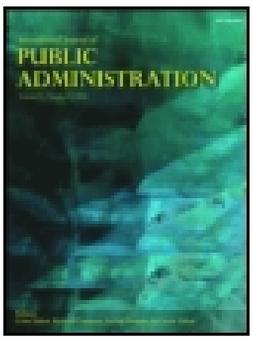

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Street-level Enforcement Style: A Multidimensional Measurement Instrument

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ABSTRACT

This study investigates street-level bureaucrats' enforcement style and its underlying dimensions by developing and validating a multidimensional measurement scale. Developing a measurement scale for enforcement style is relevant because the number of underlying dimensions is contested and studies developing measurement scales are scarce. This complicates cross-sector and cross-national comparisons. Using a survey among inspectors of the Netherlands Food and Consumer Product Safety Authority, street-level enforcement style is found to comprising three dimensions: (1) legal, (2) facilitation, and (3) accommodation. This study contributes to more validated measurement instruments by presenting a 13-item measure that can be used to study street-level bureaucrats' enforcement style.

KEYWORDS

Enforcement style; street-level bureaucracy; regulation; measurement development; scale validation

Introduction

What happens at the frontlines of policy implementation has long been at the center of public management and public administration research (Hupe, Hill, & Buffat, 2016; Lipsky, 2010). Scholars increasingly address specific attitudes, capabilities, decision-making processes, and motivational dynamics of street-level bureaucrats to better understand street-level dynamics (Etienne, 2014; May & Wood, 2003; Maynard-Moody & Musheno, 2000). A diverse range of street-level behaviors are studied, such as policy alienation (Tummers, 2012; van Engen, 2017b; van Engen, Tummers, Bekkers, & Steijn, 2016), coping (Tummers, Bekkers, Vink, & Musheno, 2015), and uncertainty experiences (Raaphorst, 2018). An explicit focus on enforcement at the street is, however, missing from this debate (May & Wood, 2003). This is surprising because street-level enforcement is increasingly addressed by regulation scholars (Lo, Fryxell, & van Rooij, 2009; Mascini & Wijk, 2009; May & Winter, 1999, 2000; May & Wood, 2003; Nielsen, 2007).

Street-level enforcement is better understood as enforcement style of individual street-level bureaucrats. Enforcement style concerns how street-level bureaucrats, such as inspectors or police officers, enforce at the street during interactions with inspectees (May & Winter, 1999, 2000). Street-level enforcement style is, thus, a type of attitude of street-level bureaucrats during inspectee-encounters which can differ depending on the situation at hand. When enforcement style is studied, it is generally understood to be two-dimensional (May & Winter, 1999, 2000; May & Wood, 2003). May & Winter (2011), contrastingly, highlight that there could be even more dimensions. This multidimensionality, however, has barely been further explored (Lo et al., 2009). On top of that, scholars generally agree that street-level bureaucrats have different enforcement styles during exactly the same inspectee-encounter, but what makes up these different styles remains unclear (Etienne, 2014; Nielsen, 2015; Mascini & Wijk, 2009; Winter & May, 2002). It, thus, remains unclear how many dimensions underlie street-level enforcement style and how they are composed (May & Winter, 2011).

This study sets out to address this multidimensional nature of street-level enforcement style and the dimensions underlying it through measurement scale development and validation. Existing studies using measurement scales to study street-level enforcement style are scarce (e.g. Lo et al., 2009; May & Winter, 2000), based on qualitative or mixed-method research (e.g. Mascini & Wijk, 2009; Nielsen, 2015) or are tested among inspectees rather than street-level bureaucrats themselves (e.g. May & Winter, 2000). More importantly, these studies use scales created *ad hoc* and, thus, for the specific purposes of the respective studies. These scales are valuable, but rarely follow all measurement development steps, such as generating–and reviewing an item pool, or running extensive statistical tests for reliability and validity (DeVellis, 2016; van Engen, 2017a). Measurement-development steps ensure valid and reliable scales that allows for cross-sector and

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cross-national comparisons. This, ultimately, contributes to a better understanding of street-level enforcement style which is crucial because the style of enforcing has implications for the implementation of public policies, street-level bureaucrats' interactions with—and treatment of inspectees and, ultimately, the legitimacy of government (Lipsky, 2010).

Therefore, this article investigates: *What dimensions underlie street-level enforcement style and how can they be measured?* by developing as well as validating a multidimensional measurement scale for street-level enforcement style. This study investigates a specific type of street-level bureaucrats, namely inspectors. Inspectors are suitable to study because they have considerable autonomy and discretion when enforcing rules and regulations and while interacting with inspectees. They are, thus, classic street-level bureaucrats (Lipsky, 2010; May & Wood, 2003). However, inspectors work for rule-enforcing organizations focused on delivering obligations by catching and punishing wrong-doers during interactions with inspectees (Sparrow, 2000) making them very powerful street-level bureaucrats (Raaphorst, 2018).

This article is structured as follows. First, the conceptual foundations of enforcement style will be discussed. Second, the empirical part is based on a survey (n = 507) among Dutch inspectors. It reports steps taken for scale development and assesses the psychometric properties using exploratory and confirmatory factor analysis and validity tests. Third, results are presented and discussed with regard to their theoretical contributions as well as how scholars and practitioners may benefit from them in terms of understanding and executing policy implementation.

