Institutional isomorphism, negativity bias and performance information use by politicians: A survey experiment

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Bert George, Department of Public Administration, Erasmus University Rotterdam, Burgemeester Oudlaan 50, Rotterdam 3000 DR, The Netherlands. Email: george@fsw.eur.nl New Public Management popularized performance measurement in public organizations. Underlying performance measurement's popularity is the assumption that it injects performance information (PI) into decision-making, thus rationalizing the ensuing decisions. Despite its popularity, performance measurement is criticized. In part, this criticism results from the limited knowledge of the conditions under which PI is purposefully used by politicians. We conducted a survey experiment based on real PI with 1,240 politicians. We hypothesized that PI has a positive impact on performance information use (PIU) when PI is benchmarked with coercive, mimetic or normative pressures. Moreover, due to negativity bias we expected this positive impact to be stronger when PI signals low performance. We found that normative pressures had a positive impact on actual PIU while coercive pressures positively affected intended PIU. Negativity bias is only relevant when linked to coercive pressures and intended PIU for analysing the organization's finances.

1 | INTRODUCTION

The advent of New Public Management (NPM)—a focus on accountability, effectiveness and efficiency—has ignited the popularity of performance measurement in public organizations (Hood 1991; Osborne 2006). Performance measurement has been conceptualized as an approach to strategy implementation which includes (a) using performance information to track the realization of strategic goals over time, (b) setting targets for this information and evaluating performance against those targets and (c) comparing performance information across departments and with other organizations (Poister et al. 2013; George and Desmidt 2018). Underlying its popularity is the assumption that

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² WILEY **P** public administration

performance measurement 'works'. Using performance information is assumed to contribute to public service performance because it increases accountability and provides information to rationalize decision-making (OECD 1994, 1997; Hatry 2007). Following this assumption, policy-makers worldwide have seen the benefits of performance measurement and approved legislative initiatives to coerce performance measurement in governments at all levels. Examples include the Government Performance and Results Act in the US, Best Value in the UK, and the Policy and Management Cycle in Flanders (Kravchuk and Schack 1996; Boyne et al. 2002; George et al. 2016).

At first blush, the argument favouring performance measurement seems intuitively agreeable. After the implosion of the unsustainable, oversized, bureaucratic and procedural government of the Weberian bureaucracy, there was a need for a parsimonious approach to resource allocation as well as a focus on output and results in public organizations—the policies of Reagan and Thatcher during the 1980s are often cited as examples of policy-makers addressing this need (Hood 1991; Hughes 2012). However, times have changed. Some of the assumptions underlying NPM have been challenged by the New Public Governance movement due to NPM's focus on control and blame—as opposed to trust and cooperation (Osborne 2006; Koppenjan 2012). Similarly, performance measurement received strong criticism and was found to result in blame games by public sector practitioners (Radin 2006; Hood 2011; Nielsen and Baekgaard 2015). A paradox thus emerges. On the one hand, performance measurement is widely used by public organizations in the belief that it enhances accountability, decision-making and, ultimately, public service performance. On the other hand, criticism of its actual effectiveness in the public sector has never been more potent.

Underlying this paradox is a lack of understanding of the conditions under which performance information is actually being used by public sector practitioners (Moynihan and Pandey 2010). Several studies have linked performance measurement directly to public service performance (e.g., Poister et al. 2013; Gerrish 2016)--thus implicitly assuming that when performance measurement systems are in place, the ensuing performance information is also being used. However, this is clearly not the case as psychological, political and technical factors have influenced performance information use even when performance measurement systems are in place (e.g., Taylor 2011; Nomm and Randma-Liiv 2012). Moreover, performance measurement has predominantly been conceptualized at the organizational, meso-level using survey data from administrative staff (e.g., Pollanen et al. 2017; George and Desmidt 2018), which inhibits our ability to elucidate the conditions under which performance information is used by individuals, at the micro-level, and particularly by politicians. This is no trivial matter as policy-making in many public organizations is part of the political arena where individual politicians use information-often provided by administrative staff-as well as their own political beliefs and agreements to formulate new policies and decisions related to those policies (Nielsen and Baekgaard 2015; George et al. 2017). One could thus argue that performance measurement is particularly effective in public organizations when politicians purposefully use performance information to inform their evaluation and learning processes (Kroll 2015). Indeed, some studies have focused on the purposes and-to some extent-the conditions under which politicians use performance information (e.g., Ter Bogt 2004; Askim 2009). However, these studies do not touch upon whether and how the content of performance information matters to the extent to which this information is actually used by politicians (Kroll 2015).

