

Noortje de Boer

Jasper Eshuis

Erik-Hans Klijn

Erasmus University Rotterdam

## Does Disclosure of Performance Information Influence Street-level Bureaucrats' Enforcement Style?

**Abstract:** Governments use different regulatory instruments to ensure that businesses owners or “inspectees” comply with rules and regulations. One tool that is increasingly applied is disclosing inspectees’ performance information to other stakeholders. Disclosing performance information has consequences for street-level bureaucrats because it increases the visibility of their day-to-day work. Using a survey (n = 507) among Dutch inspectors of the Netherlands Food and Consumer Product Safety Authority, this article shows that the disclosure of performance information has an impact on enforcement style at the street level. Findings show that perceived disclosed performance information positively enhances all three dimensions of street-level bureaucrats’ enforcement style (legal, facilitation, and accommodation). This effect is strongest for facilitation and accommodation and weakest for the legal style. Perceived resistance by inspectees partly explains this effect. Contrary to expectations, more perceived disclosure does not result in more but in less perceived resistance of inspectees by street-level bureaucrats.

### Evidence for Practice

- Disclosing performance information may have implications not only for business owners and citizens but also for inspectors. This study shows that disclosure of performance information influences the way inspectors behave during face-to-face encounters with inspectees.
- Disclosure of performance information makes inspectors more active in the sense of intensifying their enforcement style. They especially use their discretionary space to apply a more facilitative and accommodative style, but they also—to a lesser extent—become more legal in their enforcement style.
- Inspectors do not see growing problems of resistance among inspectees as result of disclosing performance information; instead, they perceive less resistance.

Inspectors are classic street-level bureaucrats with considerable autonomy and discretion to make judgments about the applicability of sanctions during interactions with clients (Lipsky 2010) such as business owners. However, they are not the only ones responsible for ensuring that businesses or “inspectees” adhere to rules and regulations. Inspectors function in a network of stakeholders (Klijn and Koppenjan 2016; Meijer 2013) that includes, for instance, consumers, public service organizations, business organizations, and the media. This context triggers regulators to use that network to stimulate compliance of inspectees, such as schools and hospitals. Making the compliance performance of inspectees available to the public is an instrument that helps activate stakeholders operating in networks. This disclosure of performance information allows stakeholders to hold inspectees accountable (Bovens 2007). For example, parents can question schools when they underperform, or consumers can hold firms responsible for poor quality of products (Van de Walle and Bouckaert 2003). The media may catch up

with this information and report negatively, which, in turn, can damage the image of inspectees (see Bennett 2016; Eshuis and Klijn 2012).

Regulators disclose performance information in different ways, such as passively presenting policy information (de Fine Licht 2014; Grimmelikhuijsen and Meijer 2014; Grimmelikhuijsen et al. 2013; Van Erp 2010), actively publishing sanctions (Ayres and Braithwaite 1992; Van Erp 2011), or constructing rating and rankings (Hood, Dixon, and Beeston 2008; Van de Walle and Roberts 2008). Different ways of disclosing performance information by governments vary, for instance, in their degree of completeness, coloring, and usability (Douglas and Meijer 2016). However, they all share the intention of stimulating compliance of inspectees (Meijer 2013; Meijer and Homburg 2009; Van de Walle and Roberts 2008) by activating other stakeholders to act on the information (e.g., Meijer 2013). For instance, consumers may stop eating at a local lunchroom if it is disclosed that it does not comply with hygiene rules and regulations.

Noortje de Boer is a doctoral candidate in the Department of Public Administration and Sociology at Erasmus University Rotterdam in the Netherlands. Her research focuses on the street-level effects of disclosing performance information by governments and other stakeholders, with a special interest in bureaucrat-citizen interactions.

E-mail: n.c.deboer@essb.eur.nl

Jasper Eshuis is associate professor in the Department of Public Administration and Sociology at Erasmus University Rotterdam in the Netherlands. His main research interests are governance, public branding, and various forms of stakeholder involvement and coproduction. His research has been published in journals such as *Public Administration Review*, *Public Management Review*, *Urban Studies*, and *Environment and Planning C*.

E-mail: eshuis@essb.eur.nl

Erik Hans Klijn is professor in the Department of Public Administration and Sociology at Erasmus University Rotterdam in the Netherlands. His research focuses on complex decision making in networks, network management, public-private partnerships, branding, and media influence on complex decision making.

E-mail: klijn@essb.eur.nl

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This article focuses on disclosed information about the compliance performance of inspectees provided *by* government agencies *for* other stakeholders.

Research on disclosing performance information at the street level is scarce, and its impact remains unclear (e.g., Etienne 2015). Scholars usually address other actors, such as public managers (e.g., Moynihan and Pandey 2010), businesses (e.g., Meijer and Homburg 2009), or citizens (e.g., James 2011; Van de Walle and Roberts 2008). The implications for inspectors are largely missing in this debate. The aim of this study, therefore, is to understand the impact of disclosure of performance information on street-level behavior, specifically from the viewpoint of inspectors. This study proposes that investigating disclosed performance information may facilitate clarifications because this instrument might have important implications for inspectors' day-to-day encounters with inspectees and, in turn, their enforcement style (Mascini and Van Wijk 2009; May and Wood 2003).

