Linking competence, warmth and trust in government

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Introduction

Citizens' trust in governmental institutions is crucial to successful democratic governance and thus considered a fundamental part of democratic legitimacy and stability (Almond and Verba 1963; Dalton 2004; OECD 2013; Marien and Hooghe 2011a). In the words of Kettl (2017), a low level of trust is a concern as it *"can make it hard for government to do what citizens need, want and expect"*. On the other hand, skepticism is healthy for a democracy because it forces government to be responsive to citizen demands (Hardin 2002; Rosanvallon 2008). Even though trust in government is generally positive, citizens should not blindly trust government actors and institutions that do not actually perform well (Norris 2011).

Due to these potential consequences for democracy of too little trust in government, scholars in political science have for decades been interested in the topic of trust in government and searched for explanations to when citizens trust institutions of government (e.g., Hetherington 1998; Levi and Stoker 2000; Anderson and Tverdova 2003; Van der Meer 2010). A general concern in the western world in recent years about declining public trust in government has fueled this interest even further (Van de Walle, Van Roosbroeck, and Bouckaert 2008) One of the most consistent efforts in previous research on determinants of trust in governmental institutions has been to study the influence of government performance. The literature has demonstrated that both perceptions of macroeconomic performance (e.g., Miller and Listhaug 1999; Keele 2007; Bovens and Wille 2008; Hetherington and Rudolph 2008; Van der Meer 2010; Van der Meer and Hakhverdian 2017) and

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perceptions of the quality of public service delivery strongly correlate with regard to citizens' trust in governmental institutions (e.g., DeHoog, Lowery, and Lyons 1990; Bouckaert and Van de Walle 2003; Van Ryzin 2007, 2011; Vigoda-Gadot 2007). However, while prior research examines either effects of government performance on a macro level (i.e., macroeconomic performance) or focus on the influence of citizens' general perception of the quality of public services (e.g., public health care or public schools), little is still known about *how* performance is related to trust. In particular, we have a limited understanding of how susceptible trust in the institutions of government is to the performance and behavior of government in concrete encounters between government and citizens. Is public performance in single case experiences with government only of little importance to overall trust, because trust is affected by the sum of the performance of all experiences that citizens have with government? Or are levels of public trust highly susceptible to recent events and specific interactions with government? To increase our knowledge about the effects of government performance on trust, I investigate the following research question: "To what extent does citizens' concrete experiences with the public sector affect their level of trust in government?"

To advance our understanding of how such interactions between citizens and public employees influence trust in government, I build on insights from social psychology about how people map the social world and, more specifically, how people form impressions of other individuals and groups of individuals. Social psychology teaches us that individuals form impressions of other people according to two fundamental dimensions of social cognition - warmth and competence (Fiske, Cuddy, and Glick 2007); the former refers to intentions (e.g., a friendly public employee) while the latter refers to abilities (e.g., a skillful public employee). In the interaction with the public sector, citizens thus both make perceptions about how competently public employees do their job (i.e., the competence-dimension) and at the same time assess the intentions of the public employees (i.e., the warmth-dimension). Importantly, social psychology literature furthermore argues that impressions of warmth and competence elicit distinct emotions and behavior. Thus, in the context of this study, I argue that in specific interactions with government employees, citizens assess government on two fundamental dimensions – warmth and competence – that guide their evaluations of trust in civil servants and governmental institutions in general. More specifically, I hypothesize that an interaction with public employees perceived as warm (competent), will lead to greater trust in government compared to an interaction where the public employee appears cold (incompetent).

Most studies that examine government performance and trust in government

use of cross-sectional data, where a major concern is that citizens use their level of trust in government to decide how well they think the government or public sector performs (Bouckaert and Van de Walle 2003; Hetherington 2005; Yang and Holzer 2006). This problem of potential reverse causality is also a challenge in this study, as citizens' impressions in the concrete interaction with the public sector can be a product of how much they trust government in the first place. To address this methodological challenge, I investigate the arguments presented here with a large-scale between-subjects survey-experiment. This is a major contribution to the broader literature on the link between government performance and trust in government, as the high internal validity of the experimental design enables me to explore causal effects. Moreover, by conducting the experiment among both American (N=816) and Danish (N=1299) citizens, I also strengthen the external validity as it enables me to test the generalizability of the findings.

The findings support that impressions of competence effectively influence both citizens' trust in civil servants and administrative institutions of government more generally. However, the findings also indicate that trust do not depend on impressions of warmth. Accordingly, the findings emphasize that citizens' impressions of the competence of public sector employees, based on a concrete interaction, influence trust in government. Thus, the results suggest - at least to some extent – that the way public sector employees act and perform when interacting with ordinary citizens plays an important role in building trust in government.

Conceptualizing trust in government

The literature on trust in government does generally not offer an explicit and common understanding of the concept. This may be because political trust is a concept that we can all understand and have an idea about, although we have a hard time defining it (Hetherington 2005). On the other hand, when contributors to the literature on trust in government define the concept, there seems to be a vast amount of understandings (Kim 2005; Zmerli and Hooghe 2011). Furthermore, if we look at the broader literature on the conceptualization of trust per se there also seems to be no clear and universal understanding. For instance, some scholars argue that we can only talk about trust as behavior, while others make the argument that trust should be understood as a psychological state. Thus, trust in government is a complex and ambiguous concept that have distinct meanings across the literature (Zmerli and Hooghe 2011).

