Appendices to chapter two

Appendix 1 Initial item pools, omitted items and final measurement scale

Cognitive attitude component

Survey introduction:

"Every individual has certain personal characteristics. The following statements are about the personal characteristics of the client <u>with whom you interact</u>. Please indicate how often, on average, you think the characteristics below apply to them"

	Item	Reason for omission		Final item
		Lack of correlational strength	EFA values	
	Clients[a] are…			
1.	ignorant	X		
2.	formal	X		
3.	scared	X		
4.	self-confident		X	
5.	friendly		X	
6.	grateful		X	
7.	responsible		X	
8.	selfish		X	
9.	trustworthy		X	
10	cooperative		X	
11.	manipulative			X
12.	hostile			X
13.	unpredictable			X
14.	stubborn			X
15.	dishonest			X

[a] Template words are in italics.

EFA, exploratory factor analysis.

Affective attitude component

Survey introduction:

"Our daily encounters and conversations with people evoke certain feelings in us. The statements below are about the **feelings** clients evoke **in you,** <u>when you interact with them</u>. Please indicate how often, on average, clients cause you to experience the feelings listed below"

	Item	Reason for omission		Final item
		Lack of correlational strength	EFA values	
1.	*Clients* make **me** feel indifferent (NA)[a]		X	
2.	*Clients* make **me** feel distressed (NA)		X	
3.	*Clients* make **me** feel ashamed (NA)		X	
4.	*Clients* make **me** feel angry (NA)		X	
5.	*Clients* make **me** feel irritable (NA)		X	
6.	*Clients* make **me** feel happy (PA)[b]		X	
7.	*Clients* make **me** feel alert (PA)			X
8.	*Clients* make **me** feel inspired (PA)			X
9.	*Clients* make **me** feel determined (PA)			X
10	*Clients* make **me** feel active (PA)			X
11.	*Clients* make **me** feel upset (NA)			X
12.	*Clients* make **me** feel afraid (NA)			X
13.	*Clients* make **me** feel nervous (NA)			X
14.	*Clients* make **me** feel insecure (NA)			X
15.	*Clients* make **me** feel uncomfortable (NA)			X

[a] Negative affective attitude component.

[b] Positive affective attitude component.

Behavioral attitude component

Survey introduction:

"We are interested in what you do <u>during your interactions with</u> <u>clients</u>. Please indicate how often, on average, you perform the behaviors below, in your interactions with them"

| | | **Reason for omission** | | |
	Item	Lack of correlational strength	EFA values	Final item
1.	I am tougher on *clients* when I think that they are behaving incorrectly	X		
2.	I take a formal approach to *clients*	X		
3.	I treat *clients* disrespectfully	X		
4.	I perform my job without prejudice towards *clients*		X	
5.	I trait *clients* equally		X	
6.	I am rude to *clients*		X	
7.	I behave authoritatively towards *clients*		X	
8.	I withhold information from *clients* which I would be allowed to give to them		X	
9.	I lose my patience when I am in contact with *clients*		X	
10	I ignore *clients'* emotions		X	
11.	I take *clients'* points of view into consideration		X	
12.	I take *clients'* personal circumstances into account		X	
13.	I explain things to *clients*			X
14.	I make *clients* feel at ease			X
15.	I help *clients*			X

