (SMART) / Mcnair, Lynch e Cross / 1990

Brignall, Fritzgerald, Johnston, Silvestro e Voss / Brignall, Fritzgerald, Johnston, Silvestro e Voss / 1991

Juran / Juran / 1992

Campos / Campos / 1992

Três Níveis do Desempenho / Rummler e Brache / 1992

Balanced Scorecard / Kaplan e Norton / 1992

PEMP (Progresso Efetivo e Medição de Desempenho) / Adams e Roberts / 1993

Gerenciamento de Processos Empresariais / Harrington / 1993

Ernest e Young / Ostrenga / 1994

Quantum / Hronec / 1994

Human Capital Intelligence / Fitz-Enz / 1994

Navegador Skandia / Edvinsson e Malone / 1995

Moreira / Moreira / 1996

Métricas de Desempenho / Universidade da Califórnia - USA – DoE / 1996

Navegador do Capital Intelectual / Stewart / 1996

Macroprocesso de uma Organização / Brown / 1996

Family Nevada Quality Forum / Family Nevada Quality Forum - USA - DoD / 1997

Sistêmica / Sandia National Laboratories - USA - DoE / 1997

Gerenciamento Total da Melhoria Contínua / Harrington / 1997

Monitor de Ativos Intangíveis / Sveiby / 1997

Integrated Performance Measurement System / Bititci / 1997

Value Chain Scoreboard / Lev / 2001

Performance Prism / Neely, Adams e Kennerly / 2002

EFQM / EFQM / 2003

In this study we will describe the most used model in companies since its creation in 1992, the Balanced Scorecard.

Balanced Scorecard – BSC: Created by Kaplan and Norton in 1992, the Balanced Scorecard (BSC) was born as a performance measurement tool, whose name, according to the authors, reflects the balance between: current and long-term objectives, financial and nonfinancial measures, trend indicators (leading) and events (lagging), and between internal and external measures. This balance is organized around four distinct specific perspectives: 1. Economicfinancial: it must establish long-term financial objectives and serves as a focus for the objectives and measures of other perspectives; 2. Customers: assesses the company's ability to produce products or provide services that meet the customer's needs; 3. Internal business processes: identify the critical internal processes in which the company must improve and achieve excellence; 4. Learning and growth: it is the substrate and support for the other three, because it is the sphere where organizations build effective behaviors, based on their ability to coordinate the capabilities of employees. Further dimensions can be inserted considering the mission characteristic or strategic objectives that are intended to be achieved. The BSC went from being a measurement system to becoming an essential management system (Kaplan & Norton, 1996), and started to be used as the main organizational tool in management processes. An advantage of this model is to try to combine monetary measures related to past performance, with measures related to non-monetary perspective scenarios (Folan &Browne, 2005). The BSC was cited as one of the seventy-five most influential ideas of the 20th century (Bible, et al., 2006) by Harvard Business Review. Details, conceptual and practical, highlight numerous criticisms of the BSC: the causal relationship between the perspectives of suggested measures, are obvious and not causal (Norreklit, 2000);the "time" dimension is not part of the BSC, different time scales must be present in the causeeffect relationship; in addition to excessive emphasis on financial measures (Schneiderman, 1999); lack of a quantitative relationship between financial and non-financial measures (Brusa, 2007);does not consider the possible existence of emerging strategies or to be modified during the process (Norreklit, 2000);metrics can be poorly defined (Bourguignon, et al., 2004). Furthermore, studies suggest typical implementations between 18 and 24 months, which means half of the mandate in the public sphere. As an alternative to the public sphere, Moore suggested an adaptation of the BSC, called the Public Value Scorecard (PVS). PVS follows the public value strategy and emphasizes the three perspectives of the "strategic triangle": social mission, legitimacy and support and operational capabilities. However, some researchers, such as Zhang and Wang (2010), point out the scarcity of theoretical models and empirical evidence in academic literature, about PVS in public organizations, especially studies that point to indicators for the three perspectives of the triangle.