Although, some would argue that we cannot talk about trust *per se* (Hardin 2000), when the object is made up by institutions (we can only trust the actors

within the institutions), I follow the literature that consistently has used the term trust. Trust in government is conceptually different from social trust, as the former refers to trust in the institutions of government while the latter refers to trust in other individuals. The most prominent conceptions of trust in government defines it as an evaluative orientation toward government (e.g., Miller 1974; Hetherington 1998, 2005; Keele 2007; Van der Meer 2010). Arthur Miller (1974), one of the early prominent scholars in the field, defines trust in government as "a basic evaluative or affective orientation toward the government". Many scholars (implicitly) on this idea by referring to trust as an *evaluation*. At its core, these definitions imply that trust is a relationship where "A trusts B to do X" (Hardin 2000). However, these definitions of trust can be criticized for being confused with or almost equal to judgements of government performance, and they do not explicitly take into account other aspects or themes that are thought to be important to the conceptualization of trust. PytlikZillig and Kimbrough (2016) make an important contribution to the conceptualization of trust in the social sciences, by reviewing other reviews of the definition of trust across disciplines such as political science, economics, psychology, management, and organizations. The authors come up with four common themes that many or most scholars converge on: trust involves [1] an interdependent relationship between a trustor and a trustee, [2] uncertainty and risk for the trustor, [3] no external coercion, and [4] trust is based on positive expectations. Even though consensus on a definition of trust is still lacking, there seem to be broad support for defining trust in psychological terms (PytlikZillig and Kimbrough 2016; Grimmelikhuijsen and Knies 2017). Based on this literature, I define trust in this article by following the overarching psychological definition by Mayer et al. (1995): Trust is "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party". Even though this definition originally was developed to study trust between citizens, it can be applied to examine trust in government; in this case, "another" refers to the institutions rather than other citizens.

Trust in government can refer to a wide range of objects that operate on different levels and have different implications (Bovens and Wille 2011). Prominently, Easton (1965, 1975) distinguishes between specific and diffuse support for a political system, where the former refers to support of current authorities and the latter refers to support of the regime. In the broader literature, trust in government has been defined as both an expression of diffuse support (e.g., Marien and Hooghe 2011b; Van der Meer 2018; Jennings et al. 2017), while others argue that it does not fit into either category (Citrin and Stoker 2018). In line with

the latter argument, Norris (2011) have refined the conventional Eastonian distinction by arguing for a continuum between specific and diffuse support. In the current study, I follow this line of reasoning, as I am interested in citizens' trust in the *institutions of government as such* and not in officeholders in particular or more diffuse and general attitudes about democratic performance and principles. Still, we can differentiate between different governmental institutions. According to Bouckaert (2012), the public sector can be defined in a broad sense to include both political and administrative institutions and in a narrower sense referring to actors and institutions that deliver public services. Building on this, I distinguish between political and administrative institutions of government, where the former is institutions such as the national parliament or politicians in general, while the latter refers to for instance civil servants and the public administration. This is an important theoretical distinction, as citizens might direct their trust in administrative and political institutions differently based on their experiences with public employees.

Literature review: the link between performance and trust

In the search for explanations of trust in government, a vast amount of studies has examined whether government performance plays a role. This has generated two lines of research (Bouckaert et al. 2002): one examining the impact of macro level performance and another investigating the impact of performance on micro level (i.e., the link between public service delivery and trust in government).

Prior studies at the macro level have been concerned with how economic success and failure drives trust in government (e.g., Miller and Listhaug 1999). Generally, these studies demonstrate that citizens have more trust in government, when they have positive perceptions about the state of the national economy (e.g., Keele 2007). Thus, citizens reward and punish government for their level of performance in the macroeconomic arena. Hence, Keele (2007) found that consumer confidence fluctuates very well with trust in government studying American citizens, and similarly Bovens and Wille (2008) concluded that economic failure was one of the most important explanations for the Dutch drop in political trust. This pattern is also evident when looking at the individual level (e.g., Citrin and Green 1986; Van der Meer and Dekker 2011). Even though the literature consistently finds effects of subjective evaluations of economic performance, the picture is much more blurred when examining objective indicators of macroeconomic performance as determinants of trust in government (see Van der Meer 2017 for an overview).

In this area, findings are at best mixed.

Extant research in public administration has also focused on how perceptions of public service delivery can influence trust in government. These studies build on the micro-performance theory (Bouckaert and Van de Walle 2003), which simply states that the better performance citizens experience from the public sector, the more satisfied citizens get and this in turn leads to greater trust in government. Accordingly, Van Ryzin (2011) found that – both on individual and country level – perceptions of government outcomes are significantly linked to trust in civil servants. Similarly, Vigoda-Gadot and Mizrahi (2007) found a correlation between perceived public sector performance and trust in administrative agencies investigating a sample of Israeli citizens during a five-year period. Along these lines, working with the expectancy-disconfirmation model showed that citizens' perceptions of public sector performance not only leads to an overall satisfaction level but in turn also impacts on trust in government (e.g., Van Ryzin 2007). In sum, all these studies have in common – at both the macro and micro level - that they rest upon the assumption that trust is based on citizens' perceptions of competence. That is, trust rests on the extent to which citizens perceive government as having the ability to produce outcomes and provide services in a competent, effective and skillful manner. These insights are important, as they show how competence is important for government to secure citizens' trust (cf. the section on conceptualization). However, these studies do not tell us much about how and whether the performance citizens experience in specific interactions with government impacts on trust in government. The present study builds on and adds to extant research exactly by examining the impact of such experiences. In line with the previously mentioned literature on the performance-trust link, I expect perceptions of competence to have an effect on citizens' trust in government. Formally, I have formulated the following hypothesis:

H1a: The more citizens perceive public employees as competent in a concrete interaction between a citizen and a public employee, the more citizens are likely to trust public employees.

Extending the argument: the importance of warmth and competence

However, obtaining the full picture of the role interactions between government and citizens play concerning trust, requires more scrutiny and theorizing. There is reason to be skeptical about whether perceived competence of public employees

is the only important explanation to trust in government, when we talk about the impact of citizens' specific interactions with government. Building on insights from social psychology (e.g., Fiske et al. 2007), I argue that assessments of the intentions of public employees play an important role alongside perceived competence, in guiding citizens' level of trust. This theory of social cognition is a fruitful perspective for theorizing on how specific interactions with government, as it provides insight into how people form impressions in the interaction with other people. The crux of the theory is that when people form impressions of others (individuals or groups), they do so along two fundamental dimensions: warmth and competence (Fiske et al. 2002; 2007; Cuddy et al. 2007). It is argued that these two dimensions organize how people interpret the social world, and "account almost entirely for how people characterize others" (Fiske et al. 2007, 77). Fundamentally, in encounters with other individuals, people want to know the answer to two questions. First, in the meeting with others, individuals must determine the intentions of the other (i.e., is the other a friend or foe), and secondly, people want to know whether the other has the ability to pursue those intentions. Thus, social perception reflects basic evolutionary pressures, where the question of the other's intentions is at least as – if not more – important than competence (Fiske et al. 2007). Assessments of the other's intent correspond to the warmth-dimension, which includes attributes such as friendliness, sincerity and honesty, while perceived ability refer to the competence-dimension linked to traits like skill, capability, efficiency and knowledge. As these dimensions of social cognition are universal, and thus should be applicable in any situation involving relations between people, I argue that they can be used to study interactions between citizens and government. Thus, when citizens interact with government employees, they can be expected to determine both how warm and how competent they perceive the employee to be. More specifically, citizens might not have uniformly positive or negative impressions of public employees, but instead it is possible to have more mixed impressions (e.g., warm and incompetent).