Appendix 2 AVE test of discriminant validity

Construct A		Construct B	Co-variance	S.E.	C.R.	P	Shared Variance	AVE A	AVE B
Test study (n = 218)									
Within-construct									
Cognitive com.	↔	Positive affect	.063	.087	.73	.47	.004	.39	.47
Cognitive com.	↔	Negative affect	.499	.068	7.31	***[a]	.249	.39	.50
Cognitive com.	↔	Behav. com.	-.303	.085	-3.55	***	.092	.39	.45
Positive affect	↔	Behav. com.	.263	.086	3.08	.00	.069	.47	.45
Negative affect	↔	Positive affect	-.016	.083	-.19	.85	.000	.50	.47
Negative affect	↔	Behav. com.	-.403	.077	-5.22	***	.162	.50	.45
Between-construct									
Cognitive com.	↔	Work eng.	-.115	.078	-1.47	.14	.013	.39	.66
Cognitive com.	↔	Prosocial mot.	-.018	.082	-.22	.83	.000	.39	.63
Cognitive com.	↔	Rule-follow.	-.104	.083	-1.26	.21	.011	.39	.48
Positive affect	↔	Work eng.	.466	.064	7.31	***	.217	.47	.66
Positive affect	↔	Prosocial mot.	.244	.077	3.16	.00	.060	.47	.63
Positive affect	↔	Rule-follow.	.096	.082	1.17	.24	.009	.47	.48
Negative affect	↔	Work eng.	-.321	.069	-4.64	***	.103	.50	.66
Negative affect	↔	Prosocial mot.	-.02	.079	-.25	.80	.000	.50	.63
Negative affect	↔	Rule-follow.	-.099	.079	-1.24	.21	.010	.50	.48
Behav. com.	↔	Rule-follow.	.017	.086	.20	.84	.000	.45	.48
Behav. com.	↔	Prosocial mot.	.364	.077	4.76	***	.132	.45	.63
Behav. com.	↔	Work eng.	.296	.076	3.87	***	.088	.45	.66
Work eng.	↔	Prosocial mot.	.402	.063	6.37	***	.162	.66	.63
Rule-follow.	↔	Work eng.	.324	.068	4.76	***	.105	.48	.66
Rule-follow.	↔	Prosocial mot.	.135	.077	1.76	.08	.018	.48	.63
Replication study (n = 879)									
Within-construct									
Cognitive com.	↔	Positive affect	.155	.043	3.64	***	.024	.36	.51
Cognitive com.	↔	Negative affect	.421	.038	11.06	***	.177	.36	.44
Cognitive com.	↔	Behav. com.	.142	.043	-3.26	.00	.020	.36	.56
Positive affect	↔	Behav. com.	.282	.039	7.14	***	.080	.51	.56
Negative affect	↔	Positive affect	.069	.042	-1.66	.10	.005	.44	.51
Negative affect	↔	Behav. com.	.213	.041	-5.21	***	.045	.44	.56
Between-construct									
Cognitive com.	↔	Self-efficacy	-.107	.041	-2.61	.01	.011	.36	.51
Positive affect	↔	Self-efficacy	.200	.038	5.24	***	.04	.51	.51
Negative affect	↔	Self-efficacy	-.341	.036	-9.53	***	.116	.44	.51

(continued)

Construct A		Construct B	Co-variance	S.E.	C.R.	P	Shared Variance	AVE A	AVE B
Behav. com.	↔	Self-efficacy	.238	.038	6.25	***	.057	.56	.51
Cognitive com.	↔	Rule-follow.	-.110	.044	-2.52	.01	.012	.36	.42
Positive affect	↔	Rule-follow.	.003	.042	.074	.94	.000	.51	.42
Negative affect	↔	Rule-follow.	-.111	.042	-2.66	.01	.012	.44	.42
Behav. com.	↔	Rule-follow.	.046	.042	1.09	.28	.002	.56	.42
Self-efficacy	↔	Rule-follow.	.178	.039	4.60	***	.032	.51	.42

[a] The covariance is significantly different from zero at the 0.001 level (two-tailed).

Appendices to chapter three

Appendix 1 Survey items

Survey items
Cognitive attitude component

- Taxpayers are manipulative.
- Taxpayers are hostile.
- Taxpayers are unpredictable.
- Taxpayers are stubborn.
- Taxpayers are dishonest.

Positive affective attitude component

- Taxpayers make me feel alert.
- Taxpayers make me feel inspired.
- Taxpayers make me feel determined.
- Taxpayers make me feel active.

Negative affective attitude component

- Taxpayers make me feel upset.
- Taxpayers make me feel afraid.
- Taxpayers make me feel nervous.
- Taxpayers make me feel insecure.
- Taxpayers make me feel uncomfortable.

Behavioral attitude component

- I explain things to taxpayers.
- I make taxpayers feel at ease.
- I help taxpayers.

Social cohesion

- Members of our team do not stick together outside of work time (reversed).
- Our team members rarely party together (reversed).
- Members of our team would rather go out on their own than get together as a team (reversed).

Individual attraction to the group

- For me this team is one of the most important social groups to which I belong.
- Some of my best friends are in this team.