To expand our understanding of whether and how the content of performance information matters, we use theory on institutional isomorphism (Powell and DiMaggio 1991) to hypothesize that performance information is used more when it is benchmarked with either a coercive, normative or mimetic institutional pressure. In addition, we draw on literature on negativity bias—in particular negative differentiation theory (Rozin and Royzman 2001)—to hypothesize that the impact of institutional pressures on performance information use is stronger when performance information signals low performance. We conduct a randomized survey experiment with 1,240 local politicians from Flemish municipalities (Flanders is the northern, Dutch-speaking part of Belgium) to test these hypotheses. This setting is particularly relevant due to recent NPM-like reforms that have enforced elements of performance measurement upon Flemish municipalities (George et al. 2016). In this experiment, the real performance information on a municipality is used, namely an indicator that measures the financial performance of Flemish

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Our study is original and distinctive from earlier research in six specific ways. First, we address the call for more insights into the conditions under which practitioners purposefully use performance information in public organizations (Moynihan and Pandey 2010; Kroll 2015). Second, by focusing on local politicians we expand the current focus on managers and managerial rationality to politicians and political rationality in explaining performance information use (Nielsen and Baekgaard 2015). Third, by employing a randomized survey experiment based on real information we build on state-of-the-art methods for identifying causal inference that do not suffer from endogeneity issues, which is a weakness of much current public administration research (George and Pandey 2017). Fourth, we extrapolate insights from institutional isomorphism (Powell and DiMaggio 1991)—a well-established theory within the social sciences—towards performance measurement research by identifying whether coercive, normative and mimetic pressures help explain the conditions under which politicians purposefully use performance information. Fifth, we incorporate negativity bias (Rozin and Royzman 2001) as a moderator based on psychological theory, thus using theories and methods from psychology to elucidate public administration phenomena (i.e., behavioural public administration) (Grimmelikhuijsen et al. 2017). Finally, our insights can help practitioners evolve from performance measurement (i.e., generating performance information) toward performance management (i.e., performance information is not only generated but also purposefully used) (Julnes and Holzer 2001).

The main contribution and take-home argument of our article lies in the realization that performance measurement and management in the New Public Governance era are influenced by institutional forces coming from the organization's network (Osborne 2006; Koppenjan 2012). Indeed, we uncover that when performance information is benchmarked with a performance standard set by a central authority, politicians are more likely to use the said information when analysing municipal finances and overall performance. Similarly, politicians are more likely to ask for more information on their performance when performance information is benchmarked with a norm advised by a professional organization. Whether or not the said information is positive or negative seemingly matters less, although we do uncover some evidence for both blame avoidance and credit claiming by politicians. Hence, to move from performance measurement to management in the New Public Governance era, we cannot neglect the institutional forces that shape public organizations and the actors within.

We do, however, need to acknowledge that although coercive and normative pressures had a part to play—our findings were mostly significant at the p < .10 level and mimetic pressures proved to be irrelevant. In part, these findings are the result of our specific empirical setting and we thus urge caution towards a broad generalization of both our significant and insignificant findings. Indeed, further research is needed to assess the impact of institutional isomorphism on performance measurement and management. Moreover, other research found that contingency theory better predicts management tool usage in the public sector than institutional isomorphism (e.g., Lægreid et al. 2007) and our relatively modest results do not provide enough evidence to counterbalance these insights. Nonetheless, we follow other scholars by concluding that institutional forces cannot simply be neglected in research on performance measurement and management in the public sector (e.g., Ashworth et al. 2009).

This article has implications for public administration practice by illustrating that performance dashboards or reports should contain relevant institutional benchmarks (i.e., performance standards set by central authorities or advised standards set by professional organizations) to enhance purposeful usage of this information by politicians. Simply raining down numbers is not enough. Our implications for public administration theory lie in our identified need for a more nuanced approach to the performance measurement debate, which acknowledges the role of institutional, macro-level forces as well as micro-level behaviour and attitudes as opposed to only analysing the meso level of the public organization. In what follows, we elaborate on our theoretical frameworks and define our hypotheses. Next, we discuss the design of our experiment—including balance and manipulation checks—as well as our empirical setting. We move on to our results and conclude by discussing the implications of our findings for practice and theory.

4 WILEY pa public istration

1.1 | Institutional isomorphism and performance information use

In order to study how the content of performance information matters to performance information use, we turn to the theory on institutional isomorphism. While previous public administration studies on performance information use by individuals have often relied on psychological theory due to its focus on explaining individual behaviour (Grimmelikhuijsen et al. 2017), we argue that studying institional isomorphism helps unravel the broader contextual—as opposed to individual—conditions that influence individuals' performance information use. Institutional isomorphism is one of the theoretical mechanisms underlying new institutional theory (Powell and DiMaggio 1991; Scott 2008) and is particularly useful to investigate public sector adoption of administrative innovations (Lowndes and Wilson 2003; Ashworth et al. 2009; George and Desmidt 2014). One of the core assumptions of new institutional theory is that specific institutions formulate rules that need to be followed by individuals if they seek to obtain legitimacy (Powell and DiMaggio 1991; Lowndes and Wilson 2003). Public sector practitioners thus operate in 'an environment dominated by roles, requirements, understandings, and assumptions, beliefs and scripts about what constitutes appropriate or acceptable organizational forms and behaviour' (Decramer et al. 2012, p. S90). As a result of this environment, institutional isomorphism emerges-which 'is a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions' (Powell and DiMaggio 1991, p. 66).