This well-established model of social perception has been important in the work on stereotyping (Fiske et al. 2002; Fiske, Cuddy, and Glick 2007), but it has also been applied in political science. Hence, warmth and competence have been studied in relation to political rhetoric, where Pedersen (2017) found that politicians appear competent when using numbers in political communication. Furthermore, in studies of presidential candidates, voters make impressions according to warmth and competence (e.g., Kinder et al. 1980). Laustsen and Bor (2017) further showed that warmth perceptions outperform impressions of competence in predicting presidential candidate evaluation and vote choice. Importantly, as

the latter study indicates, perceptions of warmth and competence elicit distinct emotions, attitudes and behavior (see Cuddy et al. 2007). Thus, competence and warmth entail positivity while incompetence and lack of warmth elicit negativity. In this way individuals' assessments of warmth and competence guide decisions about the other. This I important to the purpose of this study. Accordingly, when citizens interact with a public employee, perceived warmth and competence of the public employee are expected to be valuable predictors of trust in government. More specifically in this study, I am particularly interested in the separate effect of the two dimensions, rather than how combinations of the two dimensions are related to trust. Formally, I have formulated the following hypothesis with regard to the effect of perceived warmth (see H1a for perceived competence):

H1b: The more citizens perceive public employees as warm in a concrete interaction between a citizen and a public employee, the more citizens are likely to trust public employees

It is not clear from the social psychology literature how far the predictions about the behavioral and attitudinal consequences of warmth and competence impressions go. The literature mostly concentrates on how people perceive a given social object (e.g., another individual) on the dimensions of warmth and competence and how these impressions predict attitudes, feelings and behavior towards that exact object – and thus not whether it has further implications. In the context of this study, citizens' impressions of public employees' warmth and competence might not only predict trust in public employees but also predict a broader trust in government. That is, these specific interactions could have more wide-ranging effects. Based on this, I also test whether the impressions citizens form in concrete actions with public employees spill over to trust in government more broadly. In particular, I expect the following as expressed in these hypotheses:

H2a: The more citizens perceive public employees as competent in a concrete interaction, the more citizens are likely to trust governmental institutions in general.

H2b: The more citizens perceive public employees as warm in a concrete interaction, the more citizens are likely to trust governmental institutions in general.

Data and research design

The main research question in this study is "To what extent citizens' concrete experiences with the public sector affect their level of trust in government?" In particular as pointed out above, the underlying question of interest is whether

citizens' perceptions of warmth and competence of public employees is linked to trust. One empirical strategy would be to compare citizens that have experienced a competent (warm) public employee with citizens who have experienced an incompetent (cold) public employee, measure their trust in government, and then make a mean comparison of their trust judgements. However, a number of methodological problems challenges are present in this observational design.

First, a correlation between perceptions of public employees and trust in government might be attributable to selection bias in the form of reverse causality, as citizens might use their level of trust in government to decide how they evaluate the performance of the public sector (Bouckaert and Van de Walle 2003; Hetherington 2005). Second, selection bias might also be at play if some characteristic (e.g., general optimism or ideological orientation) both explain how citizens evaluate public employees they meet and trust in government. Third, on a more fundamental level, it is hard to identify a case in which it is possible to clearly separate perceptions of warmth and competence, respectively. The two first points are known methodological problems, as the dominant approach in studies linking performance and trust is to use cross-sectional designs. Thus, researchers has called for setting experimental designs that can secure the direction of causal influence (Van Ryzin 2011). To avoid these common methodological shortcomings of existing studies, I turn to a between-subjects survey-experimental design. The main advantage of this design is that I can isolate the effect of warmth and competence perceptions, respectively, by randomly assign subjects to different impressions/perceptions a public sector employee.

More specifically, I conduct two different experimental studies, where I use two different strategies with regard to the exact manipulation of public employees' warmth and competence. In study 1, I prime respondents to think about an experience they have had with the public sector in terms of either competence or warmth, while study 2 examine the impact of warmth and competence perceptions using vignettes that manipulated both warmth- and competence-related traits of a fictitious public employee. Importantly, both these studies allow me to test both predictions about the effects of perceived competence and the effects of perceived warmth. The two studies are complement to each other in a number of ways. Study 1 enhances the ecological validity of the experiment by using respondents' own experiences with government as treatment, which on the other hand opens up the possibility that perceptions of both warmth and competence are manipulated. This threatens the internal validity, as perceptions of warmth and competence might be confounded. Study 2 on the other hand, emphasizes these limitations of study 1 by testing the support for the predictions in a much more controlled

experimental set-up. However, the more stylized treatments presented to subjects in study 2 limits the ecological validity. Further, to explore the generalizability of the findings, study 1 is conducted in two very different settings, as both American and Danish citizens are used as subjects. In study 2, the sample only consist of American citizens.

Study 1: data and participants

The data for study 1 consist of a sample of Danish citizens recruited via YouGov and a sample of American citizens recruited through Amazon Mturk. Both surveys were carried out in November-December 2018, and resulted in 2,115 respondents (DK= 1,299; US= 816). The Danish sample is largely representative of the Danish population, while the American sample is nonrandom and thus not representative of the US population at large. Table 1 shows descriptive statistics for the two samples used in study 1.