Appendices to chapter four

Appendix 1 Measures

Measures
Cognitive attitude component
• Taxpayers are manipulative.
• Taxpayers are hostile.
• Taxpayers are unpredictable.
• Taxpayers are stubborn.
• Taxpayers are dishonest.
Positive affective attitude component
• Taxpayers make me feel alert.
• Taxpayers make me feel determined.
• Taxpayers make me feel active.
Negative affective attitude component
• Taxpayers make me feel upset.
• Taxpayers make me feel afraid.
• Taxpayers make me feel nervous.
• Taxpayers make me feel insecure.
Supportive leadership
• My supervisor considers my personal feelings before acting.
• My supervisor behaves in a manner which is thoughtful of my personal needs.
• My supervisor sees that the interests of employees are given due consideration.

Supplementary Appendix

SUPPLEMENTARY MATERIAL

This document contains the supplementary material for the article "Supervisory leadership at the frontlines: Street-level discretion, supervisor influence, and street-level bureaucrats' attitude towards clients."

Survey procedure and survey texts

This section presents additional insights on our survey procedure, as well as the survey texts and items used to measure the study variables.

For our study, Dutch and Belgian street-level tax bureaucrats were surveyed. Belgium can be divided into two main language areas: Flanders and Walloon. Most Flemish individuals speak Dutch. Most individuals from Wallonia are French-speaking. Although Dutch and Flemish bureaucrats both speak Dutch, language differences do exist between the Netherlands and Flanders. To accommodate to these differences, first, a slightly adjusted version of the Dutch survey text was administered to respondents from Flanders to ensure that the survey texts matched the professional terminology used in each of these Dutch-speaking areas. For the study variables, however, there was only one language difference: Dutch street-level bureaucrats refer to their frontline supervisor as 'teamleider' [i.e., team leader], whereas Flemish bureaucrats call her/him 'teamchef' [i.e., team boss].

Second, a French translation of the surveys was presented to respondents from Walloon. These French versions were obtained by having a Walloon native involved in our research project translate both the street-level bureaucrat and supervisor survey to French. These translations were subsequently discussed in detail with other researchers in this project. These other researchers were natives from Flanders and the Netherlands. By this procedure, we ensured that the survey texts also matched the French-speaking bureaucrats' professional language. Third, the language areas in Belgium overlap. The internal databases of the Belgian tax administration allowed us to identify beforehand which tax bureaucrats spoke Dutch and which spoke French, for the majority but not all of the bureaucrats. To address this issue, Belgian respondents who clicked the survey link were first asked to select their language of preference. Following the preference they listed, either the French survey or the Flemish survey would start.

Below, the original survey texts used to measure the cognitive, positive affective, and negative affective components of the street-level bureaucrat and supervisor attitude and street-level bureaucrats' supportive leadership perceptions are listed. We provide the Dutch and French texts, as well as their English translations. The presented texts only reflect the

study variables of this paper. Full questionnaires are available upon request at: keulemans@ essb.eur.nl.

Dutch survey text for street-level bureaucrats

Cognitive attitude component [33]

Het eerste deel van deze vragenlijst gaat over uw contacten met belastingplichtigen.

Ieder mens heeft bepaalde persoonlijke kenmerken. De volgende stellingen gaan over de kenmerken van de belastingplichtigen met wie u contact hebt. Kunt u aangeven hoe vaak u gemiddeld genomen vindt dat onderstaande kenmerken op hen van toepassing zijn.

Belastingplichtigen zijn …

	1 Nooit	2 Zelden	3 Af en toe	4 Regel-matig	5 Vaak	6 Zeer vaak	7 Altijd
betrouwbaar	O	O	O	O	O	O	O
manipulatief	O	O	O	O	O	O	O
oneerlijk	O	O	O	O	O	O	O
vijandig	O	O	O	O	O	O	O
meewerkend	O	O	O	O	O	O	O
onvoorspelbaar	O	O	O	O	O	O	O
koppig	O	O	O	O	O	O	O

Affective attitude components

Onze dagelijkse ontmoetingen en gesprekken met mensen roepen bepaalde gevoelens bij ons op. Onderstaande stellingen gaan over de gevoelens die belastingplichtigen bij ú oproepen wanneer u contact met hen hebt. Kunt u aangeven hoe vaak belastingplichtigen u gemiddeld genomen onderstaande gevoelens geven.

---

33 Because all cognitive attitude items are negatively framed (see Appendix 1 of the paper), we surveyed the cognitive component with two additional, positively framed survey items to prevent a negative perception bias. These items are 'betrouwbaar' [i.e., trustworthy] and 'meewerkend' [i.e., cooperative]. These two items were derived from Keulemans and Van de Walle's (2018) scale construction study of street-level bureaucrats' attitude towards clients. As these two additional items only served to divert negative perception bias, they were not included in any of the analyses.