Theoretical framework

The inspector

Street-level bureaucrats' autonomy and discretion for delivering obligations and interacting with inspectees set the stage for their ways of inspecting at the street-level (Nielsen, 2015; Sparrow, 2000). Street-level bureaucrats are defined as "public service workers who interact directly with citizens in the course of their job, and who have substantial discretion in the execution of their work" (Lipsky, 2010, p. 3). Inspectors implement public policies with considerable autonomy and discretion during inspectee interactions and are, therefore, classic street-level bureaucrats (Lipsky, 2010). The implementation strategies of the public organizations that employ inspectors determine what to enforce, how to enforce, and when to enforce (May & Burby, 1998; May & Winter, 2000; Sparrow, 2000). These organizational boundaries partly determine the parameters within which inspectors can make judgments about the application of enforcement policies during on-site visits with inspectees (Nielsen, 2015; Maynard-Moody & Musheno, 2000). Hence, within these parameters, inspectors have their own discretionary room to behave as they see fit during regulatory encounters (May & Winter, 2000; May & Wood, 2003).

Inspectors, however, also have distinct characteristics. First, most street-level bureaucrats like—teachers, social workers, and physicians—deliver services to clients. Inspectors, however, deliver obligations to inspectees (Sparrow, 2000). Regulators and their inspectors set out to minimize social risks by detecting wrongdoers and punishing them accordingly. By using sanctions, inspectors, thus, limit their inspectees freedom of acting the way they want (Baldwin, Scott, & Hood, 1998; Sparrow, 2000). Second, whereas some street-level bureaucrats often interact with vulnerable inspectees, like social clients or the unemployed (Lipsky, 2010), inspectors mainly interact with a heterogeneous clientele, such as powerful corporations (Braithwaite, 2003; Nielsen, 2015). Third, the inspectees do not have a choice when interacting with inspectors, because there is no exit option (Nielsen, 2015). When an inspector fines a bar owner for violating smoking regulations, for example, this inspectee does not want this interaction and cannot choose to exit it. Inspectees, therefore, often view the intervening interactions with inspectors as unwanted since their intention is to detect criminal behavior and punish accordingly (Nielsen, 2015; Winter & May, 2015). In sum, inspectors are powerful (Raaphorst, 2018) because they limit inspectees' freedom and interactions are obligatory and unavoidable.

Defining enforcement style

Street-level enforcement consists of enforcement actions and enforcement style. Notably, enforcement style is also frequently used to study the ways of enforcing of regulatory agencies (e.g. Braithwaite, Walker, & Grabosky, 1987; Carter, 2017; McAllister, 2010). In this article, however, street-level bureaucrats and not the regulatory agency are the unit of analysis. Both enforcement actions and enforcement style are related because they address the behavior of street-level bureaucrats during the enforcement process, although they are conceptually different (May & Winter, 2000). Enforcement actions address behavioral activities

conducted by street-level bureaucrats before and after a public encounter. They include, for instance, finalizing sanctions, specifying specific indicators that are inspected, or the planning of day-to-day inspectee-encounters, and executing accompanied administrative tasks (May & Winter, 2000). Enforcement actions are enforcement tasks that a street-level bureaucrat executes before s/he visits inspectees and which are, thus, not directly related to the behavior of a specific inspectee.

The behavior of street-level bureaucrats, however, also has a relational dimension because they implement policies during inspectee interactions (de Boer, Eshuis, & Klijn, 2018; de Boer and Eshuis, in press; Maynard-Moody & Musheno, 2000; Pautz, 2010). Bruijn, Ten Heuvelhof, & Koopmans (2007) highlight that enforcing regulations is inherently a game between the inspector and the inspectee. The relational attitude of inspectors during these interactions is captured in their enforcement style. Enforcement style is defined as "the character of the day-to-day interactions of [street-level bureaucrats] when dealing with regulated entities" (May & Winter, 2000, p. 145). During these face-to-face interactions, street-level bureaucrats behave a certain way toward inspectees, predominantly focusing on implementing enforcement policies but also giving advice or tips on how to improve compliance. In sum, the most important difference between enforcement action and style is that the latter is relational coming to light during face-to-face encounters with inspectees but the departure point for decision-making remains the rules that street-level bureaucrats need to enforce (May & Winter, 2000). The focus here is solely on street-level enforcement style.

Understanding enforcement style

There is a general agreement that street-level enforcement style is not fixed, and street-level bureaucrats combine different elements in varying constellations depending on the situation at hand (Mascini, 2013; Pautz, 2010). On top of that, street-level bureaucrats have a different style of enforcement during the same inspectee-encounter (Etienne, 2014; Nielsen, 2015; Mascini & Wijk, 2009; May & Winter, 2000). The way these enforcement style variations are studied, however, differs. Scholars differ in whether enforcement style is understood to vary along on one or along multiple dimensions (Kagan, 1994; Lo et al., 2009; May & Winter, 1999, 2000; May & Wood, 2003; Reiss, 1984). Traditionally, enforcement style was conceptualized as being one-dimensional. The single dimension concerned the rigidness of applying rules (May & Wood, 2003). To illustrate, Kagan (1994) emphasizes that street-level bureaucrats vary in style from being cooperative to more punitive. Reiss (1984) highlights that styles vary from accommodative to more deterrent and sanctioning. Scholars, however, have pointed out that one dimension with two polar opposites—ranging from more cooperative to punitive—is not enough to grasp the complex nature of street-level enforcement style (Braithwaite et al., 1987; Gormley, 1998; May & Burby, 1998).