Table 1. Descriptive statistics

	Full sample	US sample	DK sample
	Mean	Mean	Mean
Left-right scale (0-10)	5.06	4.86	5.20
Social trust (0-1)	0.58	0.52	0.62
Political interest (0-1)	0.46	0.38	0.51
Gender (female)	0.48	0.43	0.52
High education	0.50	0.69	0.39
Age			
18-34	0.37	0.55	0.25
35-49	0.27	0.30	0.25
50-64	0.18	0.11	0.23
65+	0.17	0.03	0.26
Employment			
Government/public	0.15	0.12	0.18
Private	0.37	0.54	0.27
Student	0.09	0.03	0.13
Self-employed	0.11	0.23	0.04
Unemployed	0.05	0.05	0.05
Other	0.22	0.03	0.34

Note. As not all respondents have valid answers on all covariates, the number of observations for the respective covariates in the table differ (see also table A.1 in the appendix). High education = at least a short university degree.

Experimental design

In the experiment, all subjects were asked to think back on an experience with a public sector employee. However, respondents were randomly assigned to one of four experimental conditions. In the first condition, respondents were asked to think back on an experience with a competent and effective public employee, while respondents in the second condition had to think of an incompetent and ineffective public employee. In the third and fourth condition subjects were asked the same just in terms of a warm and helpful or cold and unhelpful public employee, respectively. These exact words are used to manipulate citizens' perceptions of the public employee's warmth or competence, as they refer to traits that in the literature are linked to either the dimension of warmth or competence. In particular, competence was manipulated with reference to the competence and effectiveness of the public employee, while warmth was manipulated by referring to whether the public employee was warm and helpful. To illustrate the treatment more clearly, I show the version with the competent and effective public employee below. The parts of the text that differs across experimental conditions are marked with bold font.

"Please, take a moment to think about the debate about the public sector in Denmark/the United States. It is highly debated whether public or private organizations should provide services to citizens. As citizens, we interact with the public sector in many different ways, and we probably have different experiences of the encounter from one time to the next. Sometimes we have positive impressions; sometimes we have a more negative impression. Please, think about your last ***positive*** *experience with the public sector, where the public employees* ***competently and effectively*** *delivered a service (it could be a personal experience, what you heard from friends/family, read in the news etc.). What do you think of? Please list everything that comes to mind"*

The idea behind this design is that the highlighted words in the text should "prime" respondents to either perceptions of [1] high warmth, [2] perceptions of low warmth, [3] perceptions of high competence or [4] perceptions of low competence.

Measures

I use a number of different dependent variables to measure the main outcome of interest: trust in government. Many studies on trust in government use the following item appearing in the American National Election Studies; "How much of the time do you think that the government in Washington is doing the right thing?". I use this item to study citizens' overall trust in government and in order to be able to compare to the current literature using this measure. However, this item

has been criticized for it wording, as 'government' can be associated with several different institutions and actors (Citrin and Stoker 2018), and importantly citizens might trust institutions differently: especially when we talk about the effect of impressions of public service delivery. To take this into account, and in particular to be able to distinguish administrative institutions from political institutions, I also asked respondents to state how much they personally trust distinct institutions of government on a 0 to 10 scale, which mirror the measurement used in European Social Survey. In particular, trust in the police, public administration, national government, national parliament, politicians, and political parties were measured using this scale. Moreover, trust in civil servants were measures using the question from General Social Survey asking how much you agree with the following statement: "Most civil servants can be trusted to do what is best for the country" (on a five-point scale). Trust in civil servants, the police, public administration were used to construct an index of 'trust in administrative institutions' (alpha = .79), while trust in the national government, national parliament, politicians and political parties were used to construct an index of 'trust in political institutions' (alpha=.94). In addition, I use the 'trust in civil servants' item as a dependent variable, because the experimental stimuli at its core is about public employees and thus trust in these actors is of special importance in this study. All trust-measures are recoded to 0-1 scales, where high values indicate higher trust in government.

The survey also included a number of questions regarding background information. Besides asking about gender and age, the survey included questions about social trust (0-10 scale), sector of employment ("public", "private", "self-employed", "student" or "out of work"), political interest (1 to 5 scale), and personal income. To measure citizens' prior beliefs, I use a measure of ideology with regard to self-placement on a 0 (left) to 10 (right) scale[1].

Estimation strategy

In the end of the questionnaire, after having received the experimental treatment and having measured the main dependent variables, participants answered two manipulation checks. First, to test whether the experimental stimuli had created the expected variation in perceived warmth and competence, subjects were asked to think back on the experimental treatment and the public employee they were asked to think about and then asked to rate him or her on warmth and competence on a five point scale . Second, participants were asked to indicate which character

1. The measures of social trust and political interest are recoded to 0-1 scales on which "1" indicates high trust and interest, respectively.

trait (e.g., a competent public employee) they were asked to base their thoughts on. In particular: "Earlier in this survey you were asked to think back on an experience with the public sector. What were you asked to base your thoughts upon?" This second manipulation check enables me to assess whether respondents at first carefully read the instructions.

The manipulation check indicates that both the warmth and competence manipulations successfully created the expected difference in perceived warmth and competence respectively. The difference in perceived warmth between the high warmth and low warmth conditions is 0.18 ($\text{mean}_{highwarmth} = 0.62$, $\text{mean}_{lowwarmth} = 0.44$, p<0,001), while the difference in perceived competence between the high competence and low competence conditions is 0.23 ($\text{mean}_{highcompetence} = 0.64$, $\text{mean}_{lowcompetence} = 0.41$, p<0,001). However, the manipulation checks also reveal that the experimental treatments of warmth and competence respectively are confounded because the manipulations in addition had an impact on perceptions on 'the other' dimension of social cognition. This means, for instance, that subjects randomly assigned to the high competence group not only scored higher on perceived competence but also on perceived warmth.