Connection between measurement tools and creating public value: In order to measure the performance of a public entity, we need tools to do it. Performance has been measured in several ways through the use of indicators, financial, efficiency, effectiveness, inputs, outputs, productivity, make or buy, satisfaction / quality (Min Lee, &Braham, 2020), among others. Kaplan and Norton (2004) state that multidimensional performance measurement systems are the most explored due to the completeness that the evolution of these systems has reached to the present day, comprising internal, external, financial and non-financial indicators. These measurement systems encompass processes from the development of the set of metrics to the collection, analysis and interpretation of performance data. It can be used by managers to better allocate resources. The measurement of public value occurs through Multidimensional Performance Measurement Systems (MPMS). According to Moore's perspective, performance in creating public value cannot be measured based on the nature of the action, but based on the ability of the public actor to become more efficient and more effective, especially technologically. (Moore, 1995). According to the author, the public value created can be measured in a multiple perspective, which comprises: (1) the value produced for users / beneficiaries in the face of individual requests; (2) the social impact of community-oriented policies; and, (3) the trust and legitimacy that the public entity enjoys. Therefore, the complexity of the sum of multiple, and not always congruent, interests of the community comes into play (Saeed, & Zubair, 2019). This means going beyond the simple sum of individual interests (O'Flynn, 2007). Furthermore, impact indicators are paramount in monitoring, over the years, social welfare policies, with respective measurements of creating public value or destroying it. At the same time, citizens' confidence and satisfaction indicators should be applied to complement the measurement (Min Lee, &Braham, 2020).It appears that, in the absence of these indicators, the measurement of public value is not rigorous, making it impossible to evidence its

METHODOLOGY

The research described in this article is both quantitative and qualitative. It is a descriptive research that aims to describe the components of a complex system, such as the performance measurement system and the creation of public value (Stake, 2011). The choice of the sample was based on the study and observance of:

1. Number of inhabitants, proportionally, medium and large cities, in the respective countries;

2. Municipalities that have adopted New public Management;

3. Use of a performance measurement system. Thus, the sample was defined as follows: Belo Horizonte and Contagem, in Brazil; Cesena and Venice, Italy. It is emphasized that the comparison is not absolute, but relative, given the huge population difference between the four municipalities involved. The research objects are the performance measurement systems present in these four municipalities, making the research method a comparative study (Heydebrand, 1973) and, at the same time, a multiple case study

(Punch, 1998; Yin, 2003). In this study, we sought to follow the three principles for data collection according to Yin (2003), in order to try to guarantee the legitimacy of the research: 1. It used multiple sources of evidence; 2. A database was built throughout the study; 3. Formed an evidence chain. The tools used for data collection were the questionnaire and the interview. The electronic questionnaire was used so that it could be applied simultaneously to a larger number of individuals. Closed questions were proposed leading to answers more easily, so as not to imply other statements (Phellas, &Balourdos, 2015). The sample of the questionnaires is of probability and simple random, for accessibility. In this study, the populations were the "municipal managers". Two hundred and forty-five online questionnaires were sent to the municipality of Belo Horizonte. Two hundred and fifty for Count. For Cesena, thirteen. And for Venice, forty-three questionnaires. The qualitative instrument of data collection was a semi-structured interview containing nine questions. Designed to investigate certain issues that could not be further investigated in the questionnaires. The sample was also chosen, but it was not probabilistic. Sixteen face-to-face interviews were carried out at the municipal offices, lasting at least 30 minutes and at most 60 minutes, with the four chosen figures: the Mayor, the Advisor, the Secretary-General and the Secretary for Planning and Management. These managers were chosen because, it is believed that they are part of the link between the political world and the strategic scope, in the municipality, and because they are the managers most likely to make decisions. Furthermore, these figures can influence the implementation and use of MPMS. Quantitative data analysis was performed using descriptive and inferential statistics, calculating Pearson's linear correlation coefficient. Subsequently, the significance level was calculated to give greater reliability to the results. The "R" software, version (3.1.3) was used. Content analysis was used to analyze qualitative data using the NVivo 12 Professional software.

RESULTS AND DISCUSSION

To analyze whether the use of performance measurement systems shows public value, we address four main issues: (1) how the performance measurement system is seen; (2) which performance measurement systems are used; (3) improvement in achieving the objectives after the implementation of the performance measurement system specifying the area; and (4) what types of performance indicators are used. Each of these issues is described in the following paragraphs.

How the Performance Measurement System is viewed: Table 1 shows that the organizational performance measurement system is seen in different ways between the two countries. Regarding the variable "Improvement tool", the average importance of Brazilians was significantly lower than that of Italians (P-value = 0.028), indicating that Brazilians tend to give more importance to the fact that the organizational performance measurement system is a tool for improvement than Italians. Adversely, the average importance of Italians in relation to "Means for distributing the result bonus" was significantly lower than that of Brazilians (p-value = 0.000), indicating that Italians give greater importance (1.47) to the fact that system is a means of distributing the bonus of result than the Brazilians (2.49).Regarding "Regulatory compliance", the average importance of Italians was significantly lower than that of Brazilians (p-value = 0.006), indicating that they attach greater importance to this item than the Brazilians. The average importance of Brazilians in relation to "Means to carry out corrective actions" was significantly lower than that of Italians (p-value = 0.000), granting greater importance (2.01) to the fact that the measurement system is a means to carry out corrective actions than Italians (3.00).