Indeed, May & Winter (1999) empirically revealed that enforcement style varied along not one but two dimensions, specifically formalism[1] and coercion. May & Winter (2000) define formalism as "the degree of rigidity in interactions that varies from informal conversations and rule-bound instances on the part of the [street-level bureaucrats]" (p. 147) and coercion as "the willingness to issue threats that vary from a trusting inspector not issuing warnings, to a skeptical [street-level bureaucrat] threatening to report or to impose penalties for violations" (p. 147). While Kagan (1994) conceptualized both dimensions on one dimension—the punitive dimension—May & Winter (1999); May & Winter (2000) argue that they should be separated because street-level bureaucrats can vary in the extent to which they internalize each. Put differently, May & Winter (1999; 2000) show that both dimensions can be present—in different degrees—simultaneously which results in different patterns of enforcement styles. Three ideal types of street-level bureaucrat enforcement style were identified, namely: (1) legalistic (high formalism, moderate coercion); (2) flexible (moderate formalism and coercion); and (3) accommodative (low formalism and coercion). May & Winter (2000) thus show that enforcement style is composed of two dimensions and the combination in which they are applied at the street-level result in different enforcement styles of street-level bureaucrats.

May & Wood (2003) also see street-level enforcement style as two-dimensional, but they use slightly different labels than May & Winter (1999); May & Winter (2000). They empirically show that street-level enforcement style consists of (1) formalism and (2) facilitation which replaces the coercion dimension of May & Winter (1999); May & Winter (2000). In line with May & Winter (1999, 2000), formalism is understood as rigidly applying rules and regulations. Facilitation is defined as "the willingness of [street-level bureaucrats] to help regulatees and be forgiving" (May & Wood, 2003, p. 1999). This two-dimensional nature of enforcement style has now become widely accepted and used to study the frontline enforcement behavior of street-level bureaucrats (e.g. Mascini & Wijk, 2009; May & Wood, 2003; Nielsen, 2015).

In a later reflection on their own work, May & Winter (2011) point out that there could be more than two dimensions. Surprisingly, this notion has not been further explored. When enforcement style at the street-level is discussed, the traditional two-dimensional understanding of enforcement style remains the main conceptualization (e.g. Carter, 2017; Yee, Tang, & Lo, 2014; Zhan, Lo, & Tang, 2013). One notable exception is the work of Lo et al. (2009) who do build on the idea of a multidimensional enforcement style and, thus, make an important contribution to the understanding of street-level enforcement style. Lo et al. (2009) conceptualize that enforcement style is constructed of five underlying dimensions.

The first two dimensions of Lo et al.'s (2009) multidimensional concept include May & Winter's (1999) identified formalism and coercion. First, *formalism* stresses the attention paid to the rigidness of the law during interactions by being reserved and legal-oriented (Lo et al., 2009; May & Winter, 1999, 2000; May & Wood, 2003). Examples of the formal dimension would be putting an emphasis on a firm implementation of rules and regulations and not considering mitigating circumstances of inspectees (Lo et al., 2009). Second, *coercion* focuses on the force of the law and, thus, the willingness of street-level bureaucrats to issue and signal threats (Lo et al., 2009; May & Winter, 1999, 2000). Street-level bureaucrats focusing on coming across as an authority, keeping inspectees on their toes and making threats adhere to the coercive dimension of enforcement style.

Third, *educational* highlights the communicative aspect of the law (Lo et al., 2009). Street-level bureaucrats encounter numerous inspectees who did not intend to break laws, but merely do not understand them because they are too complex and exhaustive (e.g. Nielsen, 2015). Focusing on informing and educating inspectees during interactions are examples fitting the educational enforcement style dimension. Fourth, *prioritization* entails pragmatic enforcement. Street-level bureaucrats applying this dimension are focused on prioritizing contextual circumstances on the one hand, like the inspectees' cooperation, while on the other hand also focusing on being effective at the same time (Lo et al., 2009). Prioritizing during inspectee encounters is, thus, concerned with placing more emphasis on contextual circumstances and being effective than on other elements—like informing inspectees (Tummers et al., 2015). Finally, *accommodation* emphasizes "the reconciliation of the demands of key stakeholders in regulatory enforcement" (Lo et al., 2009, p. 2710). Street-level bureaucrats, thus, consider the opinions of other stakeholders like colleagues or supervisors (Lo et al., 2009; Maynard-Moody & Musheno, 2000). Notably, this dimension slightly differs from the other four. Street-level bureaucrats cannot emphasize the opinions of others during inspectee encounters but, merely, keep them at the back of their mind.

The five dimensions of enforcement style are summarized in Table 1. This table provides a definition for each dimension to clarify the conceptual differences between each dimension. Also, an example of an attitude fitting each dimension is given. It is important to note that at the street-level, street-level bureaucrats can employ one or combinations of the enforcement style dimensions depending on the inspectee they are interacting with. None of the enforcement dimensions are likely to be present solely in their pure form. Instead, street-level bureaucrats will combine different degrees of multiple dimensions of enforcement styles during interactions with inspectees which, ultimately, results in their street-level enforcement style (Lo et al., 2009; Mascini & van Wijk, 2009; May & Winter, 2000; May & Wood, 2003).