`Figure 1.` Perceptions of warmth by experimental condition

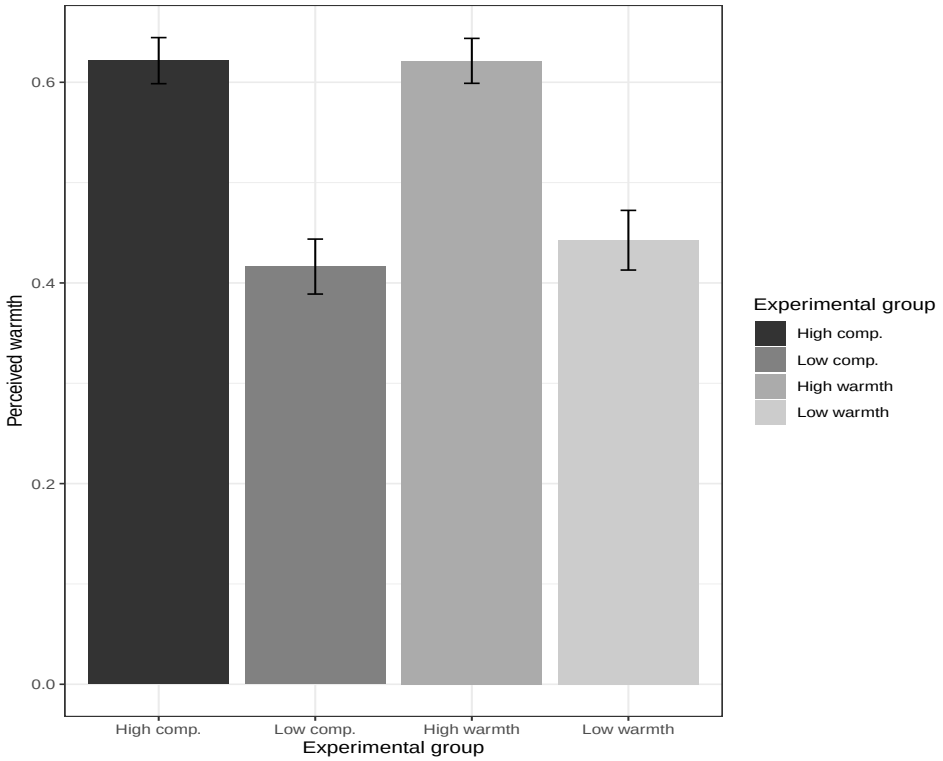
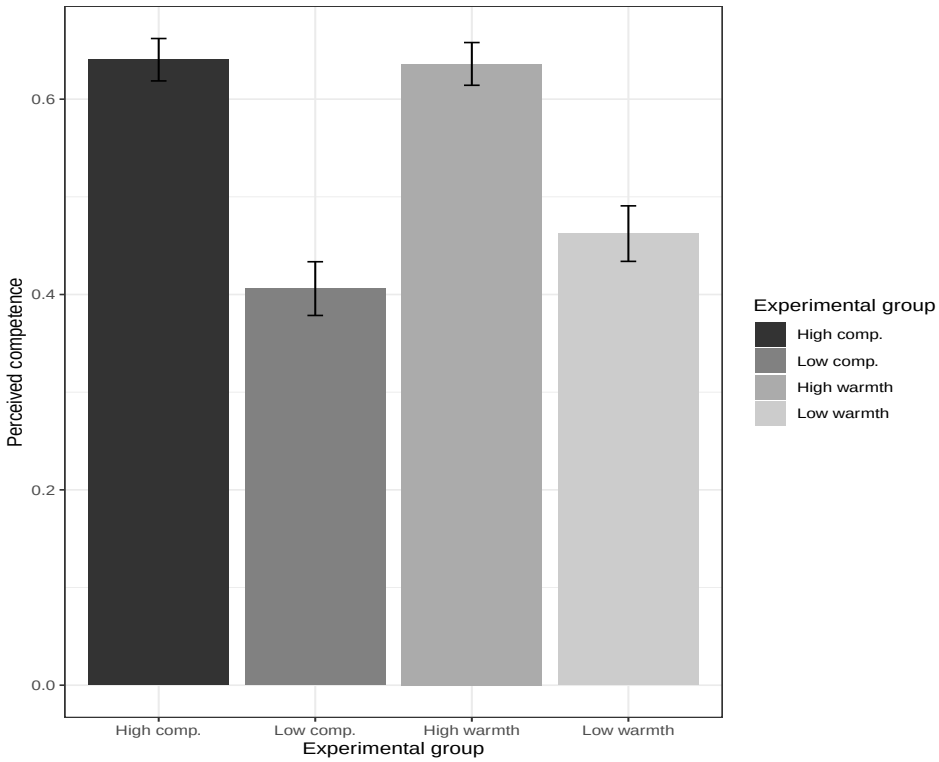


Figure 2. Perceptions of competence by experimental condition



As is evident in figure 1 and 2, the manipulation of warmth also creates variation in perceived competence and the manipulation of competence creates variation in perceived warmth. Indeed, the difference in perceived competence between the two groups where warmth is manipulated is 0.17 while the difference in perceived warmth between the two competence conditions is 0.21. There can be two different reasons behind this pattern. First, it is possible that participants did not read the instructions carefully enough and then in the first place did not base their thoughts on the given character trait. However, the manipulation check still show a pattern, where subjects have positive perceptions on warmth and competence if they were randomly assigned to either the high competence or the high warmth condition. I would all else being equal expect much more noise in these perceptions if this was the case. Furthermore, 60 % answered correct on the second manipulation check. Given that there were quite a few questions between the experimental stimuli and the manipulation check item this is a fairly conservative estimate of the effectiveness of the manipulation. Still, even though respondents for instance answered "warm" on this item when they were assigned to the high competence condition, it does not leave out the possibility that they thought of public employees as both competent and warm. A second interpretation is that a halo effect is at play. That is, people have a tendency to evaluate other individuals consistently, which means that even though for instance the subjects in the high competence condition in

this study thought about a competent public employee, they might assume, using competence as a heuristic, that the person is also high on the warmth-dimension. Although not optimal, this potential positive correlation between the dimensions of warmth and competence is a known issue when people judge and evaluate other people (Fiske et al. 2007). In its essence, this correlation is problematic because if comparisons of, say the high and low competence groups, leads to significant differences in trust, then I cannot be sure whether this difference is because of warmth or competence impressions.