Institutional isomorphism occurs as a result of three specific institutional pressures: coercive (i.e., indicating conformity with formal and informal rules and regulations), mimetic (i.e., common responses to uncertainty based on modelling after other organizations) and normative (i.e., through formal education and advice from professional organizations) pressures (Powell and DiMaggio 1991; Decramer et al. 2012; George and Desmidt 2014). Hence, applied to the context of performance information use, we can expect actors within public organizations (i.e., politicians) to use performance information when it is benchmarked with a coercive, mimetic or normative pressure, even if technically inefficient, in order to gain legitimacy, and the resources necessary to ensure their 'survival' (Meyer and Rowan 1977; Zucker 1987; Powell and DiMaggio 1991).

Coercive pressures in the form of formal regulations have clearly emerged in the context of performance measurement in public organizations. Legislative initiatives such as the Government Performance and Results Act in the US and Best Value in the UK coerced public organizations to formulate, implement and report on performance information to some form of central authority as well as achieve specific performance standards (Barkdoll and Bosin 1997; Boyne et al. 2002). In the empirical setting of this article (i.e., Flemish municipalities), several rules and regulations have also been formulated by the Flemish government and a specific performance standard was set concerning the financial performance (i.e., Self-Financing Margin) of Flemish municipalities (Goeminne and George forthcoming). Hence, extrapolating the insights from institutional isomorphism, we expect that politicians who receive performance information that is benchmarked with this coercive performance standard set by the Flemish government are more likely to use this performance information to ensure their legitimacy as politicians. This results in the following hypothesis:

H1: PI benchmarked with a coercive pressure is positively related to PIU by politicians.

Mimetic pressures indicate that 'organizations may model themselves on other organizations' when confronted with uncertainty (Powell and DiMaggio 1991, p. 69). Applied to performance measurement in public organizations, we can expect public sector practitioners to actively look at what their neighbours are doing and use this information in their evaluation and learning processes. Indeed, public sector evidence has shown that public organizations are influenced by the behaviour of sister agencies in choosing to adopt specific performance management processes (e.g., Berry 1994; Berry and Wechsler 1995; Ashworth et al. 2009). In Flemish municipalities, mimetic behaviour can also be expected as recent NPM reforms have created uncertainty among politicians and administrative staff on how to apply the coerced performance measurement system and achieve performance standards (George and Desmidt 2014). Thus, taking into account the mechanisms underlying institutional isomorphism, we expect that H2: PI benchmarked with a mimetic pressure is positively related to PIU by politicians.

Normative pressures emerge 'primarily from professionalization', which is defined as 'the collective struggle of members of an occupation to define the conditions and methods of their work ... and to establish a cognitive base and legitimation for their occupational autonomy' (Powell and DiMaggio 1991, p. 70). Professional organizations are a specific example of a normative pressure that is especially relevant to public organizations. Indeed, the public sector is typically filled with professional organizations that group a set of public organizations (e.g., National League of Cities in the US) or a set of public sector professions (e.g., Association of City Managers in the Netherlands). Based on institutional isomorphism, one can expect these organizations to impact the activities of their members (e.g., Stillman 1977; Blair and Janousek 2014). Again applied to our empirical setting, Flemish municipalities are grouped by the Association of Flemish Cities and Municipalities which offers advice and support to all its members. In line with institutional isomorphism, we thus expect that politicians who are confronted with performance information benchmarked with a norm advised by the Association of Flemish Cities and Municipalities are more likely to use this performance information as an indication of their professionalization as politicians. This leads to our third hypothesis:

H3: PI benchmarked with a normative pressure is positively related to PIU by politicians.

1.2 | The moderating role of negativity bias

Negativity bias is a theoretical concept from psychology which indicates that human beings in general tend to react more strongly to negative events, experiences or information than to positive or neutral ones—even when all other factors are kept constant (Baumeister et al. 2001; Rozin and Royzman 2001). The opposite of negativity bias is positivity bias—which argues that positive events, experiences or information spark a stronger reaction (Ferrara and Yang 2015). Both biases have been empirically tested in psychology literature, with negativity bias emerging, for instance, in social judgements of other people (Baumeister et al. 2001) and positivity bias emerging, for instance, in the impact of Twitter messages (Ferrara and Yang 2015). Research in public policy and administration has typically centred on negativity bias due to its clear link with some undesired consequences of New Public Management—including 'naming and shaming' as well as 'blame games' based on negative performance information (Hood 2011). Nonetheless, finding evidence of positivity bias might imply that performance measurement in public organizations is not only about naming, shaming and blaming, but perhaps also about credit claiming.

Within public policy and administration studies, negativity bias has typically been used to argue that negative information is more attention-grabbing than positive information, or that fear of costs often outweighs anticipation of benefits. A variety of public policy and administration studies have emerged which validate the central proposition of negativity bias. For instance, low performance of public organizations is argued to spark close attention from the public whereas high performance often stays under the radar (Lau 1982; Hood 2011; James and Moseley 2014)—which implies that politicians tend to focus more on low performance because this could damage their reelection (Soroka 2006). Nielsen and Baekgaard (2015, p. 551) frame this negativity bias in relation to performance information by indicating that 'credit claiming [is] of much less importance than blame avoidance', and illustrate the impact of negativity bias on politicians' attitudes to spending and reform. Moreover, their findings are successfully replicated by George et al. (2017) with Flemish local politicians. Similarly, Nielsen and Moynihan (2017) find that politicians are more likely to attribute responsibility for performance data to administrators but only when low

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performance information is given. Hence, both in theory and based on public policy and administration evidence, negativity bias seemingly matters when assessing the impact of performance information.