First and foremost, the work of inspectors is becoming more visible to the public, which makes them more accountable. The way inspectors enforce can be scrutinized by the public, which, in turn, may impact the enforcement style (Schillemans 2008; Winter 2003). Second, inspectees' (non)compliance will be part of the public sphere, which may influence the way they behave toward inspectors during regulatory encounters (Levi-Faur 2011; Murphy 2004). Especially for inspectees who do not comply, risks and uncertainties are increased, which may trigger more resistance at the street level. Inspectors may, as a consequence, enforce in a more legal manner (see Etienne 2015). In sum, disclosing performance information potentially increases the visibility of inspectors and triggers inspectees during regulatory interactions. Therefore, the central research question is, *to what extent does the perceived disclosure of performance information have an impact on inspectors' enforcement style during regulatory encounters?* This research contributes theoretically as it investigates why inspectors enforce the way they do by showing the direct impact of perceived disclosure of performance information (see Ayres and Braithwaite 1992; Meijer and Homburg 2009; Van Erp 2011; Van de Walle and Roberts 2008) and the indirect impact of perceived resistance by inspectees at the front lines (see Etienne 2013, 2015; Van Erp 2009).

This article is structured as follows: The theoretical foundations will be discussed first, including conceptualizations of disclosing performance information, enforcement style, and potentially influential factors such as perceived resistance. Then, the methodological considerations will be presented, followed by the findings based on a survey ( $n = 507$ ) of Dutch inspectors of the Netherlands Food and Consumer Product Safety Authority. Finally, a conclusion and discussion of the implications for understanding enforcement at the front lines and policy implementation are provided.

### Conceptual Framework and Expectations

According to May and Wood (2003, 119), "enforcement style is a concept that is easily understood in the abstract but hard to pin down in the specifics." It has been described as "regulatory style" (Gormley 1998; Kagan 1994), styles of enforcement that vary

(Hutter 1989), or it is intertwined with the concept of enforcement strategies (May and Wood 2003). The general notion of these different labels of enforcement style addresses inspectors' ways of enforcing at the front line as well as their ways of interacting with their inspectees (May and Winter 1999, 2000; May and Wood 2003). Enforcement style is defined as "the character of the day-to-day interactions of inspectors when dealing with representatives of regulated entities" (May and Wood 2003, 119).

Enforcement style can be understood as a single or a multidimensional concept (Kagan 1994; May and Winter 1999, 2000). Traditionally, it was studied along a single dimension. Kagan (1994), for instance, used the rigidity of applying rules to study enforcement style. More recently, however, scholars have shown empirically that enforcement style is multidimensional (e.g., de Boer 2017; Lo, Fryxell, and Van Rooij 2009; May and Winter 1999, 2000). May and Winter (1999, 2000) illustrate that an inspector's typical enforcement style is better understood as being two-dimensional, consisting of formalism and coercion. The formal dimension refers to inspectors' degrees of formality and flexibility, while coercion addresses the levels of trust and willingness of inspectors to use threats. These two dimensions can be applied at the same time or separately. This suggests that enforcement style is multifaceted and more nuanced than originally thought. Therefore, exploring more enforcement style dimensions can facilitate a deeper level of understanding (Winter and May 2011).

Lo, Fryxell, and Van Rooij (2009) make an important contribution and bring forward that enforcement style is composed of five dimensions. The first is *formalism*, which is "adherence to rather rigid legal requirements" (2709). A formalistic style entails enforcing clear penalties, setting strict deadlines, and not considering mitigating circumstances of inspectees. Second, *coercion* highlights "the force of law" (2709). In practice, more coercive inspectors are very willing to implement—or threaten with—sanctions. Third, the *educational* dimension stresses "the communicative function of the law" (2709). Here, educating inspectees and the public, which can, in turn, pressure for more responsible behavior, is central. Fourth, *prioritization* is defined as "pragmatic enforcement that tries to get the most effective result within the given contextual constraints and while considering the circumstances at hand" (2709). A prioritizing enforcement style entails, for instance, prioritizing violations in determining the consequences. Finally, *accommodation* refers to "the reconciliation of the demands of key stake holders in regulatory enforcement" (2710). In other words, inspectors' keep the opinions of others—such as their supervisors—in the back of their mind during regulatory encounters with inspectees.

Lo, Fryxell, and Van Rooij (2009) were the first to show that enforcement style is, indeed, composed of more than two dimensions. There are, however, some limitations to their study. First, their instrument is tested among Chinese inspectors, and it is unclear whether their scales are valid beyond that research context (de Boer 2017). Second, their scales are created ad hoc and not validated using steps such as exploratory and confirmatory factor analyses or interviewing experts (DeVellis 2016). Building on Lo, Fryxell, and Van Rooij (2009), de Boer (2017) has furthered the conceptualization and measurement of enforcement style by redeveloping and validating a measurement scale. This work brings

together the classic conceptualization of the two-dimensional enforcement style (May and Winter 1999, 2000) and the five-dimensional enforcement style (Lo, Fryxell, and Van Rooij 2009).

De Boer (2017) finds that enforcement style is composed of three dimensions, namely, (1) *legal*, which combines both rigid and coercive applications of the law; (2) *facilitation*, incorporating the communicative application of the law and accounting for situational characteristics of inspectees; and, finally, (3) *accommodation*, which entails taking the opinions of others into account. In this study, we use de Boer's (2017) scales because they have been validated using measurement development and validation steps (DeVellis 2016).

### **Disclosure of Performance Information**

There is a trend toward making more information available to the public about the ways that government and its clients are performing (Grimmelikhuijsen and Welch 2012; Van Dooren and Van de Walle 2008; Van Erp 2009, 2010). Although the extent of disclosure of this information varies across governments, it makes the work of both agencies and individual inspectors more visible to the public (e.g., Etienne 2015; Gilad, Maor, and Bloom 2015; Meijer 2013; Maor and Sulitzeanu-Kenan 2013; Winter 2003). Performance information is defined as "systematic information describing the outputs and outcomes of public programs and other organizations—whether intended or otherwise—generated by systems and processes intended to produce such information" (Pollitt 2006, 39). In this study, disclosing performance information refers specifically to disclosed information about the compliance performance of inspectees provided *by* government agencies *for* other stakeholders.