Table 1. Five dimensions of street-level bureaucrats' enforcement style.

Concept	Dimension	Dimension definition†	Example†
Enforcement style	Formalism	The emphasis a street-level bureaucrat puts on rigid legal requirements during interactions with inspectees	An inspector emphasizing strict requirements that must be met by the inspectee
	Coercion	The emphasis a street-level bureaucrat puts on issuing threats during inspectee interactions	An inspector threatening the inspectee with issuing a sanction
	Educational	The emphasis a street-level bureaucrat puts on educating a client during inspectee interactions	An inspector explaining rules and regulations to the inspectee
	Prioritization	The emphasis a street-level bureaucrat puts on being effective considering contextual constrains during inspectee interactions	An inspector not considering the mitigating circumstances of the inspectee
	Accommodation	The extent to which a street-level bureaucrat takes opinions of other stakeholders into account during inspectee interactions	An inspector taking opinions of colleagues in his/her team into account when interacting with the inspectee

† Note: Definitions and examples are inspired by and adapted from Lo et al. (2009) and May & Winter (1999); May & Winter (2000).

Measuring enforcement style

Lo et al. (2009) took the first important step to further advance the dimensions that underlie street-level enforcement style. There are, however, limitations. First and foremost, Lo et al. (2009) test their enforcement style dimensions in an Asian context, specifically China. Understanding non-Western contexts is, indeed, lacking from the regulatory enforcement literature and, thus, very important (Rooij, Fryxell, Lo, & Wang, 2013). However, encounters between inspectors and those they regulate is context-depended (Mascini, 2013). In this line of reasoning, there are differences between the Chinese regulatory context and other contexts, such as the West (Rooij et al., 2013; Zhan et al., 2013; Zhang, 2016). Due to these cultural differences, it could very well be that the street-level enforcement style dimensions also differ in a Western context. The Western context, specifically the Dutch context, is central in this article. Second, Lo et al. (2009) create their scales *ad hoc* and do not follow measurement development steps (DeVellis, 2016; van Engen, 2017b). For example, no cognitive interviews are conducted to ensure that the dimensions and their operationalization resonate with inspectors. Likewise, no exploratory and confirmatory steps are taken to gain a deeper understanding of the way the five dimensions are made up.

Method

Case

The Netherlands Food and Consumer Product Safety Authority (NVWA) was selected as a case for this research. The NVWA is one of the largest Dutch inspectorates with the core responsibility of overseeing food and product safety to ensure that public health and animal welfare are up to standard. This case was selected because the NVWA has been under a lot of pressure over the past decade due to several media outrages. Reforming the way the NVWA and its inspectors enforce has often been suggested as a way to combat such large-scale debacles as well as the risks for the public (Posthumus, 2015; Weel, 2017).

Data

An online survey was distributed among inspectors between October and November 2016 at the NVWA. Respondents were guaranteed full anonymity and confidentiality. Only inspectors from the divisions Veterinary and Import, Agriculture and Nature and Consumer and Safety (n = 1201) were included, because face-to-face inspection visits are not central to other divisions. A total response rate of 56.5% was achieved (n = 679). A total of 172 respondents were excluded from analysis because they filled in less than 50% of the questionnaire. The total sample, thus, consists of 507 respondents.

Table 2. Sample and population characteristics.

	Sample (n = 507)	Population (n = 1201)
Age (M)	48.99	49.0
Years' work experience (M)	16.27	21.30
Female (%)	27.40	28.73
Male (%)	71.90	71.27
Other gender (%)	0.40	-

Note: No data are available on other genders for the total populations.

This sample includes 71.9% males, 27.4% females, and 0.4% others. Age ranges from 23 to 73 (M = 47.99, SD = 12.85). All three divisions are represented (33.3% Consumer & Safety, 34.7% Veterinary & Import, 32% Agriculture & Nature). Work experience varies between 1 and 43 years (M = 16.27, SD = 11.22). The sample was representative (Table 2). The respondents in the sample only had slightly lower years of work experience than the total population (M = 21.3), which should be considered when interpreting the findings.

Measurement scale: Preparation and analysis

A two-phase approach was used to develop and validate the measurement scale for street-level enforcement style (DeVellis, 2016). The two phases consist of preparation and analysis (van Engen, 2017b).

For the preparation, DeVellis (2016) measurement development guidelines were followed. First, a preliminary item pool was generated by adapting items created by Lo et al. (2009), but also adding to it by building on other scholars who have quantitatively measured street-level enforcement style (Mascini & Wijk, 2009; May & Winter, 1999, 2000). This resulted in five items for each dimension (25 in total). This item pool is larger than the expected final scale, which is common practice, since it allows the researcher to identify the most optimal combination of items (DeVellis, 2016; van Engen, 2017a). All items were measured on a 10-point scale ranging from completely disagree (1) until completely agree (10). Second, the item pool was reviewed by experts (n = 11) to evaluate face validity. Interviewed experts included five senior staffers composed of middle and upper management and six inspectors. After revising the items several times, the experts recognized that the 25-item scale measured the different dimensions of enforcement style and were formulated appropriately for the enforcement context.