Importantly, the previously cited studies typically focus on policy or management preferences resulting from negative information—not on the actual usage of the said information. Nonetheless, we argue that negativity bias might also be applicable to performance information use due to the concept of negative differentiation theory (Rozin and Royzman 2001). Negative information not only results in more attention and/or more fear of costs—it also results in more information-processing by individuals. Negative differentiation theory argues that people tend to spend more time processing negative information than positive (Abele 1985). Performance information use is—in essence—an information-processing activity where bounded rationality implies that one needs to make choices on which information to gather and use. Applied to the institutional pressures-performance information use relation, we argue that institutional pressures have a stronger impact under negative conditions than positive because politicians are inclined to spend more time processing negative information use information. This leads us to our final hypothesis:

H4: The positive relation between PI benchmarked with an institutional pressure and PIU by politicians is stronger when PI signals low performance.

2 | METHODS

2.1 | Empirical context

The case of politicians in Flemish local government is particularly relevant from a new institutional and methodological viewpoint and hence constitutes our empirical case. First, recent legislation by the Flemish government has imposed a performance management cycle as well as a performance standard (i.e., Self-Financing Margin) upon Flemish local governments with the aim of improving their financial performance (George et al. 2016). This legislation ensures that we can use actual performance information related to financial performance (i.e., Self-Financing Margin). Moreover, our defined institutional benchmarks are real as (a) performance standards have been set by the Flemish government, (b) an uncertainty on how to address the reforms is present, thus stimulating mimetic behaviour and (c) professional organizations are offering their advice on how to answer uncertainties (George and Desmidt 2014).

Second, Flemish municipalities have a similar institutional and economic context, which allows us to exclude several otherwise confounding variables (Goeminne and Smolders 2014). Conclusively, by surveying actual local politicians in a homogeneous institutional and economic setting, using real performance information and linking this information to actual institutional pressures, we greatly enhance the realism underlying our survey experiment which is a common criticism of these types of experiments (Margetts 2011; Aguinis and Bradley 2014).

2.2 | Data collection

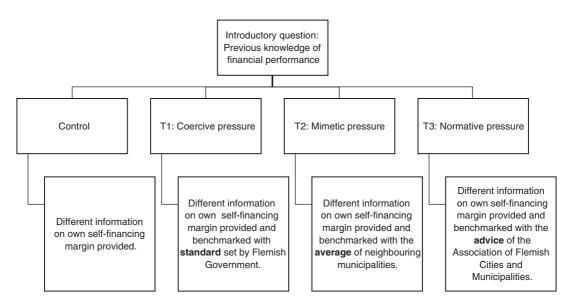
In order to draw valid conclusions, a randomized survey experiment was sent to serving city councillors of all 308 Flemish municipalities. When designing the survey experiment, we took into account the recent recommendations of Baekgaard et al. (2015). Specifically, our survey needed to be up to par with the general survey requirements set for public administration scholarship (Lee et al. 2012; Podsakoff et al. 2012). These requirements include: (a) pretesting the survey, (b) identifying expert informants, (c) offering an incentive (i.e., policy report) to ensure committed respondents, (d) adding labels to response options and highlighting different items, (e) putting the experimental treatment and the dependent variables on different pages of the survey to create psychological separation, (f) guaranteeing anonymity, (g) surveying the entire population to avoid issues with sample frames and (h) including a general statement in our invitation letter to minimize response bias. The survey was sent to the entire population of 7,290 city councillors at the beginning of February 2017. Three reminders were sent and, after three weeks, we had received 1,240 responses corresponding to a response rate of 17 per cent. In order to trace the causal effects of our experimental treatments, respondents were randomly assigned to either a control group or one of three treatment groups by the software package we used (i.e., Qualtrics). However, within each of the four experimental groups, respondents received different information depending on the financial performance (i.e., Self-Financing Margin) of their municipality and the average financial performance of their neighbouring municipalities. Thus, we randomly assigned respondents to different institutional pressures, but did not manipulate the signal of the information (i.e., the financial performance disclosed). The survey design is presented in Figure 1.

Finally, all respondents across the groups were asked the same questions about performance information use (i.e., our dependent variables) as well as some manipulation checks immediately after the experimental treatments.

Our approach resembles that of previous studies (e.g., Nielsen and Baekgaard 2015; George et al. 2017; Nielsen and Moynihan 2017) in which the actual content of information was not manipulated due to ethical concerns about the detrimental effects of deceiving political decision-makers. However, the randomization procedure ensures that the groups are alike on average in terms of the actual content of the information, and the causal effects of the treatments can thus be identified by simply comparing performance information use across experimental groups.