Erasmus University Rotterdam

Belastingplichtigen …

	1 Nooit	2 Zelden	3 Af en toe	4 Regel-matig	5 Vaak	6 Zeer vaak	7 Altijd
maken mij van streek	O	O	O	O	O	O	O
geven mij een angstig gevoel	O	O	O	O	O	O	O
geven mij een ongemakkelijk gevoel	O	O	O	O	O	O	O
maken mij alert	O	O	O	O	O	O	O
laten mij onzeker voelen	O	O	O	O	O	O	O
geven mij een geïnspireerd gevoel	O	O	O	O	O	O	O
maken mij nerveus	O	O	O	O	O	O	O
geven mij een vastberaden gevoel	O	O	O	O	O	O	O
maken mij actief	O	O	O	O	O	O	O

Supportive leadership

Nu volgen enkele uitspraken die betrekking hebben op uw [teamleider/teamchef]. Kunt u aangeven in welke mate u het eens bent met de volgende stellingen.

	1 Hele-maal mee oneens	2 Mee oneens	3 Enigs-zins mee oneens	4 Niet mee oneens, niet mee eens	5 Enigs-zins mee eens	6 Mee eens	7 Hele-maal mee eens
Mijn [teamleider/teamchef] neemt mijn persoonlijke gevoelens in overweging alvorens te handelen	O	O	O	O	O	O	O
Mijn [teamleider/teamchef] gedraagt zich op een manier die rekening houdt met mijn persoonlijke behoeften	O	O	O	O	O	O	O
Mijn [teamleider/teamchef] ziet erop toe dat er voldoende rekening wordt gehouden met de belangen van werknemers	O	O	O	O	O	O	O

French survey text for street-level bureaucrats

Cognitive attitude component

La première partie du questionnaire concerne vos interactions avec les contribuables.

Chaque individu a certaines caractéristiques personnelles. Les propositions suivantes concernent les caractéristiques des contribuables <u>avec lesquels vous interagissez</u>. Pourriez-vous indiquer svp à quelle fréquence en moyenne, d'après vous, les caractéristiques suivantes s'appliquent à eux?

Les contribuables sont …

	1 Jamais	2 Rarement	3 Occasion-nellement	4 Régulière-ment	5 Souvent	6 Très souvent	7 Toujours
dignes de confiance	O	O	O	O	O	O	O
manipulateurs	O	O	O	O	O	O	O
malhonnêtes	O	O	O	O	O	O	O
hostiles	O	O	O	O	O	O	O
coopératifs	O	O	O	O	O	O	O
imprévisibles	O	O	O	O	O	O	O
têtus	O	O	O	O	O	O	O

Affective attitude components

Nos rencontres et conversations quotidiennes avec les gens suscitent certains sentiments et certaines émotions. Les propositions suivantes concernent les sentiments que les contribuables réveillent en vous <u>lorsque vous interagissez avec eux</u>. Pourriez-vous svp indiquer à quelle fréquence, en moyenne, les contribuables suscitent chez vous vous les sentiments mentionnés ci-dessous?

Les contribuables …

	Jamais	2 Rare-ment	3 Occa-sion-nelle-ment	4 Réguliè-rement	5 Souvent	6 Très souvent	7 Toujours
me rendent alerte	O	O	O	O	O	O	O
me rendent peu sûr(e) de moi	O	O	O	O	O	O	O
me rendent mal à l'aise	O	O	O	O	O	O	O
me rendent inspiré(e)	O	O	O	O	O	O	O
me rendent contrarié(e)	O	O	O	O	O	O	O
me rendent effrayé(e)	O	O	O	O	O	O	O
me rendent actif(ve)	O	O	O	O	O	O	O
me rendent déterminé(e)	O	O	O	O	O	O	O
me rendent nerveux(se)	O	O	O	O	O	O	O

Supportive leadership

Nous passons maintenant à quelques propositions concernant votre chef d'équipe. Pourriez-vous svp indiquer dans quelle mesure vous êtes d'accord avec les propositions suivantes?