To partially correct for this, I report two analyses: one of the overall average effect of warmth and competence based on the experimental treatments, and one where I test the robustness of these findings by excluding subjects that did not pass the manipulation check. This is advantageous as it allow me to test whether there is an indication of an effect of the treatment among subjects that "complied" and actually can be assumed to have processed the treatment information as intended. However, while this ensures that I examine the treatment effect for subjects that paid attention, some caution is warranted with regard to concerns about post-treatment bias (Aronow, Baron, and Pinson 2019). Thus, the estimates from this robustness check cannot be interpreted causally, as we cannot assume that it is random which respondents actually comply and, thus, process the treatment information as intended. In order to meet this challenge, I include covariates in these estimations[2].

To carry out the analysis of the overall effect of competence and warmth respectively, I use ordinary least squares (OLS) regression to estimate the parameters in the following equations.

$$Y_i = \alpha + \beta competence_i + \gamma X_i + \epsilon_i \tag{1}$$

$$Y_i = \alpha + \beta warmth_i + \gamma X_i + \epsilon_i \tag{2}$$

In both equations Y_i is the level of trust in governmental institutions (e.g., political or administrative institutions) for individual i, while α is the constant, γX_i is a vector of control variables and ϵ_i is the individual specific error term. In equation (1) $\beta competence_i$ is an indicator for whether a subject received high or low competence treatment and in equation (2) $\beta warmth_i$ indicates whether

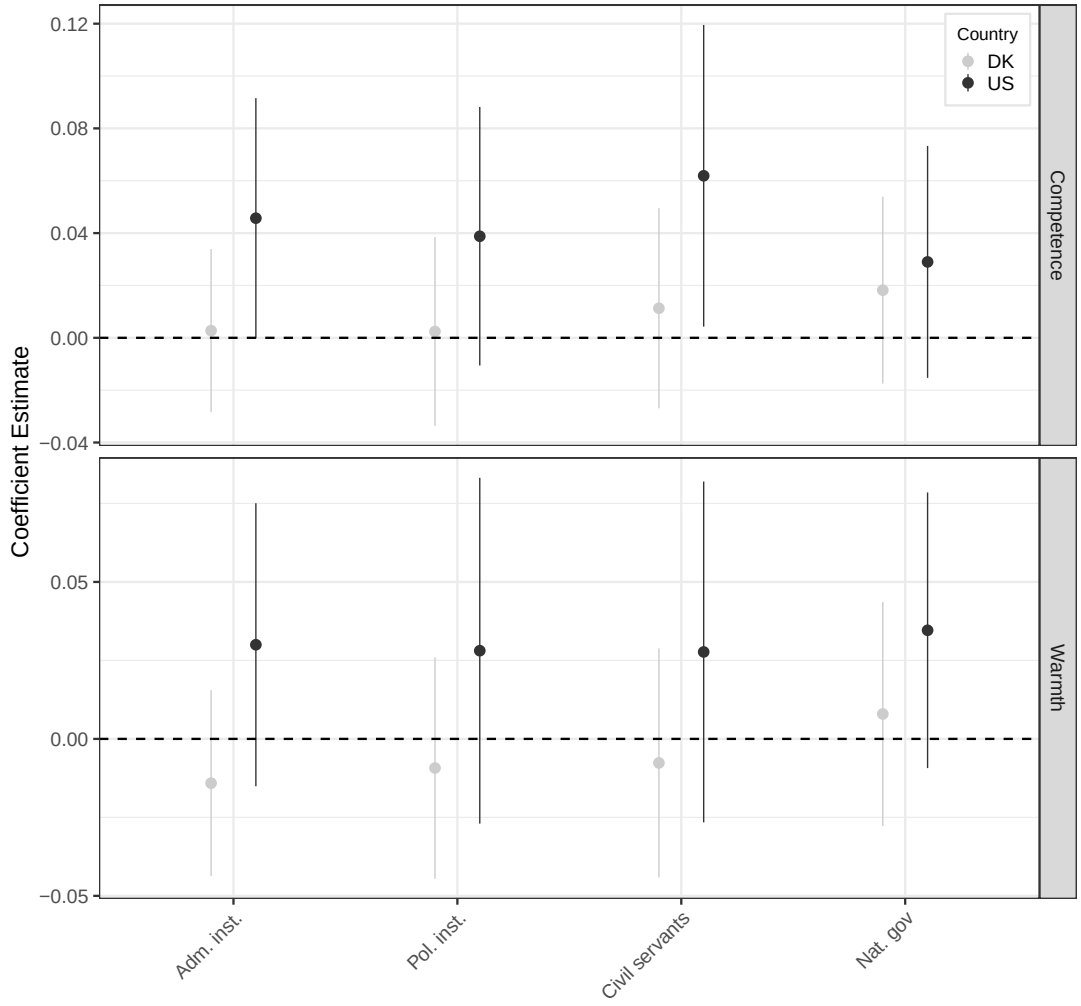
2. Additional analyses show that treatment is correlated with compliance and there are significant differences (on the 5 %-level) in gender and left-right self-placement between compliers and non-compliers (results not shown). While this indicate that compliers are not a random subset of the full sample, and thus that some selection process is at play, it is *not* evidence for a problem.

a subject received high or low warmth treatment. In both equations, β is the parameter of interest, as it indicates the difference in means between the experimental manipulations of warmth and competence respectively (conditional on the covariates). Because of the correlation between the two dimensions of social cognition, these equations estimate *intention to treat* (ITT) effects. These effects can be interpreted as the causal effect of assigning participants to the experimental stimuli but these estimates do not reveal the causal effect of warmth and competence per se, as some respondents did not perceive the experimental stimuli as intended. I also test the robustness of these findings. In particular, I perform the same OLS regressions but only include respondents who correctly stated which character trait they should base their thoughts on regarding the public employee in the experimental stimuli. That is, I exclude subjects who for instance answered "competent" to the manipulation check when assigned to any other experimental condition than "high competence". Importantly, in order to compare results across contexts, I conduct all analyses both for the full sample and for Danish and American respondents independently.

Results

First, I investigate the importance of warmth and competence impressions, respectively, on trust in government by estimating equation (1) and (2). Figure 3 shows the results for the American sample, while figure 3 visualizes the results for the Danish participants. Starting with the Danish sample, the results offer no statistical support for the predictions: the findings indicate that neither impressions of competence nor impressions of warmth have an impact on citizens' trust in government. However, when we turn to the American respondents, the picture changes. In contrast to the results among Danish citizens, the results offer some support for the predictions about the effect of competence impressions, while impressions of warmth again seems to play no particular role in building trust (H1b and H2b). The findings furthermore demonstrate that impressions of competence not only have an effect on trust in civil servants (H1a), but also a spill-over effect to trust in administrative and even political institutions (p=0.11 for trust in political institutions) (H2a).