2.4 | Independent variables

Our independent variables aimed to measure a benchmark with a coercive, mimetic or normative institutional pressure. First, we needed to select a relevant performance indicator to benchmark. We focused on the Self-Financing Margin of each municipality. The Self-Financing Margin evaluates the long-term financial stability of a municipality and is calculated by subtracting the exploitation expenditures from the exploitation income, and thereafter subtracting the loan charges which consist of capital repayments and interest from outstanding loans. A positive Self-Financing Margin indicates that the municipality is, in the long run, able to generate sufficient resources from the normal exploitation to cover the charges of taking up a loan. It signals that a municipality is able to make investments without having to take on another loan or invoke additional loan charges (Goeminne and George forthcoming). Following the Local Government Decree, Flemish local governments are obliged by the Flemish government to make sure that their Self-Financing Margin at least equals zero in the final year of their ongoing policy cycle. The



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8 WILEY Po public administration

TABLE 1 Experimental vignettes

Control group	Treatment group 1 (Coercive pressure)	Treatment group 2 (Mimetic pressure)	Treatment group 3 (Normative pressure)
The financial situation of Flemish municipalities is high on the agenda of the Flemish government. For instance, a lot of attention is being paid to the self-financing margin of	The financial situation of Flemish municipalities is high on the agenda of the Flemish government. For instance, a lot of attention is being paid to the self-financing margin of municipalities.	The financial situation of Flemish municipalities is high on the agenda of the Flemish government. For instance, a lot of attention is being paid to the self-financing margin of municipalities.	The financial situation of Flemish municipalities is high on the agenda of the Flemish government. For instance, a lot of attention is being paid to the self-financing margin of municipalities.
municipalities. Based on an analysis of recent accounting information, the self- financing margin in [insert municipality name] is [insert self- financing margin].	Based on an analysis of recent accounting information, the self- financing margin in [insert municipality name] is [insert self- financing margin]. This is [worse/better] than the standard set by the Flemish government, which is a self-financing margin of at least €0.	Based on an analysis of recent accounting information, the self- financing margin in [insert municipality name] is [insert self- financing margin]. This is [worse/better] than the average score of the neighbouring municipalities, which is a self-financing margin of [insert average].	Based on an analysis of recent accounting information, the self- financing margin in [insert municipality name] is [insert self- financing margin]. This is [worse/better] than the advised margin of the Association of Flemish Cities and Municipalities, which is a self-financing margin of at least €0.

data for the Self-Financing Margin were gathered from the annual accounts of each municipality, which can be publicly consulted via the website of the Flemish government's Agency for Home Affairs.¹

Next, we identified whether the Self-Financing Margin of each municipality was (a) below or above the standard set by the Flemish government (i.e., at least zero), (b) above or below the average of the neighbouring municipalities (i.e., we calculated this as the unweighted average of the Self-Financing Margin of all border-sharing municipalities) and (c) above or below the norm advised by the Association of Flemish Cities and Municipalities (i.e., which is also at least zero). The actual Self-Financing Margin is presented in the vignettes. For the first treatment group, the coercive benchmark was added, for the second treatment group the mimetic benchmark was added and for the third treatment group the normative benchmark was added. This resulted in the vignettes presented in Table 1.

2.5 | Dependent variables

Our dependent variables seek to grasp the extent to which politicians intended to purposefully use our specific performance indicator (i.e., the Self-Financing Margin) to evaluate or learn more about the municipality's performance. Importantly, we argue that this usage can differ based on the actual assessment that needs to be made by a politician. Financial indicators might be more fitting to assess the municipal finances, whereas indicators concerning citizen satisfaction might be more fitting to assess the quality of municipal service delivery. We incorporated this nuance by–after our vignettes–including three different statements on performance information use: (1) I will use the Self-Financing Margin when analysing the financial situation of my municipality, (2) I will use the Self-Financing Margin when analysing the overall performance of my municipality and (3) I will use the Self-Financing Margin when analysing the quality of service delivery in my municipality. All variables were assessed on a scale from 0 to 10. In addition, we included a semi-behavioural construct to measure actual purposeful use of performance information. Namely, we asked our respondents to provide their email address if they wanted to learn more about the Self-Financing Margin of their municipality (which is a dichotomous variable, 0 = no email and 1 = email given)–by providing this, we argue that politicians illustrated behaviour geared towards purposefully using this specific performance indicator (Kroll 2015).

¹http://lokaalbestuur.vlaanderen.be/bbc/data-bbc.



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TABLE 2 Descriptives

Variable	Mean	SD	Min	Max	N
Coercive treatment	0.24	0.43	0.00	1.00	1,240
Mimetic treatment	0.25	0.44	0.00	1.00	1,240
Normative treatment	0.25	0.43	0.00	1.00	1,240
PIU – finance	7.22	2.34	0.00	10.00	1,239
PIU – performance	6.67	5.57	0.00	10.00	1,237
PIU – quality	5.79	2.62	0.00	10.00	1,235
PIU – email	0.33	0.47	0.00	1.00	1,240

Table 2 indicates the descriptives of our study. As is apparent, the random assignment of respondents resulted in treatment and control groups of almost equal size. On average, respondents tended to use the Self-Financing Margin more for assessing their municipal finances than for assessing overall performance and quality of service delivery—which is to be expected because the Self-Financing Margin is an indicator of financial performance.