Which Performance Measurement Systems are used: Table 2 shows the results of a comparison between municipalities and the variable "Which performance measurement system is used". There was a significant association only between city halls and the variable Balanced Scorecard (p-value = 0.029), and this performance measurement instrument is not used in any of the samples due to the

high cost and the long period for implementation. However, all the managers in Venice and Cesena, 81.82% in Contagem, and 79.35% in Belo Horizonte, affirm the use of a "Own Model" that consists of a model developed internally mirroring the BSC guidelines. None of the municipalities use "Other" models. There is an alignment of information on the measurement system used in the city halls of Venice and Cesena, where 100% of managers know the system used.

Improvement in the achievement of objectives after the implementation of the Performance Measurement System: Table 3 shows the comparison between city halls and the variable "After implementing the performance measurement method, has the achievement of goals improved?". In Cesena, 100% of respondents say ves, followed by Venice (84.62%), Belo Horizonte (75%) and Contagem (71.59%). Most respondents have a converging opinion on improving the achievement of goals after the implementation of the measurement method. Table 4 shows the comparison of the variable "Has it improved in what context?" among the studied municipalities. The result shows that 100% of Cesena's interviewees agree that the achievement of goals has improved in the context of the services provided. In the City Hall of Venice, 90.91% think that there was no improvement in this context. In the context of employee and manager productivity, Italian respondents were unanimous in agreeing that there was an improvement, while in the municipality of Contagem there was a division of the result in 53.97% in agreement, and 46.03% that disagree with an improvement in productivity after the implementation of the tool. This association was significant (p-value = 0.004). Most respondents from the four municipalities agree, in significant numbers, that service costs have not improved. All respondents in Venice say that no improvements were seen in other variables, and the other prefectures mostly agree.

What types of Performance Indicators are used: Table 5 presents the results of the comparison between city halls on "indicators used in measurement". The "Efficiency Indicators" are widely used in Cesena (75.00%), on a medium scale in Belo Horizonte (46.74%) and Contagem (43.18%), while in Venice, they are not used (0, 00%). This association was significant (p-value = 0.002). Organizational behavior indicators are not proposed by most city halls, except for Venice (53.85%). There was a significant association (p-value = 0.001) between the prefectures and the "Production indicators (output)", with the municipalities of Contagem and Cesena being the ones that least use these indicators, while the one in Venice is the one that uses the most (92.31%).Italian cities use the "Management effectiveness indicators" more than the Brazilian ones, and this association was significant (p-value = 0.025). Regarding the "Indicators of quantitative social effectiveness", it is observed that the city that most uses these indicators is Venice (61.54%), while the city of Belo Horizonte uses 29.35%, Cesena 25.00%, and Count only 9.09%. This association between city halls and these indicators was significant (p-value = 0.000).

The "Indicators of qualitative social effectiveness" are not proposed for measurement in any of the studied municipalities. Finally, there was a significant association (p-value = 0.018) between city halls and the use of "Other" indicators, with the municipality of Contagem being the one that most uses other indicators (15.91%), although none responds managed to cite another indicator used, while the prefectures of Cesena and Venice do not use other indicators. The city of Venice is introducing new parameters to innovate in the measurement, trying to show the public value, such as impact indicators of public action. These measures are in an incipient phase, which makes it impossible to measure the public value created.

Content Analysis: Points not emerged from the responses to the questionnaires, were deepened in the interviews. A content analysis was performed using the Nvivo 12 Professional software and the main results are presented. The concept of public value created is seen differently between managers of the Belo Horizonte City Hall, and it is possible to suggest that each manager has his own way of interpreting the performance indicators.