For analysis, the statistical program R and packages "lavaan" (Rosseel, 2011), "psych" (Revelle, 2014), "semTools" (Pornprasertmanit, Miller, Schoemann, & Rosseel, 2013) were used to conduct factor analysis and establish internal consistency reliability as well as construct validity (DeVellis, 2016; van Engen, 2017b). The data slightly diverge from multivariate normality. This does not pose a problem for parameter estimates if it is accounted for (Field, 2013). Consequently, the Satorra-Bentler correction for the maximum likelihood estimation was used to calculate the parameters (Satorra & Bentler, 1994). Following Osborne & Fitzpatrick (2012), internal replication was used to ensure the findings are robust and, therefore, the sample was randomly split in half ($1n$ = 253; $2n$ = 254). The first half was used for exploratory factor analysis (EFA) and the second half for confirmatory factor analysis (CFA). Reliability was tested by examining model fit statistics and McDonald's omega. Finally, construct validity was assessed by testing the internal, convergent–and discriminant validity by relating enforcement style to theoretically related and unrelated measured constructs.

Table 3. EFA with oblique rotated factor loadings.

	Item	F1	F2	F3
	Legal dimension (ω = .80)			
	During client encounters, I focus on:			
1	Implementing policy X by following the letter of the law	**0.67**		
2	That I enforce in an unambiguous way	**0.78**		
3	That I make strict agreements with clients	**0.69**		
4	That I execute the client encounter as completely as possible	**0.73**		
5	That I uphold high standards regarding clients' compliance with rules and regulations	**0.80**		
	Facilitation dimension (ω = .85)			
	During client-encounters, I focus on:			
1	Transferring my professional knowledge to clients		**0.76**	
2	Giving indications how to improve compliance to clients		**0.79**	
3	Being as helpful as possible to clients		**0.90**	
4	The circumstances of clients that I encounter		**0.63**	
	Accommodation dimension (ω = .83)			
	During client encounters, I consider:			
1	The opinions about government task A of colleagues from my team			**0.80**
2	The opinions about government task A of other teams			**0.91**
3	The opinions about government task A of other clients			**0.65**
4	The opinions about government task A of my team leader			**0.62**

Note: In this study, the general underlined term clients is replaced by inspectee, government task A is replaced by inspecting, policy X by intervention policy, and client encounter by inspection(s).

Results

Exploratory factor analysis

The first half of the data (n = 253) was used to conduct the exploratory factor analysis. Oblique rotation was used since factors were expected to correlate (Field, 2013). A total of 12 items were excluded. This is in line with the general rule of thumb that the tested preliminary item pool is at least twice the size of the final scale (van Engen, 2017a). First, three items were omitted. These items were reverse coded, but the factors they loaded on could not be explained theoretically. It is, therefore, likely that respondents failed to attend to the positive-negative wording due to the limited number of reverse coded items. To limit method bias, the three items were omitted (DeVellis, 2016; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Second, eight additional items were omitted because they had factor loadings below .4 or cross-loadings above .3 (Field, 2013).

Based on the scree plot and theoretical interpretations of factors, the EFA results in a three-factor model instead of the expected five-factor model (Field, 2013). Table 3 shows the full wording of each item using a template. Underlined words are generic words that can be adjusted and replaced as necessary to fit the context of other studies (van Engen et al., 2016). The three factors are: (1) legal, (2) facilitation, and (3) accommodation. Each factor is a separate dimension that street-level behavior can vary on. An inspector's enforcement style is, then, made up of the way s/he varies along the three dimensions. Notably, rather than being individual dimensions, both formalism and coercion (factor 1), as well as prioritization and educational (factor 2) collapse and make up one latent construct each.

First, while May & Winter (1999); May & Winter (2000)) separate formalism and coercion this study shows they are interconnected. The first factor is composed of three formalism items and two coercion items and labeled the *legal* dimension. The legal dimension is revealed to be defined by the extent to which attention is paid to an inspector to the rigidness and force of the law. Second, the prioritization and education enforcement dimension also make up one factor as opposed to the expected two (Lo et al., 2009). The second factor is composed of three educational items and one prioritization item. This factor is labeled the *facilitation* dimension because it is composed of both the helping aspect highlighted in the educational dimension and forgiving which is part of prioritization. Finally, the *accommodation* dimension formed—as expected—one of the factors.

Confirmatory factor analysis

The second half of the dataset (n = 254) was used to perform the CFA. The fit of the model was assessed using the comparative fit index (CFI), the Tucker-Lewis

index (TLI), the root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR). Cut-off criteria are between ≥ .95 (good fit) and ≥ .90 (moderate fit) for CFI and TLI, between ≤ .06 (good fit) and ≤ .08 (moderate fit) for RMSEA and, finally, ≤ .08 (good fit) for SRMR (Hu & Benter, 1999). The model (χ^2 = 99.191, *df* = 62). The model fit was good with CFI = .929, TLI = .911, RSMEA = .052, PCLOSE = .385, and SRMR = .066.

Descriptive statistics

Table 4 shows the descriptive statistics. It is noteworthy that inspectors' street-level enforcement style is, in general, mostly legal in nature (*M* = 8.01) followed by facilitation (*M* = 7. 36). Inspectors also have a considerable accommodation enforcement style (*M* = 6.08) although the mean is considerably lower than for the other two dimensions.