3 | ANALYSIS

3.1 | Balance and manipulation checks

Before embarking upon our actual analysis, we needed to make sure that our control and treatment groups were balanced and we needed to execute manipulation checks to identify whether our treatment was actually effective (Baekgaard et al. 2015). First, as a balance check, we used an independent t-test to identify whether the differences between our control and treatment groups concerning gender, age, years of education, party membership and coalition membership were significant. These were not significant, implying that our groups were well balanced and that we did not need to control for these individual-level variables (Nielsen and Baekgaard 2015). Second, as a manipulation check we included three questions after our vignettes aimed at identifying whether the treatment had affected the respondents: (1) My municipality's Self-Financing Margin is better than the standard set by the Flemish government, (2) My municipality's Self-Financing Margin is better than that of its neighbouring municipalities, (3) My municipality's Self-Financing Margin is better than the advised norm of the Association of Flemish Cities and Municipalities. If, for instance, the coercive treatment has indeed influenced the respondents, we should expect significant impacts on the positive and negative versions of the coercive treatments on the first manipulation question compared to the control group. Hence, for each treatment we compared the effect of receiving either the positive or negative information to being in the control condition. Table 3 confirms our expectation in the sense that those receiving positive information were more likely to respond more positively than the control group (significant positive coefficient) and vice versa (significant negative coefficient). We can now move on to our analyses of H1-H4.

	Coercive pressure		Mimetic press	ure	Normative pressure		
	В	SE	В	SE	В	SE	
Constant	6.109***	0.134	6.128***	0.133	6.404***	0.138	
Positive treatment	1.162***	0.163	1.452***	0.218	1.146***	0.185	
Negative treatment	-2.062***	0.431	-2.236***	0.210	-2.708***	0.395	
Wald chi ²	84.30*	84.30***		213.68***		110.70***	
Ν	600	600		600		604	

TABLE 3 Manipulation checks

Note: Random effects model with a continuous outcome variable (running from 0 to 10) and clustered robust standard errors at the municipal level. p < .10, p < .05, p < .01, p < .01, p < .001.

	PIU – finance ^a		PIU - perfor	rformance ^a PIU – quality ^a		y ^a	PIU – email ^b	
	В	SE	В	SE	В	SE	В	SE
Constant	7.079***	0.191	6.546***	0.125	5.709***	0.150	-0.881***	0.132
Coercive treatment	0.417*	0.191	0.337+	0.179	0.311	0.201	0.146	0.177
Mimetic treatment	-0.013	0.181	-0.069	0.179	-0.181	0.215	0.220	0.174
Normative treatment	0.141	0.175	0.243	0.176	0.202	0.202	0.321+	0.181
Wald chi ²	6.02		6.25		7.70+		3.42	
Ν	1,239		1,237		1,235		1,240	

TABLE 4 Effect of coercive, mimetic and normative pressure treatments on PIU

Note: Clustered robust standard errors (municipal level) in all specifications.

^a Random effects model with a continuous outcome variable.

^b Logistic random effects model with a dichotomous outcome variable.

 $^{+} p < .10, * p < .05, ** p < .01, *** p < .001.$

3.2 | Coercive, mimetic, normative pressures and performance information use

All of the analyses were conducted using random effects modelling with clustered robust standard errors at the municipal level to control for the nested nature of our data (i.e., politicians are nested in municipalities). In Table 4, we present the results of testing H1 to H3. As is apparent from the table, we find support for H1. Respondents who received the coercive pressure treatment were more likely to indicate performance information use for analysing municipal finances and overall municipal performance. However, they were not more likely to indicate performance information use for analysing the quality of municipal service delivery or to actually provide their email address to learn more about our performance information use variables, thus resulting in a rejection of H2. In contrast, there is evidence in support of H3 as the normative pressure treatment encourages respondents to provide their email address in order to learn more about the performance indicator.

3.3 | The moderating role of negativity bias

We split our treatment groups into two subgroups: those receiving positive versus negative performance information-thus effectively resulting in six treatment subgroups-and re-ran our models. In line with H4, we

	PIU – finance ^a		PIU - perfo	mance ^a PIU – quality		ty ^a PIU – email ^b		l _p
	В	SE	В	SE	В	SE	В	SE
Constant	7.083***	0.132	6.554***	0.126	5.719***	0.151	-0.884***	0.131
Coercive positive treatment	0.369+	0.200	0.341+	0.185	0.299	0.213	0.135	0.184
Coercive negative treatment	0.717+	0.430	0.246	0.414	0.306	0.446	0.231	0.300
Mimetic positive treatment	-0.061	0.208	-0.141	0.199	-0.171	0.248	0.297	0.192
Mimetic negative treatment	0.042	0.256	-0.004	0.258	-0.251	0.284	0.130	0.237
Normative positive treatment	0.065	0.186	0.563	0.419	0.163	0.436	0.527	0.359
Normative negative treatment	0.147	0.178	0.195	0.180	0.195	0.212	0.301	0.189
Wald chi ²	6.89		7.74		8.11		4.80	
Ν	1,239	9	1,23	7	1,235	5	1,240	C

TABLE 5 Effect of positive versus negative treatments on PIU

Note: Clustered robust standard errors (municipal level) in all specifications.