	1 Très en désac-cord	2 En dé-saccord	3 Plutôt en dé-saccord	4 Ni d'ac-cord, ni en désac-cord	5 Plutôt d'accord	6 D'ac-cord	7 Très d'accord
Mon chef d'équipe prend mes sentiments en compte avant d'agir	O	O	O	O	O	O	O
Mon chef d'équipe se comporte d'une manière attentionnée vis-à-vis de mes besoins personnels	O	O	O	O	O	O	O
Mon chef d'équipe pense que les intérêts des membres de l'équipe reçoivent l'attention qu'ils méritent	O	O	O	O	O	O	O

Dutch survey text for frontline supervisors

Cognitive attitude component

Ieder mens heeft bepaalde persoonlijke kenmerken. De volgende stellingen gaan over de kenmerken die belastingplichtigen volgens u hebben. Kunt u aangeven hoe vaak u gemiddeld genomen vindt dat onderstaande kenmerken op hen van toepassing zijn.

Belastingplichtigen zijn …

	1 Nooit	2 Zelden	3 Af en toe	4 Regel-matig	5 Vaak	6 Zeer vaak	7 Altijd
betrouwbaar	O	O	O	O	O	O	O
manipulatief	O	O	O	O	O	O	O
oneerlijk	O	O	O	O	O	O	O
vijandig	O	O	O	O	O	O	O
meewerkend	O	O	O	O	O	O	O
onvoorspelbaar	O	O	O	O	O	O	O
koppig	O	O	O	O	O	O	O

Affective attitude components

Onze dagelijkse ontmoetingen en gesprekken met mensen roepen bepaalde gevoelens bij ons op. Onderstaande stellingen gaan over de gevoelens die belastingplichtigen bij ú oproepen wanneer u bijvoorbeeld aan hen denkt of over hen spreekt. Kunt u aangeven hoe vaak belastingplichtigen u gemiddeld genomen onderstaande gevoelens geven.

Belastingplichtigen…

	1 Nooit	2 Zelden	3 Af en toe	4 Regel-matig	5 Vaak	6 Zeer vaak	7 Altijd
maken mij van streek	O	O	O	O	O	O	O
geven mij een angstig gevoel	O	O	O	O	O	O	O
geven mij een ongemakkelijk gevoel	O	O	O	O	O	O	O
maken mij alert	O	O	O	O	O	O	O
laten mij onzeker voelen	O	O	O	O	O	O	O
geven mij een geïnspireerd gevoel	O	O	O	O	O	O	O
maken mij nerveus	O	O	O	O	O	O	O
geven mij een vastberaden gevoel	O	O	O	O	O	O	O
maken mij actief	O	O	O	O	O	O	O

French survey text for frontline supervisors

Cognitive attitude component

Chaque individu a certaines caractéristiques personnelles. Les propositions suivantes con-cernent les caractéristiques des contribuables. Pourriez-vous svp indiquer à quelle fréquence en moyenne, d'après vous, les caractéristiques mentionnées ci-dessous s'appliquent aux contribuables?

Les contribuables sont …

	1 Jamais	2 Rare- ment	3 Occa- sionnel- lement	4 Réguliè- rement	5 Souvent	6 Très souvent	7 Toujours
dignes de confiance	O	O	O	O	O	O	O
manipulateurs	O	O	O	O	O	O	O
malhonnêtes	O	O	O	O	O	O	O
hostiles	O	O	O	O	O	O	O
coopératifs	O	O	O	O	O	O	O
imprévisibles	O	O	O	O	O	O	O
têtus	O	O	O	O	O	O	O

Affective attitude components

Nos rencontres et conversations quotidiennes avec les gens suscitent certains sentiments et certaines émotions. Les propositions suivantes concernent les sentiments que les contribuables réveillent en vous lorsque, par exemple, vous pensez à eux ou parlez d'eux. Pourriez-vous svp indiquer à quelle fréquence, en moyenne, les contribuables suscitent chez vous vous les sentiments mentionnés ci-dessous?

Les contribuables …

	1 Jamais	2 Rare- ment	3 Occa- sionnel- lement	4 Réguliè- rement	5 Souvent	6 Très souvent	7 Toujours
me rendent alerte	O	O	O	O	O	O	O
me rendent peu sûr(e) de moi	O	O	O	O	O	O	O
me rendent mal à l'aise	O	O	O	O	O	O	O
me rendent inspiré(e)	O	O	O	O	O	O	O
me rendent contrarié(e)	O	O	O	O	O	O	O
me rendent effrayé(e)	O	O	O	O	O	O	O
me rendent actif(ve)	O	O	O	O	O	O	O
me rendent déterminé(e)	O	O	O	O	O	O	O
me rendent nerveux(se)	O	O	O	O	O	O	O

English translation survey text for street-level bureaucrats

Cognitive attitude component

Every individual has certain personal characteristics. The following statements are about the personal characteristics of the taxpayers <u>with whom you interact</u>. Please indicate how often, on average, you think the characteristics below apply to them.