Internal consistency reliability tests

The internal consistency reliability of a measurement scale concerns the homogeneity of items (DeVellis, 2016). The internal consistency reliability was tested using the model fit indices mentioned above and McDonald's omega. First and foremost, as mentioned earlier all fit indices pass the recommended thresholds indicating good internal consistency reliability. Second, the EFA resulted in a three-factor model. The proposed measure was assessed for reliability using McDonald's omega which is more sensible and less prone to over, and underestimation than the highly-critiqued Cronbach's alpha (Dunn, Baguley, & Brunsden, 2014; Sijtsma, 2009). Reliability for all three factors was above the .7 threshold (ω = .80 (factor 1), ω = .85 (factor 2), and ω = .83 (factor 3) indicating good reliability (Table 3).

Construct validity tests

Construct validity addresses the extent to which the underlying latent construct—here street-level enforcement style—"behaves the way the construct it purports to measure should behave" (DeVellis, 2016, p. 95). The internal construct validity is assessed first, followed by convergent and discriminant validity (DeVellis, 2016).

Internal construct validity

The three factors all measure a different dimension of the latent construct of enforcement style. It is therefore expected that they correlate. Table 5 shows that the legal, facilitation, and accommodation dimension all positively correlate and are, thus, related but distinguishable. Correlations are strongest between facilitation and accommodation (*r* = 0.30) and weakest between legal and accommodation (*r* = 0.16). That all dimensions positively correlate is in line with theories on street-level enforcement style which indicate that none of these styles are going to be solely present. Inspectors will combine the different dimensions during inspectee encounters and vary concerning the extent to which each dimension is internalized. These different combinations of variations make up an individuals' street-level enforcement style (Lo et al., 2009; Mascini & van Wijk, 2009; May & Winter, 2000; May & Wood, 2003).

Convergent construct validity

Convergent validity assesses the extent to which predicted related constructs are indeed related (DeVellis, 2016). The three dimensions of street-level enforcement style were theorized to be related to three constructs (perceived trust in inspectees' compliance, years of work experience, and rule obedience). Trust is perception-based, because perceptions of inspectors inform their regulatory practices and, thus, their enforcement styles (Pautz & Rinfret, 2011). Different relations are expected for each of the three dimensions and the related constructs, because inspectors will employ different combinations of the underlying dimensions of street-level enforcement styles during interactions with inspectees. Each dimension, thus, has a distinct nature (Lo et al., 2009; Mascini & van Wijk, 2009; May & Winter, 2000; May & Wood, 2003). See Appendix I for an overview of all measures and response categories.

Perceived trust in inspectees' performance. The character of the relationship between inspectees and inspectors influences street-level enforcement style (Nielsen, 2007; Pautz & Wamsley, 2012). Contrary to the New Public Management model, which is built

Table 4. Descriptive statistics of dimensions of enforcement style.

Enforcement style dimension	Min.	Max.	*M*	*SD*
Legal	1	10	8.01	1.03
Facilitation	1	10	7.36	1.32
Accommodation	1	10	6.08	1.94

Table 5. Internal construct validity.

		1	2	3
1	Legal	1		
2	Facilitation	0.24***	1	
3	Accommodation	0.16**	0.30***	1

***p < .001; **p < .05

around a lack of trust between principals and agents (Bouckaert, 2012), there is a trusting relation between inspectees and inspectors (Pautz & Wamsley, 2012). Despite the lack of substantive empirical evidence, there seems to be consensus in the literature that more trusting inspectors favor a flexible and facilitating approach during encounters with inspectees (May & Winter, 1999, 2000; Pautz & Wamsley, 2012). May & Winter (2000) emphasize that inspectors with a helpful approach "trust regulatees and sympathize with the difficulties they face in attempting to comply with regulations" (149). A positive relationship is, therefore, expected between an inspectors' trust in an inspectees' compliance and the facilitation dimension of enforcement style (Pautz, 2010; Pautz & Rinfret, 2011; Pautz & Wamsley, 2012). The results in Table 5 confirm the predicted relation (*st.B* = 0.155). This, indeed, suggests that the consensus of the relation between trust and a facilitative approach during face-to-face inspection visits (Pautz, 2010; Pautz & Rinfret, 2011; Pautz & Wamsley, 2012) is, indeed, supported by empirical evidence.

Years of work experience. In addition to the character of inspector-inspectee relations, it has long been acknowledged that individual characteristics of inspectors matter for the way they enforce (e.g. Hawkins, 1984; Gormley, 1998). Hawkins (1984), for instance, showed that the older the inspectors, the more flexible they were. Likewise, Kaufmann (2017) emphasize that inspectors with little work experience exhibit "a more policing, nit-picking attitude" than colleagues with more years of work experience. The newer inspectors do not have the confidence yet to determine which violations and risks can be overlooked and where they can be facilitating (Kaufmann, 2017; Hawkins, 1984). In this line of reasoning, a positive relationship is expected between years of work experience and the facilitation enforcement style dimension. Table 5 confirms that older inspectors are more comfortable with providing advice and sympathizing with the circumstances of inspectees (facilitation dimension) than their younger colleagues (*st.B* = 0.202).