Variable	Average	S.E.1	1stQ ²	2ndQ ³	$3rdQ^4$	P-value ⁵		
I	Brazil	1,83	0,07	1	1,5	2	0,028	
Improvement tool	Italy	2,29	0,21	2	3	3		
Means for distributing the result	Brazil	2,49	0,09	2	2	4	0	
bonus	Italy	1,47	0,13	1	1	2	0	
Regulatory compliance	Brazil	2,22	0,07	1,5	2	3	0,006	
	Italy	1,65	0,28	1	1	2		
Means to carry out corrective	Brazil	2,01	0,08	1	2	3		
actions	Italy	3	0,26	2	3	4	0	

		Tabl	e 2. Which	perform	ance measur	ement s	system is use	d?			
Variable			City Hall								
		BH (n=92)		Contagem (n=88)		Cesena (n=4)		Venice (n=13)		P-value ¹	
Board Tableau	No	90	97,83%	87	98,86%	4	100,00%	13	100,00%	1	
	Yes	2	2,17%	1	1,14%	0	0,00%	0	0,00%	1	
Performance Prism	No	92	100,00%	87	98,86%	4	100,00%	13	100,00%	0,533	
	Yes	0	0,00%	1	1,14%	0	0,00%	0	0,00%		
Balanced Scorecard	No	78	84,78%	85	96,59%	4	100,00%	13	100,00%	0.020	
	Yes	14	15,22%	3	3,41%	0	0,00%	0	0,00%	0,029	
Own Model	No	19	20,65%	16	18,18%	0	0,00%	0	0,00%	0.200	
	Yes	73	79,35%	72	81,82%	4	100,00%	13	100,00%	0,288	
	No	81	88,04%	71	80,68%	4	100,00%	13	100,00%	0.210	
Others	Yes	11	11,96%	17	19,32%	0	0,00%	0	0,00%	0,219	
¹ Fisher's exact	test.										

Table 3. After implementing the performance measurement method, did the achievement of goals improve? City Hall Variable BH (n=92) Contagem (n=88) Cesena (n=4) Venice (n=13) 25,00% 28,41% 0,00% 15,38% 75,00% 63 71,59% 100,00% 11 84,62% Yes 1 Fisher's exact test.

Variable			City Hall									
		BH (n=92)		Contagem (n=88)		Cesena (n=4)		Venice (n=13)		P-value ¹		
Services provided	No	26	37,68%	21	33,33%	0	0,00%	10	90,91%	0,001		
	Yes	43	62,32%	42	66,67%	4	100,00%	1	9,09%	0,001		
Service costs	No	59	85,51%	56	88,89%	4	100,00%	11	100,00%	0.66		
	Yes	10	14,49%	7	11,11%	0	0,00%	0	0,00%	0,66		
Productivity: employees and managers	No	21	30,43%	29	46,03%	0	0,00%	0	0,00%	0,004		
	Yes	48	69,57%	34	53,97%	4	100,00%	11	100,00%			
Others	No	64	92,75%	57	90,48%	3	75,00%	11	100,00%	0.262		
	Yes	5	7,25%	6	9,52%	1	25,00%	0	0,00%	0,363		

Interviewee 01 understands that, regardless of whether the results of the indicators are positive or negative, it is possible to use this information to facilitate and generate value for society. The positive results indicate that the actions taken are good, and the negative results make it possible to observe the actions that are not being carried out as expected and, from there, provide better actions. The other managers believe that the values established are related to measures of effectiveness and efficiency, which are possible indicators of value creation, but interpret this information differently. The managers interviewed in the city of Contagem (05, 06, 7 and 08), believe that if the performance indicators are positive, it means that you are adding value to the community. According to interviewee 05, in this municipality there is a Goals and Results model, directly linked to the Planning Secretariat, which assists in the measurement of actions.

For this manager, the value is created by involving human participation and government transparency, making information available online.Interviewee 06 agrees, since the result of the indicators is a means of measuring what the government is implementing. He mentions that he usually uses several indicators to evaluate performance, mainly financial ones. The managers interviewed in the municipality of Cesena (9, 10, 11 and 12) believe that if the performance indicators are positive it means that you are creating value for the community. According to manager 9, the positive indicator indicates the value created, another issue mentioned was the transparency of this government that provides online information from the municipality for citizens to consult. In the municipality of Venice (respondents 13, 14, 15 and 16), everyone agrees that performance measurement systems are useful and that