Taxpayers are …

	1 Never	2 Seldom	3 Occasion- ally	4 Regularly	5 Often	6 Very often	7 Always
trustworthy	O	O	O	O	O	O	O
manipulative	O	O	O	O	O	O	O
dishonest	O	O	O	O	O	O	O
hostile	O	O	O	O	O	O	O
cooperative	O	O	O	O	O	O	O
unpredictable	O	O	O	O	O	O	O
stubborn	O	O	O	O	O	O	O

Affective attitude components

Our daily encounters and conversations with people evoke certain feelings in us. The statements below are about the feelings taxpayers evoke in you, <u>when you interact with them</u>. Please indicate how often, on average, taxpayers cause you to experience the feelings listed below.

Taxpayers …

	1 Never	2 Seldom	3 Occa- sionally	4 Regularly	5 Often	6 Very often	7 Always
make me feel alert	O	O	O	O	O	O	O
make me feel insecure	O	O	O	O	O	O	O
make me feel uncomfortable	O	O	O	O	O	O	O
make me feel inspired	O	O	O	O	O	O	O
make me feel upset	O	O	O	O	O	O	O
make me feel afraid	O	O	O	O	O	O	O
make me feel active	O	O	O	O	O	O	O
make me feel determined	O	O	O	O	O	O	O
make me feel nervous	O	O	O	O	O	O	O

Supportive leadership

Listed below are some statements that pertain to your frontline supervisor. Please indicate the extent to which you agree with the following statements.

	1 Strongly disagree	2 Disagree	3 Slightly disagree	4 Neither disagree, nor agree	5 Slightly agree	6 Agree	7 Strongly agree
My supervisor considers my personal feelings before acting	O	O	O	O	O	O	O
My supervisor behaves in a manner which is thoughtful of my personal needs	O	O	O	O	O	O	O
My supervisor sees that the interests of employees are given due consideration	O	O	O	O	O	O	O

English translation survey text for frontline supervisors

Cognitive attitude component

Every individual has certain personal characteristics. The following statements are about the personal characteristics taxpayers have, according to you. Please indicate how often, on average, you think the characteristics below apply to them.

Taxpayers are …

	1 Never	2 Seldom	3 Occasionally	4 Regularly	5 Often	6 Very often	7 Always
trustworthy	O	O	O	O	O	O	O
manipulative	O	O	O	O	O	O	O
dishonest	O	O	O	O	O	O	O
hostile	O	O	O	O	O	O	O
cooperative	O	O	O	O	O	O	O
unpredictable	O	O	O	O	O	O	O
stubborn	O	O	O	O	O	O	O

Affective attitude components

Our daily encounters and conversations with people evoke certain feelings in us. The statements below are about the feelings taxpayers evoke in you, when you, for instance, think about them or talk about them. Please indicate how often, on average, taxpayers cause you to experience the feelings listed below.

Taxpayers …

	1 Never	2 Seldom	3 Occa- sionally	4 Regularly	5 Often	6 Very often	7 Always
make me feel alert	O	O	O	O	O	O	O
make me feel insecure	O	O	O	O	O	O	O
make me feel uncomfortable	O	O	O	O	O	O	O
make me feel inspired	O	O	O	O	O	O	O
make me feel upset	O	O	O	O	O	O	O
make me feel afraid	O	O	O	O	O	O	O
make me feel active	O	O	O	O	O	O	O
make me feel determined	O	O	O	O	O	O	O
make me feel nervous	O	O	O	O	O	O	O

Data cleaning

This section presents an overview of our data cleaning steps.