The degree of disclosure of performance information can vary along three dimensions: (1) completeness, (2) coloring, and (3) usability (Douglas and Meijer 2016; Grimmelikhuijsen 2012). First, completeness of the information can range from "basic, brief information without any details or consist of elaborate information in the form of both quantitative and qualitative data" (Douglas and Meijer 2016, 942). Second, coloring of the information refers to how "information about the organization can never be presented in a fully neutral manner" (Douglas and Meijer 2016, 942) and consists of a certain frame. Finally, usability of the information entails that "information can be made available in an accessible format, which is easily understandable for a layperson, or be presented in such a way that only committed experts can understand it" (Douglas and Meijer 2016, 942). Governments vary in the extent to which the performance information they disclose meets these criteria and thus how visible their work is, as well as that of their inspectors.

Notably, the implications of disclosing performance information are twofold. On the one hand, regulators disclose information about the compliance performance of their inspectees. On the other hand, the task of regulators is to ensure compliance of inspectees with rules and regulations (Baldwin, Scott, and Hood 1998; Sparrow 2000). When regulators disclose the compliance performance of their inspectees, their own performance becomes available for monitoring. The less inspectees violate rules and regulations, the more the regulator is seen as performing well.

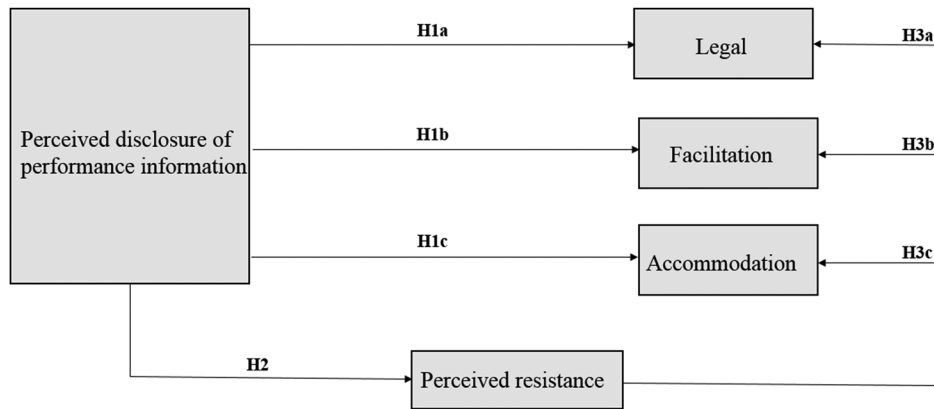
### **Hypothesized Impact of Disclosing Performance Information on Enforcement Style**

Scholars have started to investigate whether this increasing visibility of inspectors' work may help capture variations in enforcement (e.g., Etienne 2015; Winter 2003). Inspectors are classic street-level bureaucrats with substantive discretion and autonomy to make judgments during interactions with inspectees (Lipsky 2010; Raaphorst 2018). The increased visibility of regulators caused by disclosing performance information and the associated reaction of inspectees during regulatory encounters contribute to the uncertainties that inspectors face and, in turn, influence their enforcement style. The disclosure of performance information may have an impact directly and indirectly on inspectors' enforcement style.

A direct relation is hypothesized because disclosing performance information may increase uncertainties inspectors' experience. During regulatory encounters, inspectors face uncertainties because they must apply their professional knowledge to complex inspection situations using limited information. Inspectors must interpret the situation at hand, find out what is happening, and determine the appropriate outcome of the face-to-face interaction (Mascini and Van Wijk 2009; Maynard-Moody and Musheno 2003; Raaphorst 2018). Publishing performance information makes the performance of inspectees part of the public sphere (Van Erp 2009, 2010). Stakeholders can scrutinize not just the inspectees but also the regulators responsible for ensuring compliance (Carpenter 2010; Gilad 2012). The stakeholders are thus empowered to make judgments about the performance of regulators and their inspectors based on the disclosed information (see Carpenter 2010; Klijn and Koppelman 2016; Meijer 2013), which increases the uncertainties that inspectors face.

Therefore, it is expected that inspectors who perceived the disclosure of performance information to be substantive will become more legal, less facilitative, and more accommodative in their enforcement style. First, inspectors are expected to become more legal and thus rigidly apply rules and regulations because sticking to procedures they know can be used to reduce uncertainties. Procedures prescribe fixed elements for their ways of working, thus reducing uncertainties (Maynard-Moody and Musheno 2012; Raaphorst 2018). In addition, procedures provide legitimacy and approval within the organization. Second, inspectors are hypothesized to have a low facilitation style and thus do not substantively provide information on how compliance can be improved or consider the circumstances of inspectees. By sticking to standards and facts, inspectors minimize the uncertainty that unambiguous enforcement behavior is made visible or inspectees are empowered to make judgments about their performance (see Carpenter 2010; Gilad 2012). Finally, inspectors are expected to become more accommodative because when they perceive that other stakeholders, such as their team leaders and colleagues, think similarly about the way they enforce, uncertainty is reduced. In this way, they have "a backing" (Hupe and Hill 2007). The hypotheses read as follows:

**Hypothesis 1a:** Inspectors with a high score on perceived disclosure of performance information will have a high score on legal enforcement style.



**Figure 1 Conceptual Model**

**Hypothesis 1b:** Inspectors with a high score on perceived disclosure of performance information will have a low score on facilitation enforcement style.

**Hypothesis 1c:** Inspectors with a high score on perceived disclosure of performance information will have a high score on accommodation enforcement style.

To gain a deeper understanding of the relationship between disclosure of performance information and enforcement style, it is important to look at indirect effects. Street-level work is inherently relational in nature and characterized by face-to-face encounters (Lipsky 2010). Therefore, the relation between inspector and inspectee is considered and, more specifically, the resistance that inspectors perceive during regulatory encounters.