^a Random effects model with a continuous outcome variable.

^b Logistic random effects model with a dichotomous outcome variable.

⁺ p < .10, * p < .05, ** p < .01, *** p < .001.

expected that the treatment groups receiving negative performance information would react more strongly than those receiving positive performance information (i.e., a bigger effect size). The results are presented in Table 5. The analysis provides only weak and inconsistent evidence in support of this hypothesis. Negativity bias influences the strength of the coercive pressure treatment on performance information use for analysing municipal finances but, apart from this finding, by far the most results are insignificant in this analysis. Interestingly, there is even some indication of positivity bias (Ferrara and Yang 2015) in the case of the coercive pressure treatment, as respondents receiving the coercive positive treatment are more likely to use the information for analysing their overall municipal performance than those receiving the coercive negative treatment.

4 | DISCUSSION

In this article, we sought to identify the conditions under which politicians purposefully use performance information. We employed new institutional theory—and specifically institutional isomorphism (Powell and DiMaggio 1991)—as well as negativity bias (Rozin and Royzman 2001) to define theory-based hypotheses. A randomized survey experiment based on real information with 1,240 Flemish local politicians was conducted. Our results led to the conclusion that coercive and normative pressures have a part to play in determining politicians' performance information use, whereas mimetic pressures and negativity bias have little impact. These findings have several implications for public administration theory and practice.

Our article indicates that institutional isomorphism has an impact on purposeful performance information use by politicians but only under specific conditions. Specifically, when performance information was benchmarked with a coercive pressure, politicians were more likely to use this information for analysing their municipality's finances as well as overall performance, and when performance information was benchmarked with a normative pressure, politicians were more likely to provide their email address to receive more information. These findings seemingly suggest that coercive pressures outperform normative and mimetic pressures in their capacity to predict purposeful performance information use by politicians. However, we nuance the generalizability of these findings due to the specific public management context of Flemish municipalities (O'Toole and Meier 2015). Indeed, Flemish municipalities have recently been required to adopt a Policy and Management Cycle in order to increase their financial performance (George et al. 2017). One critical aspect of this cycle is that Flemish municipalities need to achieve a financial standard by the end of their policy cycle (Goeminne and George forthcoming). This standard is set by the Flemish government and implies a Self-Financing Margin of at least zero. If the municipality fails to meet this standard, sanctions and penalties will follow. Hence, the coercive pressures within this article have a penalizing mechanism tied to them—these are not simply voluntary standards but need to be achieved to avoid financial consequences. Such consequences are not tied to the mimetic and normative pressures. Future research might assess whether coercive pressures still have an influence when there is no accountability system tied to them.

Moreover, we operationalized mimetic pressures by looking at the average score of neighbouring municipalities. Flemish municipalities differ greatly in size—with about 26 per cent of municipalities having less than 10,000 inhabitants (George et al. 2017). Politicians in bigger municipalities that are surrounded by smaller neighbours might not consider these neighbours as relevant benchmarks and vice versa. Similarly, our normative pressures were operationalized by one specific professional organization—the Flemish Association of Cities and Municipalities. Although this organization seems to trigger politicians into asking for more information about their score, it does not spark the intended purposeful use of performance information. It might be that this organization is not really considered a norm setter for politicians, and other organizations such as political parties or educational institutions might be more relevant. Future research can thus investigate whether our findings differ based on another operationalization of mimetic and normative pressures. Conclusively, although our findings are related to our specific empirical context, we do add to previous public management research that uncovered the importance of coercive and normative pressures in the usage of management tools within the public sector (e.g., Ashworth et al. 2009; Decramer et al. 2012).

Our findings suggest that negativity bias is not as all-encompassing a phenomenon as is sometimes suggested. Negative performance information did matter more than positive information when a coercive benchmark was presented and performance information use centred on analysing the municipality's finances. In all other scenarios, there was no significant evidence for negativity bias. The above-mentioned finding is not surprising taking into account the Flemish context. As mentioned earlier, Flemish municipalities are expected to achieve a standard enforced by the Flemish government (i.e., a Self-Financing Margin of at least zero). Scoring below the said standard implies a failure to meet this requirement, which could result in financial penalties (Goeminne and George forthcoming). Because the Self-Financing Margin is a financial ratio influenced by the financial decisions of the municipality. it makes sense that politicians are more inclined to use this indicator to analyse municipal finances—in particular if they fear potential penalties due to bad performance. Hence, negative differentiation theory (Rozin and Royzman 2001) in our study only seemed to have explanatory power for performance information use when failure to achieve a coerced financial standard emerged and when performance information use centred on analysing municipal finances. We encourage future studies to replicate our findings in different contexts and under different conditions to assess the relevance of negative differentiation theory in public administration and policy settings. Conclusively, we identify that negativity bias might only matter to performance information use under specific conditions whereas its impact on policy and management preferences is seemingly more consistent (e.g., Nielsen and Baekgaard 2015; George et al. 2017; Nielsen and Moynihan 2017).