Street-level bureaucrat sample

Data cleaning steps	All street-level bureaucrats (*n*)	Dutch street-level bureaucrats	Belgian street-level bureaucrats
1. *n* Street-level bureaucrats that responded to the survey.	1959	1245	714
2. Street-level bureaucrats deleted because they weren't tax auditors with face-to-face client-contact (e.g., desk auditors with no client contact).	375	330	45
3. Street-level bureaucrats deleted because their supervisor did not participate in the supervisor survey.	558	266	292
4. Street-level bureaucrats deleted due to response set. All respondents with response set were manually checked to inspect their answer patterns throughout the survey. Only those of whom we felt it safe to conclude that they did not fill in the survey seriously were omitted (for instance, all extreme scores on constructs with reversed items).	2	2	0
5. Street-level bureaucrats deleted due to response set of their supervisor.	4	0	4

(*continued*)

Data cleaning steps	All street-level bureaucrats (*n*)	Dutch street-level bureaucrats	Belgian street-level bureaucrats
6. Street-level bureaucrats deleted as a result of outlier analysis. For this analysis, we standardized all four attitude components (thus including the behavioral component). These standardized variables were then recoded to represent 4 = 'normal ranges scores', 3 = 'potential outlier' 2 = 'probable outlier' 1 = 'extreme outlier'. The latter was represented by absolute z-scores > 3.29. We then constructed a sum variable that added the scores of these four recoded variables. All respondents with less than three normal range scores were manually inspected for suspicious answer patterns (*n* = 9).	3	1	2
7. Street-level bureaucrats deleted because they had one or multiple missing values on the three attitude components included in this study.	46	26	20
Final sample	971	620	351

Supervisor sample

Data cleaning steps	All supervisors (*n*)	Dutch supervisors	Belgian supervisors
1. *n* Supervisors that responded to the survey.	243	147	96
2. Respondents deleted who indicated that they were not a frontline supervisor.	3	0	3
3. Supervisors deleted with an invalid claim to supervising multiple teams: those supervisors who claimed to supervise 5 teams, which is impossible and thus a flawed answer.	3	3	0
4. Supervisors deleted who supervised teams other than those belonging to our research population (e.g., not tax auditors in the SME-segment).	29	29	0
5. Supervisors deleted who did not carry full responsibility for a single team (i.e., who were not the only supervisor of a specific team).	10	10	0
6. Duplicated supervisors who solely supervised 2 teams.	+ 9	+ 8	+ 1
7. Deleted supervisors of whom no subordinates participated.	3	3	0
8. Supervisors deleted due to response set. (Same procedure as for street-level bureaucrats).	1	0	1
9. Supervisors deleted as a result of outlier analysis. (Same procedure as for street-level bureaucrats).	0	0	0
Final sample	203	110	93

Scale calculations

This section presents additional insights on our measure constructions. It applies to all study variables that, after the procedures listed below, measures were formed by computing a mean index of their final item pool that allowed for zero missing values on any of their respective items.

Street-level bureaucrats' attitude towards clients

The assessment of this attitude construct was based on Keulemans and Van de Walle's (2018) measure for street-level bureaucrats' attitude towards clients. Their measurement instrument consists of four attitude components: the cognitive attitude component, the positive affective attitude component, the negative affective attitude component, and the behavioral attitude component. For our paper, we assessed the cognitive component and affective components of this measure, thus omitting the behavioral component. As only three out of four attitude components were used for the attitude assessment, an exploratory factor analysis was performed to assess the dimensionality of the remaining three components. An EFA that retained three factors showed that the negative affective item 'taxpayers make me feel uncomfortable' had more in common with the cognitive attitude items. After discarding this item, the new three-factor solution revealed that the positive affective item 'taxpayers make me feel inspired' had a cross-loading greater than .3 (i.e., -.332) on the negative affective attitude component. It was therefore removed. The resulting factor structure is listed below:

Component	Item	Factor 1	Factor 2	Factor 3
Cognitive attitude component	Taxpayers are manipulative			-.619
	Taxpayers are dishonest			-.632
	Taxpayers are hostile			-.605
	Taxpayers are unpredictable			-.511
	Taxpayers are stubborn			-.538
Positive affective attitude component	Taxpayers make me feel alert		.781	
	Taxpayers make me feel determined		.685	
	Taxpayers make me feel active		.595	
Negative affective attitude component	Taxpayers make me feel upset	.821		
	Taxpayers make me feel afraid	.448		
	Taxpayers make me feel insecure	.430		
	Taxpayers make me feel nervous	.967		

For all three attitude components, subsequent reliability analyses, performed separately for each component, showed that removal of any of the items of these final item pools would not result in a higher Cronbach's alpha.