First, as mentioned earlier, disclosing performance information is intended to stimulate compliance of inspectees (Meijer and Homburg 2009; Van de Walle and Roberts 2008). Disclosing noncompliant behavior embarrasses inspectees by harming their reputation, which, in turn, incentivizes compliance (Etienne 2015; Schillemans 2008; Van Erp 2009, 2010). This risk of reputation damage may increase resistance against inspectors during face-to-face encounters (e.g., Etienne 2015). On top of that, laws about disclosure and its consequences for the inspectee can simply be too complex and exhaustive (Nielsen 2016). This may also lead inspectees to resist more during regulatory encounters by way of asking for clarification or negotiating (see Etienne 2015). Perceived resistance is understood as “doubt about the intentions of the [inspector] to behave cooperatively and benignly toward those [she or he] dominates” (Murphy 2004, 194). It is thus expected that inspectors with a high score on perceived disclosure of performance information will have a high score on perceived resistance.

**Hypothesis 2:** Inspectors with a high score on perceived disclosed performance information will have a high score on perceived resistance.

Second, resistance at the street level may harm the social interactions between the inspector and inspectee. Inspectors operate in a context of sanctioning and limiting citizens’ or organizations’ freedom in order to ensure compliance (Baldwin, Scott, and Hood 1998). Inspectors thus “deliver obligations rather than services” (Sparrow 2000, 2). Delivering

obligations goes hand in hand with negotiations during regulatory encounters, which, in turn, increases uncertainties for inspectors because they may have to improvise on the spot (Etienne 2015; Raaphorst 2018). Much like the hypothesized direct relationship between perceived disclosure of performance information above (see hypotheses 1a, 1b, and 1c), inspectors are expected to reduce these uncertainties and enforce accordingly. The hypotheses read as follows:

**Hypothesis 3a:** Inspectors with a high score on perceived resistance will have a high score on legal enforcement style.

**Hypothesis 3b:** Inspectors with a high score on perceived resistance will have a low score on facilitation enforcement style.

**Hypothesis 3c:** Inspectors with a high score on perceived resistance will have a high score on accommodation enforcement style.

Figure 1 depicts all hypothesized relations.

**Method**

The conceptual model was tested at the Netherlands Food and Consumer Product Safety Authority (Nederlandse Voedsel en Warenautoriteit, NVWA). The NVWA was selected because it is one of the largest regulators in the Netherlands, charged with the important task of overseeing companies involved in food production and product safety in order to ensure public health and animal welfare. The NVWA is currently developing and implementing ways of disclosing information about inspectees’ performance. The NVWA is not developing one universal way for disclosing performance information concerning all its inspection tasks (i.e., public safety, public health, and animal welfare). Each division of the NVWA deals with multiple inspection topics. The NVWA is customizing the way performance information is disclosed for each inspection topic in order to ensure maximum impact on the compliance of inspectees. To illustrate, for some inspection topics, the compliance performance of inspectees is made available by disclosing full inspection reports, while for other topics, traffic-light symbols accompanied by the most important indicators are made available via a smartphone application.

**Data**

The data were collected in October and November 2016 using an online survey with active cooperation of NVWA. The NVWA

is made up of a board of directors, an advisory body, and five divisions: Staff, Management, Veterinary and Import, Agriculture and Nature, and Consumer and Safety. This study focuses solely on inspectors who conduct face-to-face inspection visits, and therefore only inspectors working in the Veterinary and Import, Agriculture and Nature, and Consumer and Safety division were included. Only in these three divisions are inspectors employed who conduct inspection visits. The sample frame consists of all NVWA inspectors ( $n = 1,201$ ) working in the Veterinary and Import, Agriculture and Nature, and Consumer and Safety divisions.

Respondents were assured that their answers would be fully anonymous and confidential. The questionnaire includes new scales that were validated through expert interviews ( $n = 11$ ). The consulted experts consisted of individual inspectors ( $n = 6$ ) and a senior staff committee ( $n = 5$ ). Respondents were informed by email about the study, reminded at two-week intervals, and had six weeks to complete the questionnaire. In total, 679 inspectors completed the questionnaire, resulting in a response rate of 56.5 percent. Nonresponse was present in multiple variables. In all, 172 respondents filled in only 50 percent or less. These respondents were excluded from the analysis, resulting in a total sample of 507 respondents.

In terms of demographics, 71.9 percent were male, 27.7 percent female, and 0.4 percent other. Respondents were between 23 and 73 years old ( $M = 47.99$ ,  $SD = 12.85$ ), and experience as an inspector ranged from 1 to 43 years ( $M = 16.27$ ,  $SD = 11.22$ ). Of the respondents, 33.3 percent worked in the division Consumer and Safety, 34.7 percent in Veterinary and Import, 31.7 percent in Agriculture and Nature, and 0.4 percent in other. The sample is representative of the total population. Only work experience in the sample was slightly lower than that of the total population ( $M = 21.3$ ), which should be considered when interpreting the results.

### Measures

The key variables to be explained are *enforcement style*, *perceived degree of disclosure of performance information*, and *perceived resistance*. An overview of the items of all variables can be found in the appendix.