Figure 3. Effect of experimental treatment on trust



Next, the robustness tests generally gives support for the theoretical expectations. The results from these tests yield further support for H1a, as impressions of competence still is an important predictor of trust in civil servants. However, now this is both the case among both American and Danish respondents. Further, the findings give support to the H2a, as competence also in the robustness tests have trust in broader administrative and political institutions of government. Regarding the effect of warmth, these results begin to indicate that warmth actually does matter. Among American citizens, the findings show statistically significant effects of warmth impressions, while impressions of warmth still do not influence trust when we look to the Danish sample. Hence, the robustness checks give only partial support to H1b and H2b.

In sum, these results show that a concrete experience with a public sector employee can have important effects on trust in government. In particular, the

findings show that when citizens perceive public employees as doing their job competently, they have greater trust – not just in civil servants, but also in abstract institutions of government. Yet, as discussed above the results of this study have an important drawback, as it is not possible to separate the effects of warmth and competence. The questions is whether we it is exactly impressions of competence – and not perceptions of warmth - that drives variation in trust.

Study 2

To address the limitations of study 1, I plan to conduct a follow-up study. In particular, the main purpose is to make a design where it is possible to separate warmth- and competence impressions and thus enable me to perform a more careful test this study's hypotheses. To do so, I follow the experimental design of Laustsen and Bor (2017). The authors used a vignette-experiment in a survey-context to study separate effects of warmth and competence on evaluations of political candidates. In study 2, I also employ vignettes where I present respondents with a scenario about how an interaction with a public employee. The vignette is describing a fictitious scenario, where the respondent is asked to imagine an interaction with a public employee from the US Postal Service, and it is then manipulated how the employee is acting according to warmth and competence, respectively.

Data and participants

I plan to collect data for study 2 in the fall of 2019 from a sample of American citizens. Participants will be recruited through Amazons Mechanical Turk, and I expect a total of about 1,200 respondents. As samples drawn from Mturk are based on that respondents opt-in to participating in studies rather than being drawn from a population with known probability, study 2 will rely on a convenience sample. However, while such a convenience sample is not representative of the broader population of American citizens, the literature shows that results from survey experiments replicate across population-based and convenience samples (e.g., Mullinix et al. 2015). This suggest that data using MTurk-samples can produce valid estimates of survey experiments. Moreover, it is important to notice that as I am interested in causal effects, the crucial thing to consider is whether the non-random sampling have created a selected sample that is systematically different from the population on variables that correlate with both the experimental treatment and the dependent variable (i.e., trust in government). These systematic differences can create a sample selection bias that threatens the external validity of the causal effects.

Experimental design

In the experiment, participants were first shown a short general text about the public sector, which was formulated to set the scene and to make people gather their thoughts about the public sector and especially The United States Postal Service, which is the central case in the experimental stimuli. On the following page of the survey, the vignette were shown to respondents. Above the actual vignette, it was emphasized (by underlining the text) that respondents should *imagine* that the following happened to oneself.

The material was modelled to reflect an encounter with the public agency US Postal Service where the respondent should imagine missing a package sent via US Postal Service. The vignette was designed to reflect a situation that easily could have happened for the respondent outside the experimental survey-setting, thus enhancing experimental realism and ecological validity.

The vignette offered a description of the encounter, that was manipulated in a 2(high warmth/low warmth) x 2(high competence/low competence) between-subjects design. Subjects were randomly assigned to one of four experimental conditions. The general idea behind the design of the specific content of the vignette is that perceptions of the US Postal service employee's warmth and competence were manipulated using words or phrases that are known in the literature to tap into one of the two dimensions, respectively (e.g., Fiske, Cuddy, and Glick 2007). Based on results from pre-tests, competence is manipulated with reference to the employee's skillfulness, quickness and knowledge, while warmth was manipulated by the description of the employee's level of irritation, warmth, sincerity (whether the public employee were apologizing for the delay or not). Moreover, the paragraphs describing the warmth and competence of the public employee were of equal length, and to meet challenges of primacy or recency effects, the first part of the vignette included the warmth-manipulation while the last part included the competence-manipulation. Finally, the description of the encounter is identical across conditions, besides the manipulation with respect to warmth and competence. The full texts from the vignettes are provided in Supporting Information C.

I have pre-tested several versions of the vignette to ensure that impressions of warmth and competence are separated as intended, and at the same time ensure that the similar strength of manipulation with regard to competence and warmth. As some words/phrases might reflect both warmth and competence, the pre-test for instance included questions where I asked respondents - based on the scenarios/treatment they have read earlier in the survey - to list five words that they associated with competence and warmth, respectively. This in order to better

know which words people associate with warmth and competence in the case of the US Postal Service. Furthermore, the pre-tests were designed to make realistic vignettes in terms of the information citizens would typically about the US Postal Service, while at the same time separating impressions of warmth and competence.

The case of the treatment material is chosen in order to maximize the potential for distinguishing between perceptions of warmth and competence, respectively. I decided on prioritizing this highly as the main caveat of study 1 is that warmth and competence impressions are manipulated at the same time rather than being separated. To secure just that in the best way possible, I chose an area of the public sector where I had an *a priori* expectation about that warmth related characteristics to a lesser degree is perceived as a part of the main objective and thus potentially seen as a part of being competent. I argue that warmth means most to people in "soft" areas of the public sector where the main goal is to deliver welfare directly to citizens (e.g., public schools or public elderly care), while warmth arguably means less to citizens when the public sector is working with more technical tasks such as postal service. This is not to say that warmth not is expected to be important with regard to more technical areas, yet warmth is expected to be less confounded with perceptions of competence in the eyes of citizens. Based on this line of reasoning, I chose The United States Postal Service as the central case of study 2. Beside the expectation that this case has the potential to separate perceptions of warmth and competence, the exact case of the US Postal Service was chosen because it is a agency that all citizens can be expected to know and have (at least some) prior experience with. Furthermore, it has successfully been used in other studies examining perceptions of public sector organizations (Marvel 2016).