Supervisor's attitude towards clients

The supervisor's attitude towards clients was also measured using the cognitive and affective attitude components of Keulemans and Van de Walle's (2018) multicomponent model. For the supervisors too, a three-factor solution EFA showed that the negative affective item 'taxpayers make me feel uncomfortable' had more in common with the cognitive attitude items. After omitting this item, the new EFA showed that, for the supervisors, the positive affective item 'taxpayers make me feel inspired' had more in common with the negative affective attitude items. After discarding this positive affective item, it showed that another positive affective item ('taxpayers make me feel active') had a cross-loading on the negative affective attitude component.

As we list in the paper, to assess role model effects it was key to keep attitude measures constant between the supervisors and the street-level bureaucrats they supervised. An important consideration therein was that item omissions would result in measures that displayed factorial validity and reliability for both actors. As this specific positive affective item (i.e., 'active') showed no cross-loading or other issues in the street-level bureaucrat sample, omitting this item for both actors would harm the validity and reliability of the positive affective attitude measure for street-level bureaucrats. As this measure by Keulemans and Van de Walle (2018) was originally designed for surveying street-level bureaucrats who have face-to-face contact with clients and supervisors lack such direct contact, consequences for the street-level bureaucrat sample were leading in our scale construction considerations. That is why we decided to keep this positive affective item for both actors.

The resulting factor structure is listed below:

Component	Item	Factor 1	Factor 2	Factor 3
Cognitive attitude component	Taxpayers are manipulative			.624
	Taxpayers are dishonest			.506
	Taxpayers are hostile			.650
	Taxpayers are unpredictable			.506
	Taxpayers are stubborn			.716
Positive affective attitude component	Taxpayers make me feel alert		.758	
	Taxpayers make me feel determined		.666	
	Taxpayers make me feel active	-.506	.666	
Negative affective attitude component	Taxpayers make me feel upset	.920		
	Taxpayers make me feel afraid	.471		
	Taxpayers make me feel insecure	.566		
	Taxpayers make me feel nervous	.898		

To assess whether the choice to keep the active-item for the supervisor sample impacted the reliability of the measure for supervisor positive affect, we examined whether omission of this item would result in a higher Cronbach's alpha for this specific attitude component. The reliability analysis showed that the α of .704 for the three-item measure-variant would decrease to α = .663 it the active-item were removed. This result was supportive of our choice to keep this item in this supervisor measure.

For the negative affective component of the supervisor attitude, a reliability analysis showed that removal of the item 'taxpayers make me feel afraid' would result in an increase of the Cronbach's alpha from α = .802 to α = .824. However, given the aforementioned considerations and given that an α of .802 is indicative of a measure's reliability, this item was kept in the supervisor measure for negative affect.

For the supervisor's cognitive attitude component, a reliability analysis showed that removal of additional items from its final item pool would not result in a higher Cronbach's alpha.

Supportive leadership

For supportive leadership an EFA that retained factors with eigenvalues greater than 1 extracted the one-factor solution listed below:

Item	Factor 1
My supervisor considers my personal feelings before acting	.894
My supervisor behaves in a manner which is thoughtful of my personal needs	.962
My supervisor sees that the interests of employees are given due consideration	.857

A subsequent reliability analysis showed that none of the items could be removed to obtain a higher Cronbach's alpha.

REFERENCES

Keulemans, S., & Van de Walle, S. (2018). Understanding street-level bureaucrats' attitude towards clients: Towards a measurement instrument. *Public Policy and Administration.* doi:10.1177/0952076718789749.

Appendices to chapter five

Appendix 1 Survey items

Survey items
Rule-following identity
• I am someone who follows the rules even if I don't agree with them.
• Sometimes it's okay to bend the rules to help out a person who deserves it (reversed).
• It is important that things are done 'by the book' no matter what.
• If I think a rule is pointless, I will find a way around it (reversed).
• I find it important to always follow the rules.
General self-efficacy
• I will be able to achieve most of the goals that I have set for myself.
• When facing difficult tasks, I am certain that I will accomplish them.
• In general, I think that I can obtain outcomes that are important to me.
• I believe I can succeed at most any endeavor to which I set my mind.
• I will be able to successfully overcome many challenges.
• I am confident that I can perform effectively on many different tasks.
• Compared to other people, I can do most tasks very well.
• Even when things are tough, I can perform quite well.
Positive affective attitude component
• Taxpayers make me feel alert.
• Taxpayers make me inspired.
• Taxpayers make me feel determined.
• Taxpayers make me feel active.
Negative affective attitude component
• Taxpayers make me feel afraid.
• Taxpayers make me feel uncomfortable.
• Taxpayers make me feel insecure.