**Enforcement style.** Drawing on de Boer (2017), enforcement style was measured on three dimensions: (1) legal, (2) facilitation, and (3) accommodation. Legal was measured using five items and facilitation and accommodation using four items on a 10-point scale ranging from “never” (1) to “always” (10). Items included the following: during inspections I focus on “making strict agreements with clients” (legal); “clarifying rules and regulations to clients” (facilitation); “the opinions of inspectors from my team about enforcing” (accommodation). Reliability for all three factors was above the .7 threshold ( $\omega = .80$  [legal],  $\omega = .85$  [facilitation], and  $\omega = .83$  [accommodation]), indicating acceptable reliability.<sup>1</sup>

### Perceived degree of disclosure of performance information.

Building on transparency scholarship, the perception of disclosure of performance information of inspectors was operationalized to consist of three criteria: (1) completeness, (2) coloring, and (3) usability (Douglas and Meijer 2016; Grimmelikhuijsen 2012). For

each criterion, two items were formulated, resulting in a six-item measure. Items included the following: I would typify the inspection results that the NVWA discloses as “complete” (completeness); “without judgment” (coloring); and “understandable for nonexperts” (usability). Exploratory factor analysis showed that the third criteria (usability) entails a separate factor. Since usability was measured on only two items, both items were omitted. The resulting four-item measure is reliable ( $\omega = .89$ ).<sup>2</sup>

**Perceived resistance.** Perceived resistance was based on Braithwaite’s (2003) and Murphy’s (2004) studies targeting taxpayers and measuring their doubt about the intentions of the Tax Authority. Inspired by Murphy’s (2004) scale, five items were formulated to fit the viewpoint of the inspectors and their context. All items were reverse-coded. Items included, “it is possible to satisfy clients completely” and “clients actively help during inspections.” Two items were dropped after an exploratory factor analysis was conducted because of low factor loadings (less than .4) or cross-loadings (greater than .3), resulting in a reliable three-item measure ( $\omega = .71$ ).<sup>3</sup>

**Controls.** There are also several controls included based on the correlation table, namely, rule obedience and several demographics (gender and work experience).

### Common Source Bias

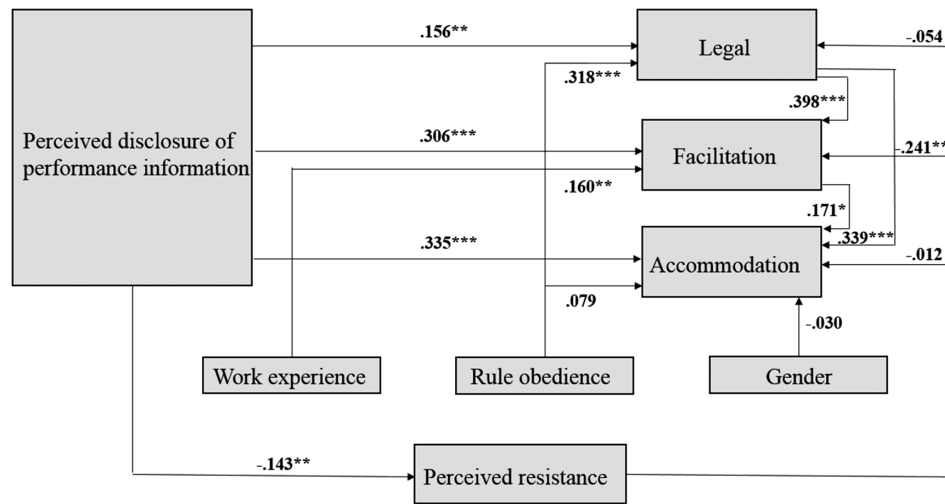
The variables in this study are inherently perceptual, making a survey the appropriate method (George and Pandey 2017; Podsakoff, MacKenzie, and Podsakoff 2012). Potential common source bias was minimized using design remedies (Podsakoff, MacKenzie, and Podsakoff 2012). First, the questionnaire was tested among informants, which increases face validity. Second, the dependent and independent variables were presented on separate pages of the questionnaire. Third, variables that consisted of multiple items were given a different color to increase respondent focus. Fourth, the respondents were incentivized to participate by informing them that a short report would be shared with them and the management of the NVWA. Finally, organizational support ensured that inspectors were informed through different channels and by different people (the researchers, their team leaders, management) about the importance of participating in this research (George and Pandey 2017; Lee, Benoit-Bryan, and Johnson 2012; Podsakoff, MacKenzie, and Podsakoff 2012; Podsakoff and Organ 1986).

Post hoc statistical remedies indicate that common source bias does not substantially impact the findings of this study. First, a confirmatory factor analysis was carried out (Podsakoff et al. 2003). All variables in the conceptual model were loaded on one factor. The fit of the model was assessed using the comparative fit index (CFI), Tucker-Lewis index (TLI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR). Cutoff criteria are between  $\geq .95$  (good fit) and  $\geq .90$  (moderate fit) for CFI and TLI; between  $\leq .06$  (good fit) and  $\leq .08$  (moderate fit) for RMSEA with PCLOSE  $> .05$ ; and  $\leq .08$  (good fit) for SRMR (Hu and Bentler 1999). The model fit ( $\chi^2 = 1537.436$ ,  $df = 171$ ,  $p = .000$ )<sup>4</sup> is very poor, with CFI = .397, TLI = .330, RSMEA = .169, PCLOSE = .000 and SRMR = .160. Second, a common latent factor model was estimated (Podsakoff et al. 2003). All items were

**Table 1** Means, Standard Deviations, and Correlations ( $n=507$ )

	M	SD	1	2	3	4	5	6	7	8
1 Perceived degree of disclosed performance information	5.5	1.98	1							
2 Legal style	8.04	1.06	0.12**	1						
3 Facilitation style	7.40	1.43	0.25***	0.34***	1					
4 Accommodation style	5.80	1.83	0.32***	0.21***	0.32***	1				
5 Perceived resistance	5.68	1.63	-0.11**	-0.04	-0.22***	-0.09	1			
6 Work experience	16.37	11.18	-0.06	0.00	0.15**	0.04	0.00	1		
7 Gender (1 = female)	0.28	0.45	-0.07	-0.04	-0.05	-0.10**	-0.01	-0.34***	1	
8 Gender (1 = other)	0.00	0.06	-0.01	-0.01	0.01	-0.06	0.05	-0.04	-0.04	1
9 Rule obedience	7.57	1.44	0.08	0.31***	0.07	0.10**	-0.05	-0.01	0.01	-0.03

\*\*\* $p < .001$ ; \*\* $p < .05$ .