				C'4 I	easurer				
Variable		BH (n=92)		Contagem (n=88)		Cesena (n=4)		Venice (n=13)	
No	o 49	53,26%	50	56,82%	1	25,00%	13	100,00%	
Yes	43	46,74%	38	43,18%	3	75,00%	0	0,00%	0,002
No	69	75,00%	63	71,59%	3	75,00%	6	46,15%	0.40=
Yes	23	25,00%	25	28,41%	1	25,00%	7	53,85%	0,187
No	46	50,00%	55	62,50%	3	75,00%	1	7,69%	0.001
Yes	46	50,00%	33	37,50%	1	25,00%	12	92,31%	0,001
No	70	76,09%	65	73,86%	1	25,00%	6	46,15%	0.025
Yes	22	23,91%	23	26,14%	3	75,00%	7	53,85%	0,025
No	65	70,65%	80	90,91%	3	75,00%	5	38,46%	0,000
Yes	27	29,35%	8	9,09%	1	25,00%	8	61,54%	0,000
No	65	70,65%	66	75,00%	3	75,00%	9	69,23%	0.011
Yes	27	29,35%	22	25,00%	1	25,00%	4	30,77%	0,911
No	89	96,74%	74	84,09%	4	100,00%	13	100,00%	0,018
Yes	3	3,26%	14	15,91%	0	0,00%	0	0,00%	0,018
	No Yes No	BH No 49 Yes 43 No 69 Yes 23 No 46 Yes 46 No 70 Yes 22 No 65 Yes 27 No 65 Yes 27 No 89	BH (n=92) No 49 53,26% Yes 43 46,74% No 69 75,00% Yes 23 25,00% No 46 50,00% Yes 46 50,00% No 70 76,09% Yes 22 23,91% No 65 70,65% Yes 27 29,35% No 89 96,74%	BH (n=92) Contag No 49 53,26% 50 Yes 43 46,74% 38 No 69 75,00% 63 Yes 23 25,00% 25 No 46 50,00% 55 Yes 46 50,00% 33 No 70 76,09% 65 Yes 22 23,91% 23 No 65 70,65% 80 Yes 27 29,35% 8 No 65 70,65% 66 Yes 27 29,35% 22 No 89 96,74% 74	BH (n=92) Contagem (n=88) No 49 53,26% 50 56,82% Yes 43 46,74% 38 43,18% No 69 75,00% 63 71,59% Yes 23 25,00% 25 28,41% No 46 50,00% 55 62,50% Yes 46 50,00% 33 37,50% No 70 76,09% 65 73,86% Yes 22 23,91% 23 26,14% No 65 70,65% 80 90,91% Yes 27 29,35% 8 9,09% No 65 70,65% 66 75,00% Yes 27 29,35% 22 25,00% No 89 96,74% 74 84,09%	BH (n=92) Contagem (n=88) Cese No 49 53,26% 50 56,82% 1 Yes 43 46,74% 38 43,18% 3 No 69 75,00% 63 71,59% 3 Yes 23 25,00% 25 28,41% 1 No 46 50,00% 55 62,50% 3 Yes 46 50,00% 33 37,50% 1 No 70 76,09% 65 73,86% 1 Yes 22 23,91% 23 26,14% 3 No 65 70,65% 80 90,91% 3 Yes 27 29,35% 8 9,09% 1 No 65 70,65% 66 75,00% 3 Yes 27 29,35% 22 25,00% 1 No 89 96,74% 74 84,09% 4	BH (n=92) Contagem (n=88) Cesena (n=4) No 49 53,26% 50 56,82% 1 25,00% Yes 43 46,74% 38 43,18% 3 75,00% No 69 75,00% 63 71,59% 3 75,00% Yes 23 25,00% 25 28,41% 1 25,00% No 46 50,00% 55 62,50% 3 75,00% Yes 46 50,00% 33 37,50% 1 25,00% No 70 76,09% 65 73,86% 1 25,00% Yes 22 23,91% 23 26,14% 3 75,00% No 65 70,65% 80 90,91% 3 75,00% Yes 27 29,35% 8 9,09% 1 25,00% No 65 70,65% 66 75,00% 3 75,00% Yes 27	BH (n=92) Contagem (n=88) Cesena (n=4) Venic No 49 53,26% 50 56,82% 1 25,00% 13 Yes 43 46,74% 38 43,18% 3 75,00% 0 No 69 75,00% 63 71,59% 3 75,00% 6 Yes 23 25,00% 25 28,41% 1 25,00% 7 No 46 50,00% 55 62,50% 3 75,00% 1 Yes 46 50,00% 33 37,50% 1 25,00% 12 No 70 76,09% 65 73,86% 1 25,00% 7 Yes 22 23,91% 23 26,14% 3 75,00% 7 No 65 70,65% 80 90,91% 3 75,00% 5 Yes 27 29,35% 8 9,09% 1 25,00% 9	BH (n=92) Contagem (n=88) Cesena (n=4) Venice (n=13) No 49 53,26% 50 56,82% 1 25,00% 13 100,00% Yes 43 46,74% 38 43,18% 3 75,00% 0 0,00% No 69 75,00% 63 71,59% 3 75,00% 6 46,15% Yes 23 25,00% 25 28,41% 1 25,00% 7 53,85% No 46 50,00% 55 62,50% 3 75,00% 1 7,69% Yes 46 50,00% 33 37,50% 1 25,00% 12 92,31% No 70 76,09% 65 73,86% 1 25,00% 6 46,15% Yes 22 23,91% 23 26,14% 3 75,00% 7 53,85% No 65 70,65% 80 90,91% 3 75,00% 5 38,4