Rule obedience. Next to demographic characteristics like years or work experience, personality characteristics matter for street-level enforcement style. It is expected that inspectors who are very rule obedient will apply the legal and accommodation dimension more extensively. First, rule obedience is a personality characteristic and inspectors possessing this will be more comfortable with being strict and formal (van Kleef, Schott, & Steen, 2015). It is, therefore, hypothesized that there is a positive relationship between the legal dimension and an inspectors' rule obedience. Second, reliable judgments are central to the legitimacy of regulators (Tujin, Janssens, Robben, & Van Den Bergh, 2012). Rule-obedient inspectors are hypothesized to be more accommodative because they turn to other stakeholders, like their team leaders and colleagues, for support on how to make judgments and, in turn, enforce (Maynard-Moody & Musheno, 2000). Table 5 shows that both expectations are confirmed (*st.B* = 0.308 and *st.B* = 0.134, respectively).

Table 6. Convergent and discriminant validity.

	Street-level enforcement style dimensions		
	Legal	*Facilitation*	*Accommodation*
Convergent validity			
Trust in inspectees' compliance	0.035	0.155*	−0.039
Rule obedience	0.308***	0.031	0.134*
Years' work experience	−0.053	0.202**	−0.077
Discriminant validity			
Traditional media usage	0.027	−0.083	0.044
Social desirability	−0.013	−0.073	0.084

The standardized coefficients from the Structural Equation Model (SEM) are reported.
***$p < .00$; **$p < .05$; *$p < .01$

Discriminant validity

Discriminant validity assesses whether expected unrelated constructs are, indeed, unrelated (DeVellis, 2016). Two unrelated constructs are traditional media usage (measured in hours) and social desirability (measured by 1 item and a 10-point scale ranging from completely disagree to completely agree). Table 6 shows that both constructs are, indeed, not correlated with all three dimensions of street-level enforcement style.

Conclusion and discussion

Understanding street-level enforcement is important for understanding policy implementation (May & Wood, 2003). This study has both a theoretical and methodological point of departure. Theoretically, there is an unsolved conceptual puzzle concerning the nature and number of dimensions underlying street-level enforcement style. Methodologically, there is a lack of a validated and psychometrically sound measurement scale which complicates cross-sector and cross-national comparisons. This study investigates and operationalizes street-level enforcement style by building on the classic work of May & Winter (1999); May & Winter (2000) and the more recent work of Lo et al. (2009). By revealing three dimensions underlying street-level enforcement style (legal, facilitation, and accommodation), this study contributes to a deeper

understanding of street-level enforcement behavior generally and takes the first step toward understanding individual variations specifically.

Theoretically, this study contributes knowledge on how we can understand street-level behavior, and specifically enforcement style by addressing its underlying dimensions (May & Winter, 2011). This study, thus, conceptually contributes to the concept of enforcement style. While May & Winter (1999); May & Winter (2000)) and May & Wood (2003) argue for a two-dimensional conceptualization, Lo et al. (2009) advocates a five-dimensional underpinning of enforcement style. The findings of the measurement development and validation analysis in this study adds to this dimensionality discussion and shows that—in a Western context—street-level enforcement style is composed of three dimensions. First, the legal dimension is constructed of both the rigidness (*formalism*) and force of the law (*coercion*) (Kagan, 1994; Lo et al., 2009; May & Winter, 1999, 2000; May & Wood, 2003). This finding is in line with the original notion of a punitive and legal style and, sub-sequentially, applying rules rigidly (Kagan, 1994). Kagan (1994), ultimately, argues that formalism and coercion make up the same construct. Notably, this study shows that the legal dimension is revealed to not solely consist of variations in flexibility of applying rules (Kagan, 1994), but also of the extent of the emphasis inspectors put on being rigid and strict (Kagan, 1994; May & Wood, 2003) as well as their degree of threatening with sanctions and consequences for noncompliant behavior (Lo et al., 2009; May & Winter, 1999, 2000).

The second dimension is facilitation which encompasses the communicative function (*educational*) of the law while considering circumstances at hand (*prioritization*) (Lo et al., 2009; May & Wood, 2003). This finding is in line with previous research. According to May & Wood (2003) one of the dimensions of street-level enforcement style is facilitation which encompasses helping and forgiving inspectees. The educational enforcement dimension entails the extent of the communicative function of the law and providing information to inspectees (Lo et al., 2009). Sharing information signals a positive relationship fostering cooperation and, thus, a way of helping (e.g. Bruijn et al., 2007; Etienne, 2013; Nielsen, 2007). In addition, prioritization is a dimension composed of the extent of accounting for contextual circumstances of inspectees (Lo et al., 2009). Paying attention during inspections to the situations of inspectees can be seen as forgiving (May & Wood, 2003). In sum, though May & Wood (2003) do not explicitly study it, they state that helping and forgiving are at the heart of facilitation. The second factor revealed in this study empirically confirms this idea.

Finally, accommodation addresses the extent to which inspectors consider opinions of other stakeholders, like their team leaders when conducting inspection visits (Lo et al., 2009). First and foremost, by empirically identifying this third dimension, the present study confirms that May & Winter (2011) were correct to point out that street-level enforcement style is more complex than originality thought; and consequently, indeed, best captured in more than two dimensions (Lo et al., 2009). Furthermore, the accommodation dimension is in line with Maynard-Moody & Musheno's (2000) notion that street-level workers are inherently connected to peers. Though the interactions street-level bureaucrats have with inspectees determine how they implement policies, it is the relationship with their fellow street-level workers which shapes their attitude and support their ways of dealing with inspectees. Notably, as opposed to the legal and facilitation dimension, accommodation is more cognitive in nature. Future research could explore roles of other external stakeholders for the enforcement styles of street-level bureaucrats (e.g. de Boer et al., 2018; de Boer and Eshuis, in press) or study variations within the enforcement style of inspectors and other cognitive behaviors (e.g. Tummers et al., 2015).