**Figure 2** Graphical Representation of Results of Structural Equation Modeling

loaded on their theoretical constructs as well as on a first-order factor. An ANOVA testing the  $\chi^2$  differences between the common latent factor model and the conceptual model was not statistically significant ( $\chi^2$  difference = 2.1991,  $df=2$ ,  $p = .3333$ ). Thus, including the common latent factor did not improve the model.

### Findings

Several analyses were conducted to determine whether perceived disclosed performance information impacts inspectors' style during regulatory encounters as well as whether this is mediated by perceived resistance using the statistical program R. More specifically, the packages *lavaan* (Rosseel 2011), *psych* (Revelle 2014), *semTools* (Pornprasertmanit et al. 2013), and *semPlot* (Epskamp 2013) were used. The parameters were estimated using the Satorra-Bentler correction because our data slightly violates assumptions of multivariate normality (Satorra and Bentler 1994).

Table 1 shows the descriptive statistics and the correlations between the perceived disclosure of performance information, the three dimensions of enforcement style, and perceived resistance. The correlations between perceived disclosure of performance information and legal (.12), facilitation (.25), and accommodation (.32) enforcement style are all statistically significant. The three enforcement styles also correlate significantly at the .001 level. Perceived resistance, the mediator in the conceptual model, correlates negatively with a facilitation style (-0.22). Perceived resistance also negatively correlates significantly with perceived

disclosed performance information (-0.11) and does not correlate with a formal or accommodation style, which contradicts our theoretical expectations.

None of the control variables correlates with the independent variable (perceived disclosure of performance information) and the mediator (perceived resistance).<sup>4</sup> A legal style correlates significantly with rule obedience (.31), a facilitation style with work experience (.15), and an accommodation style with the gender dummy (1 = female) (-.10) as well as rule obedience (.10). All other control variables correlating significantly were included in the model.

To further investigate the relation between the variables, structural equation modeling (SEM) is used, specifically, a fully latent structural regression modeling (Kline 2015). SEM is used because of the latent nature of the dependent, independent, and mediator variables and the multiple regressions hypothesized. The model fit ( $\chi^2 = 409.230$ ,  $df=216$ ,  $p = .000$ )<sup>5</sup> is good, with CFI = .923, TLI = .911, RSMEA = .048, PCLOSE = .679, and SRMR = .057.

Table 2 and figure 2 show shows the results of the hypothesized direct and indirect effects. First, the direct effects are discussed. Hypothesis 1a expected that the inspectors who score high on perceived disclosure of performance information will also score high on legal style. The standardized coefficients for legal enforcement style are, indeed, statistically significant, indicating that the greater inspectors perceive the disclosure of performance information to

**Table 2** Results of Structural Equation Modeling

Independent variables	Dependent Variables											
	Legal Style			Facilitation Style			Accommodation Style			Perceived Resistance		
	z	St.SE	St.B	z	St.SE	St.B	z	St.SE	St.B	z	St.SE	St.B
<i>Direct effects</i>												
Perceived degree of disclosed performance information	2.331	0.037	0.156**	5.086	0.038	0.306***	5.447	0.050	0.335***	-2.343	0.028	-0.143**
Perceived resistance	-0.169	0.082	-0.012	-3.084	0.109	-0.241**	-0.097	0.117	-0.054	—	—	—
<i>Indirect effects via perceived resistance</i>												
Perceived degree of disclosed performance information	0.171	0.005	0.002	2.130	0.010	0.035**	0.804	0.008	0.008	—	—	—
<i>Total effects</i>												
Perceived degree of disclosed performance information	2.310	0.038	0.157**	5.557	0.039	0.341***	5.605	0.050	0.343***	—	—	—

\*\*\* $p < .001$ ; \*\* $p < .05$ .

be, the greater their legal enforcement style ( $z = 2.331$ ,  $st.B = .156$ ,  $SE = .037$ ,  $p = .020$ ). Hypothesis 1b expected that when inspectors' perceptions of disclosed performance information increase, their facilitation enforcement style will decrease. This relationship is also statistically significant, but in the opposite direction as hypothesized. This study finds that as the perception of disclosure of performance information of inspectors rises, so does their facilitation enforcement style ( $z = 5.086$ ,  $st.B = .306$ ,  $SE = .038$ ,  $p = .000$ ). This is the exact opposite of the expected relationship. Hypothesis 1c concerns the accommodation enforcement style of inspectors. It was expected that inspectors who score high on the perceived disclosure of performance information will have a high accommodation enforcement style. The standardized coefficients are, as expected, statistically significant ( $z = 5.447$ ,  $st.B = .335$ ,  $SE = .050$ ,  $p = .000$ ). In other words, the greater inspectors perceive the disclosure of performance information to be, the greater their accommodation enforcement style. The effect of disclosure of performance information is about half as small for legal style ( $st.B = .156$ ) as opposed to the effect on accommodation ( $St.B = .335$ ) and facilitation ( $St.B = .306$ ) style.

Our second and third set of hypotheses concern the indirect effect of perceived disclosed performance information on enforcement style through the mediator perceived resistance. Hypothesis 2 stated that a high score on perceived disclosure of performance information will lead to high scores on perceived resistance of inspectees. This relationship is found to be statistically significant, but negatively instead of positively ( $z = -2.342$ ,  $st.B = -.143$ ,  $SE = .028$ ,  $p = .019$ ). When inspectors perceive the disclosure of performance information to be greater, they perceive less resistance by inspectees. The third set of hypotheses expected that high scores on perceived resistance by inspectees will lead to a more legal (hypothesis 3a), less facilitation (hypothesis 3b), and more accommodation (hypothesis 3c) enforcement style. Only the relation between perceived resistance and a facilitation style is statistically significant ( $z = -3.084$ ,  $st.B = -.241$ ,  $SE = .109$ ,  $p = .002$ ). In other words, when inspectors perceive resistance by inspectees to be greater, they become less facilitating in their style.