indicators are excellent sources to indicate whether this value is being created or not, for society. For managers 14, 15 and 16, it is possible to have an idea of creating value, even when dealing only with the output indicators, and it is sufficient that these indicators are positive. In 2015, the measurement was based on production efficiency. Respondent 13 states that this value creation is linked to the measurement of the result, that is, to the effects and the perception of this measurement by society, and that the municipality of Venice is not yet ready to measure it: When you build a bike lane, the indicator measures the Km of the road, and a possible reduction in traffic, car, or if you increased bicycle traffic and reduced CO2 emissions, among others, is not measured. Some of these things we know, but we are not structured to measure them. (Interviewee n. 13).

FINAL REMARKS

This study is based on economic theories to empirically investigate whether the performance measurement systems used by city halls are able to show the value created for society from the perspective of the Theory of Public Value Creation. The studied municipalities were: Belo Horizonte and Contagem, in Brazil; and, Cesena and Venice, Italy. A theoretical review about the Theory of Public Value Creation and performance measurement systems was elaborated, highlighting respective strengths, main indicators used and limitations. The findings of this study show similarities in some critical factors in both countries, which can influence the measurement of value. They also suggest that for the sample studied, MPMS's are widely used in measuring organizational performance although viewed differently between city halls. Brazilians place greater importance on the fact that the organizational performance measurement system is a means to carry out corrective actions and a tool for improvement, than Italians. On the other hand, the Italians place greater importance on the fact that this system is a means of distributing the bonus and regulatory compliance than the Brazilians. In all municipalities, a specific model was created, inspired by the MPMS and strategic management most used by private organizations around the world, the Balanced Scorecard - BSC. The non-use of BSC by city halls is justified by two main factors: 1- the fact that it is an expensive tool; and, 2 - it takes around 18 to 24 months to implement, which in the public sphere, represents half of the term of office. Levels above 70% of respondents say that the achievement of goals has improved after the implementation of the performance measurement method. According to the managers, this improvement is perceived, mainly: 1- in the productivity of employees and managers (converging results from all city halls); and, 2- at the level of services provided (with the

exception of Venice). The indicators are usually aligned with the strategy proposed in the mandate plan. As shown in the results, city halls use efficiency, effectiveness, behavioral and output indicators more frequently. The municipalities of Belo Horizonte, Contagem and Cesena consider only efficiency and effectiveness indicators as possible indicators of value creation. Although the literature affirms the importance and the essential presence of outcome indicators in the measurement of performance from the perspective of public value (Moore, 1995), these are not proposed and in the rare times they are used they do not reflect the real impact caused, as they there is a difficulty in this measurement and the difficulty of managers in separating what is output from what is outcome. The difficulty of measuring outcome is put by managers as a motivation for not being included in the measurement of organizational performance. This type of indicator should have a continuity of measurement, which does not happen when the term ends and another mayor takes over, since the strategy may be different from the previous one. Only the city of Venice is studying how to implement the outcome indicators. The results of this study suggest that, for the sample studied, MPMS's with their respective indicators selected, measured and monitored, do not show the public value created by city halls from the perspective of Theory of public value creation. This article fosters the debate on measuring performance in the context of creating public value. The study carried out presented limitations regarding its sample, which, when presented on a small number, allows considering the results found only for the population in question. In addition, the peculiarities of Brazilian and Italian cities limit the generalization of discoveries to other countries. It is suggested for future studies, the expansion of the sample in different cultural contexts. It is expected that more studies will be proposed to help develop a better understanding of the performance measurement process in city halls, particularly from the perspective of public value creation theory. In addition, new studies may propose new tools to highlight the public value created through a measurement system based on the well-being of the community.

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