The legal, facilitation, and accommodation enforcement style dimensions were also theoretically related to individual-level characteristics of the street-level bureaucrat, namely (1) perceived trust in inspectees' performance; (2) years of work experience; and (3) rule obedience. The convergent validity tests showed that individual antecedents of inspectors positively correlate with different dimensions of enforcement style. This could have important consequences for scholars investigating street-level enforcement style variation. This study adds to the growing body of research showing that individual-level antecedents such as demographics (Hawkins, 1984; Kaufmann, 2017), trust, and other relational aspects of inspector-inspectee interactions (Etienne, 2013; Pautz, 2010; Pautz & Rinfret, 2011; Pautz & Wamsley, 2012) as well as personality traits like rule obedience (van Kleef et al., 2015) may potentially help explain enforcement style variations. Future research investigating individual antecedents in relation to inspectee encounters can, thus, be especially fruitful for understanding street-level enforcement styles.

Methodologically, this study answers to the increasing number of articles calling for creating high quality measurement scales (e.g. Grimmelikhuijsen & Knies, 2017; van Engen, 2017b; van Engen et al., 2016; Van Loon, Leisink, Knies, & Brewer, 2016). The street-level enforcement scale at hand, ultimately, enables scholars to study this concept systematically across sectors and countries and investigate the extent of its effects. In other words, future studies are urged to further explore the three enforcement style

dimensions across different types of street-level bureaucrats, its antecedents and its effects at the street-level. Scholars can, for instance, investigate the effects of street-level enforcement style of other street-level bureaucrats on ways of implementing public policies (Mascini & Wijk, 2009) and their interactions with inspectees (de Boer et al., 2018; de Boer & Eshuis, in press; Etienne, 2013; Pautz & Wamsley, 2012).

Despite the theoretical and methodological contributions, this study has limitations. First and foremost, the data collected here are cross-sectional making the establishment of causal inferences impossible. Making causal inferences is not the goal of this study and more research is needed to fully grasp the causal implications of the correlations found in the convergent and discriminant tests of this study. Second, street-level enforcement style is situational and, thus, differs across individual-inspectee encounters, sectors, and countries. Notably, a Western population was used in this sample. Lo et al. (2009) street-level enforcement style study was tested in an Asian context because they surveyed Chinese inspectors. The Chinese regulatory context is seen as more authoritarian than the Western context (Rooij et al., 2013; Zhan et al., 2013; Zhang, 2016). The role of Chinese inspectors and their behavior during interactions with inspectees may, thus, differ from inspectors operating in a Western context, but there could also be similarities. Future research should study cross-national similarities and differences concerning the three dimensions underpinning street-level enforcement style or compare across sectors within one country or individual encounters as well as its implications for implementation of enforcement policies.

Finally, this measurement scale is validated using a specific kind of street-level bureaucrat, namely the inspector. Regardless, many other street-level bureaucrats implement enforcement policies, like police officers (e.g. Engel & Worden, 2003). In addition, a large portion of street-level bureaucrats may arguably deal with fewer rules (Maynard-Moody & Musheno, 2000) but may still have to enforce public policies such as parole officers. More research is needed to understand the way other type of street-level bureaucrats enforce at the street-level and how they combine the three dimensions during different encounters with inspectees. In this way, a more thorough understanding can be established of similarities and differences in street-level enforcement styles.

All in all, street-level enforcement style is more complex than is commonly proposed (May & Winter, 1999, 2000, 2011). Studies aiming to investigate street-level enforcement style can benefit from taking its three-dimensional nature into account and advancing it. Using the developed and validated 13-item measure will allow for cross-sector and cross-national comparisons which, ultimately, ensures a better understanding of how street-level enforcement style is made up and how it can be measured systematically.

Note

1 Formalism is conceptualized in the social sciences in different ways. In the political sciences, it is frequently referred to as the gap between what is said formally and what is actually executed in practice (e.g. Farazmand, 2012; Riggs, 1994). In this article, the conceptualization of formalism used by scholars specifically investigating street-level enforcement style is used.

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Appendix I. Items used in questionnaire

Construct	Item(s)	Measure
Perceived organizational effectiveness (ω = .83; α = .82)	My division is successful in: (1) Tracing violations of rules and regulations (2) Ensuring companies comply with rules and regulations (3) Monitoring risks (4) Reducing risks	10-point scale with: 1 = completely disagree 10 = completely agree
Perceived trust	I would typify my degree of trust in inspectees concerning their compliance as:	10-point scale with: 1 = low trust 10 = high trust
Rule obedience	In general, I am someone who follows the rules even if I disagree with them	10-point scale with: 1 = completely disagree 10 = completely agree
Work experience	How many years have you been employed at the NVWA (or a predecessor of the NVWA)?	Filled in years
Traditional media usage	How many hours do you spend using traditional media per day?	Filled in hours
Social desirability	I am always willing to admit to a mistake	10-point scale with: 1 = completely disagree 10 = completely agree