In this line of reasoning, when investigating the total indirect effects of an inspector's perceived disclosure of performance information on all three dimensions of enforcement style through perceived resistance, one statistically significant relation is found.

The relationship between the inspectors' perception of disclosed performance information and a facilitation style is mediated by their perceived resistance ( $z = 2.130$ ,  $st.B = .035$ ,  $SE = .010$ ,  $p = .033$ ). Notably, the total indirect effect is small but statistically significant. When an inspector scores high on perceived disclosure of performance information, he or she perceives less resistance by inspectees, which leads to a more facilitating enforcement style. See table 3 for an overview of confirmed and disconfirmed hypotheses.

## Conclusion and Discussion

This study contributes to scholarship addressing why street-level bureaucrats vary in their enforcement styles during regulatory encounters. In terms of theory, this study proposed that researching the impact of disclosed performance information as well as the perceived resistance of inspectees can help explain enforcement style variations. On basis of the literature on street-level enforcement (Lo, Fryxell, and Van Rooij 2009; May and Winter 1999, 2000) and disclosing performance information (Gilad, Maor, and Bloom 2015; Maor and Sulitzeanu-Kenan 2013; Van Dooren and Van de Walle 2008; Van Erp 2009, 2010), this study theorized that making the compliance performance information of inspectees part of the public sphere will add visibility and, in turn, uncertainty for

**Table 3** Results of Hypotheses

	Hypothesized Relationship	Confirmed?
1a	Inspectors with a high score on perceived disclosure of performance information will have a high score on legal enforcement style.	Yes
1b	Inspectors with a high score on perceived disclosure of performance information will have a low score on facilitation enforcement style.	No (opposite effect found)
1c	Inspectors with a high score on perceived disclosure of performance information will have a high score on accommodation enforcement style.	Yes
2	Inspectors with a high score on perceived disclosed performance information will have a high score on perceived resistance.	No (opposite effect found)
3a	Inspectors with a high score on perceived resistance will have a high score on legal enforcement style.	No
3b	Inspectors with a high score on perceived resistance will have a low score on facilitation enforcement style.	Yes
3c	Inspectors with a high score on perceived resistance will have a high score on accommodation enforcement style.	No

inspectors and thus stimulate them to adapt their enforcement style. A significant direct effect of inspectors' perception of disclosure of performance information on all three dimensions of enforcement style (legal, facilitation, and accommodation) was found. Also, a significant indirect effect was revealed between perceived disclosure of performance information, perceived resistance, and enforcement facilitation style.

First and foremost, this study enhances the understanding of enforcement and regulation by showing that disclosing performance information, which makes both the compliance performance of inspectees and the activities of the regulators publicly accessible, impacts inspectors' frontline enforcement behavior (see Etienne 2015). More specifically, inspectors intensify all three dimensions (legal, facilitation, and accommodation) of their enforcement style when they perceive the disclosure of performance information to be substantive. Future research is needed to understand the unintended consequences of disclosing performance information for street-level behavior. To illustrate, disclosing performance information is meant to empower other stakeholders to hold regulators accountable (see Bovens 2007; Van de Walle and Roberts 2008). However, such disclosure may result in perverse incentives (Freeman 2002) such as gaming behavior by the regulators (Courty and Marschke 2004; Heckman, Heinrich, and Smith 2009) to avoid increasing visibility or mitigate possible consequences of this. For instance, inspectors may take extra time to complete inspection visits or resist conducting complex inspections such as the complete closure of businesses. Taking more time and prioritizing easy inspection visits may, in turn, boost the inspectors' scores on the performance criteria of the organization. In addition, inspectors may also intentionally leave details out of the inspector report or do the opposite and, thus, include too many details. These unintended consequences may not, in the end, foster but harm the quality of regulation (cf. Freeman 2002; Werner and Asch 2005). Future research connecting street-level enforcement style to these potential unintended could shed more light on this.

Second, opposed to our expectations, inspectors tend to facilitate more rather than less during regulatory encounters when they perceive the disclosure of performance information to be substantive. This could possibly be explained by the relational nature of enforcement (Lipsky 2010). First, disclosing performance information is relatively new and may damage the reputation of inspectees (e.g., Van Erp 2009, 2010) which, in turn, may harm their relationship with regulators. Inspectors may use a facilitation enforcement style because providing information and considering circumstances at hand fosters trust and, in turn, enhances a cooperative relation between inspector and inspectee (e.g., Pautz 2009; Pautz and Wamsley 2012) and mitigates the "hard" signal that disclosing performance information can be. In other words, inspectors may move toward clients (Tummers et al. 2015) by being facilitative in their style. Another explanation could be that because disclosing performance information makes the work of inspectors more visible (e.g., Winter 2003), they become more vulnerable in terms of blame. Inspectors will set out to minimize this risk (Hood 2010) and therefore may provide information and clarifications to ensure the inspectees' knowledge of the implications of disclosure performance information is complete (cf. Nielsen 2016). This may enhance the image that they did everything

they could to communicate with inspectees. Further research (including experimental methods) in which the type of performance information that is collected or utilized is varied is needed to fully understand why inspectors become more facilitative in their enforcement style when they perceive the disclosure of performance information to be greater.