Although we did not expect to find evidence for positivity bias (Ferrara and Yang 2015), a particular finding did support the moderating effect of positive information. Specifically, politicians who received information that their municipality scored better than the performance standard set by the Flemish government were more inclined to use this performance information when analysing the overall performance of their municipality. This implies that negativity bias strengthens the impact of coercive pressures when analysing the municipality's finances, whereas positivity bias strengthens the impact of coercive pressures when analysing the municipality's overall performance. These findings contradict previous research that indicates that blame avoidance is more important than credit claiming (e.g., Soroka 2006; Hood 2011; Nielsen and Baekgaard 2015). Indeed, it seems that—in our case—evidence for both blame avoidance and credit claiming is uncovered but under different conditions. We thus encourage future scholars to not disregard positivity bias in their analyses and identify the conditions under which positivity bias might be more potent than negativity bias.

Finally, our findings have implications for policy-makers and other public sector practitioners. Simply enforcing performance measurement systems upon public organizations does not necessarily imply that relevant performance information is produced and used (Taylor 2011; George and Desmidt 2018). We illustrate that thorough scrutiny is necessary when devising ways in which performance information will be presented to politicians. Dashboards of performance indicators produced by central authorities are increasingly popular in the public sector and are at the heart of many performance measurement systems (Edwards and Thomas 2005). However, to evolve towards performance management such dashboards should not simply present performance information in the hope that this information will be used (Julnes and Holzer 2001). Rather, specific nudges to the dashboard's design can help increase the likelihood that performance information will be purposefully used by practitioners. Based on our insights we suggest that these dashboards include a benchmark with performance standards set by central authorities as well as norms advised by professional organizations to stimulate purposeful performance information use.

5 | LIMITATIONS

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Institutional isomorphism is a 'middle range theory' in the sense that it allows us to define workable hypotheses while simultaneously adding to the 'grand theory' of new institutionalism (Abner et al. 2017). However, our choice of a survey experiment does imply some limitations in testing a middle range theory. First, due to the nature of survey experiments we had to design specific vignettes to operationalize the institutional pressures. While we believe

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this operationalization to be relevant, it does not fully grasp all aspects underlying these pressures. Other findings might be uncovered when different choices on how to operationalize these pressures are made. Second, we focused on behavioural intentions to purposefully use performance information and a semi-behavioural construct. Whether or not these result in actual performance information use behaviour by politicians during decision-making is unclear. Third, we used a specific performance indicator (i.e., Self-Financing Margin) in a specific setting (i.e., Flemish municipalities). Replication of our findings is thus necessary before we can generalize to a broader population. Fourth, while our experiment allows us to causally test relations, it does not provide insights into the underlying causal mechanisms.

Future research could address these limitations. Other survey experiments could focus on different ways to measure institutional pressures—for instance, coercive pressures can be operationalized through informal rules and mandates as opposed to formal regulation, mimetic pressures can be operationalized by looking at other similar organizations that might not be geographical neighbours and normative pressures can centre on the role of educational institutions. Similarly, another type of performance information can be used—for instance, indicators of citizen satisfaction as opposed to financial performance. Other methods could also be applied. Actual behaviour could be observed by conducting laboratory experiments, observing politicians in their daily practices and analysing formal council reports or minutes of meetings. In-depth case studies could uncover potential causal mechanisms explaining why politicians react to certain information in a specific context. In the end, a mix of both qualitative and quantitative methods is the best approach to studying performance measurement and management in the public sector.

6 | CONCLUSION

We began this article by highlighting the paradox between the popularity of performance measurement in public organizations and the seemingly consistent stream of criticism arguing against performance measurement's effectiveness in a public sector context. In this article, we went beyond this paradox by advocating a nuanced perspective where the question is not necessarily 'does performance measurement work?' but rather 'under which conditions do politicians purposefully use performance information?' Indeed, performance measurement is a highly politicized theme and too often the institutional forces shaping performance information use have been neglected. We illustrated that, in part, whether or not politicians purposefully use performance information is influenced by the manner in which this information is presented to them. Simply 'raining down' numbers might not necessarily work; rather, one could think about benchmarking performance information with performance standards set by a central authority or a norm advised by a reputable professional organization in order to spark a reaction from politicians. In conclusion, we encourage other scholars to explicitly incorporate politics into performance measurement studies thus identifying not only the conditions under which performance information is used by politicians but also how it is actually used.

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14 WILEY Po public administration

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How to cite this article: George B, Baekgaard M, Decramer A, Audenaert M, Goeminne S. Institutional isomorphism, negativity bias and performance information use by politicians: A survey experiment. *Public Admin.* 2018;1–15. https://doi.org/10.1111/padm.12390

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