Third, this study also found that the strength of the effect of the perceived disclosure of performance information on the three enforcement style dimensions varies. The effect on the legal enforcement style is only half the effect on the accommodation and facilitation styles. These differences could be explained by the extent to which inspectors can use their discretionary space in each enforcement style. On the one hand, a legal style is closely associated with executing organizational protocols and rigidly sticking to rules and regulations (Baldwin, Cave, and Lodge 2012; de Boer 2017; Lo, Fryxell, and Van Rooij 2009; Mascini and Van Wijk 2009). This style gives inspectors little room to maneuver using their discretionary space. Facilitation and accommodation, on the other hand, are both styles that are less directly determined by organizational procedures. In other words, these two styles are associated with the discretionary space of inspectors (e.g., Lipsky 2010). Thus, the fact that the effect of disclosing performance information on facilitation and accommodation is larger than on a legal style can be explained by the notion that inspectors simply have more room to vary these styles than the legal style.

Finally, a surprising result of this study is that inspectors who perceive disclosure of performance information to be substantive do not perceive high resistance by inspectees. A potential explanation could be that inspectors view disclosing performance information as an effective instrument to enhance compliance (Meijer and Homburg 2009). In that sense, there will be less resistance among inspectees, since disclosure stimulates them to obey the rules and regulations. Future research, however, is needed to really clarify this result. Investigating the types of uncertainties inspectors experience (e.g., Raaphorst 2018) or their coping mechanisms (Tummers et al. 2015) could be especially fruitful.

There are, of course, methodological limitations. Most importantly, using a single survey has been critiqued because it is at risk of common source bias and relationship overestimation (Meier and O'Toole 2013; Podsakoff and Organ 1986). Here, this critique has merit, but potential common source bias was an unavoidable limitation. First and foremost, all variables in our conceptual model are perceptual in nature (George and Pandey 2017). Nonetheless, Podsakoff, MacKenzie, and Podsakoff (2012, 549) highlight that when "both the predictor and criterion variables are capturing individual's perceptions, beliefs, judgments, or feelings," surveys are the right choice of method. Second, other objective data sources were unavailable because of access limitations and privacy concerns within the organization used in this study (George and Pandey 2017). As was already mentioned, perceptions are at the heart of this study and are best collected directly from the population of interest (in this case, inspectors). There are limited possibilities to collect this information in large quantities. Finally, the correlation matrix shows that not all variables are significantly positively related (George and Pandey 2017)—something that would be expected if



common source bias were present (Spector 2006). By using design and ex ante statistical remedies, this limitation was minimized.

There are also other limitations of this study. First, this study explains only part of the variation in enforcement style. Future research should further address inspectors' behavior by studying the impact of other potential explanatory variables, such as political pressure (e.g., Moynihan and Hawes 2012). Second, a single organization was studied in this article. For generalization to other (regulation) organization and contexts, more cross-sector and cross-national research is needed. Future research can benefit from comparative approaches, including comparisons of different regulation systems such as command and control and bottom-up (voluntary based).

All in all, this study contributes to the public management and administration literature by showing that disclosing performance information is relevant for inspectors' enforcement style and that the three dimensions of enforcement style are not mutually exclusive (see also May and Winter 1999, 2000). The study also highlights that inspectors are becoming more active in the sense of intensifying multiple enforcement styles as a result of disclosing performance information. They choose a more facilitative style, a more accommodative style, and, to lesser extent, a more legal style. The study also indicates that for a better understanding of inspectors' enforcement styles, we should look at the interaction between inspectors with their environment, including the strategy of their organization regarding disclosing public information, and inspectors' behavior.

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## Notes

1. McDonald's omega is reported rather than Cronbach's alpha. Cronbach's alpha has been heavily critiqued over the years because it is prone to over- and underestimation, which McDonald's omega is not (e.g., Sijtsma 2009). Notably, the reliability for the three factors does not differ when calculating Cronbach's alpha:  $\alpha = .85$  (legal),  $\alpha = .88$  (facilitation), and  $\alpha = .83$  (accommodation).
2.  $\alpha = .88$
3. The reliability for the three factors does not differ substantially when calculating Cronbach's alpha ( $\alpha = .69$ ).
4. We ran the analysis including dummies for division as controls. However, model fit statistics worsened and indicated model misspecification. Notably, none of our statistically (in)significant results changed substantially.
5. That chi-square is significant is due to the large  $n$  (e.g., West, Taylor, and Wu 2012).

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## Appendix: Survey Items, Core Variables

### Enforcement style

*Legal* ( $\omega = .80$ ;  $\alpha = .80$ )

During inspections, I focus on:

- Implementing the intervention policy by following the letter of the law
- That I enforce in an unambiguous way
- That I make strict agreements with inspectees
- That I execute the inspection as complete as possible
- That I uphold high standards regarding inspectees' compliance with rules and regulations

*Facilitation* ( $\omega = .85$ ;  $\alpha = .85$ ).

During inspections, I focus on:

- Transferring my professional knowledge to inspectees
- Giving indications how to improve compliance to inspectees
- Being as helpful as possible to inspectees
- The circumstances of inspectees that I encounter

*Accommodation* ( $\omega = .83$ ;  $\alpha = .84$ ).

During inspections, I consider:

- The opinions about inspecting of colleagues from my team
- The opinions about inspecting of other teams
- The opinion about inspecting of inspectees
- The opinions about inspecting of my team leader

*Perceived resistance* ( $\omega = .71$ ;  $\alpha = .69$ )

- It is possible to satisfy clients completely (R)
- Clients actively help during inspections (R)
- Clients are forward with information during inspections (R)

*Perceived degree of disclosed performance information* ( $\omega = .89$ ;  $\alpha = .88$ ).

I would typify the inspection results that the NVWA discloses as:

- Complete
- Detailed
- Shedding light on all aspects of an inspection
- Without judgment

### Rule obedience

In general, I am someone who follows the rules even if I disagree with them.

### Gender

What is your gender?

### Work experience

How many years have you been employed as an inspector at the NVWA (or predecessors of the NVWA)?