Right after having imagined the scenario described in the experimental vignette, respondents answered manipulation checks in the form of rating the US Postal on perceived warmth and competence on a five-point scale; thus following the practice from the social psychology literature (e.g., Fiske et al. 2002). Finally, respondents rated their trust in government. First, subjects were asked to - based on the encounter they just imagined - to rate their trust in the US Postal Service. Second, subjects indicated their trust in government using the same measures as in study 1. Yet, a measure of trust in civil servants using the same 0-10 scale as the other items measuring trust in specific institutions was added. This allow me to study the effect of warmth and competence on both citizens' trust in the specific organisation they interact with as well as a more general trust in different governmental institutions (administrative and political). Finally, in study 2 a question about how much trust subjects have in their negihbour were added to

the questionnaire in order to test for a halo effect. That is, in this case, whether the treatment simply have induced a general optimism rather than actually more trust in government[3].

Results

To be written

General discussion, implications and conclusion

To be written

- More discussion of the substantial size of treatment effects in study 1
- Code qualitative responses in study 1
- Differences across context: Are the significant results among US citizens a result of the non-representative sample?
- Case-choice: Could the effect of warmth and competence be different across public sector areas?
- Is it inherently positive that citizens are affected by single interactions with government?

3. See Supporting Information C for the full wording of the measures.

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Supporting Information

A Descriptives and balance check (study 1)

The following table shows means in covariates only for respondents with valid answers on all covariates. 204 respondents in total have missed one or more background variables, meaning that the dataset contains 1,911 observations without missing (compared to the full sample of 2,115 observations). As is evident from the table, most of the mising/don't know answers is on the left-right scale (most of these are don't know answers in the Danish sample). This sample of 1,911 observations is used in the robustness test in the main article, because I include covariates in these analyses. In the main analysis I use the full sample to avoid bias from attrition.

Table A2-A4 show the means of ideology, political interest, social trust, gender, education, age, employment and income across the experimental conditions; for both the full sample, the US sample and the DK sample independently. As the three tables show, the experimental groups are balanced on these covariates. The differences in means are generally very small and insignificant. Only a few differences are significant at the 10%-level, yet given the large number of comparisons, this small number of significant differences are not surprising and does not give rise to concerns about systematic differences between the treatment groups.

`Table A.1.` Descriptives and number of missing values

	DK sample	US sample	Full sample	#Missing
	Mean	Mean	Mean	
Left-right scale (0-10)	5.22	4.85	5.07	148
Social trust (0-1)	0.63	0.52	0.58	43
Political interest (0-1)	0.48	0.38	0.44	35
Gender (female)	0.50	0.42	0.47	6
High education	0.41	0.69	0.53	21
Age				7
18-34	0.23	0.55	0.36	
35-49	0.26	0.30	0.27	
50-64	0.23	0.12	0.19	
65+	0.28	0.03	0.18	
Employment				20
Government/public	0.18	0.12	0.15	
Private	0.27	0.54	0.39	
Student	0.12	0.03	0.08	
Self-employed	0.04	0.23	0.12	
Unemployed	0.04	0.05	0.04	
Other	0.35	0.03	0.22	

Note. The table only includes respondents without missing on any covariate, N=1911. High education = at least a short university degree or similar.

Table A.2. Balance in covariate means across experimental condition: full sample

	LC vs. HC	HW vs. HC	LW vs. HC	HW vs. LC	LW vs. LC	LW vs. HW
Diff. in left-right	0.27	0.10	0.15	-0.17	-0.12	0.05
Diff. in pol. int.	0.007	0.032*	0.021	0.025	0.014	-0.01
Diff. in soc. trust	0.008	0.02	0.0008	0.0001	-0.007	-0.016
Diff. in % female	-0.005	-0.01	-0.023	-0.005	-0.018	-0.013
Diff. in % high edu.	0.008	0.024	-0.025	0.016	-0.03	-0.05
Diff. in %18-34	-0.01	0.01	0.03	0.03	0.04	0.02
Diff. in % gov. empl.	0.01	0.03	0.02	0.02	0.01	-0.004

Note. * $p < 0.1$. LC= Low competence condition, HC= High competence condition, LW= Low warmth condition, and HW=High warmth condition.

Table A.3. Balance in covariate means across experimental condition: US sample

	LC vs. HC	HW vs. HC	LW vs. HC	HW vs. LC	LW vs. LC	LW vs. HW
Diff. in left-right	0.06*	0.45	0.46	-0.15	-0.14	0.006
Diff. in pol. int.	0.01	0.05*	0.04	0.03	0.03	-0.007
Diff. in soc. trust	-0.01	0.01	0.007	0.02	0.02	-0.002
Diff. in % female	-0.08	-0.06	-0.03	0.02	0.05	0.03
Diff. in % high edu.	0.03	0.05	0.04	0.02	0.01	-0.01
Diff. in %18-34	0.01	-0.01	0.04	-0.02	0.02	0.05
Diff. in % gov. empl.	-0.04	-0.03	-0.01	0.01	0.03	0.02

Note. * $p < 0.1$. LC= Low competence condition, HC= High competence condition, LW= Low warmth condition, and HW=High warmth condition.

Table A.4. Balance in covariate means across experimental condition: DK sample

	LC vs. HC	HW vs. HC	LW vs. HC	HW vs. LC	LW vs. LC	LW vs. HW
Diff. in left-right	0.05	-0.13	-0.05	-0.18	-0.1	0.08
Diff. in pol. int.	0.004	0.03	0.01	0.02	0.007	-0.01
Diff. in soc. trust	0.02	0.02	-0.001	0.003	-0.02	-0.02
Diff. in % female	0.04	0.02	-0.02	-0.02	-0.06	-0.04
Diff. in % high edu.	-0.007	0.004	-0.07*	0.01	-0.06	-0.07*
Diff. in %18-34	-0.03	0.02	0.02	0.05	0.05	-0.0001
Diff. in % gov. empl.	0.05	0.07	0.05	0.02	0.00001	-0.02

Note. * $p < 0.1$. LC= Low competence condition, HC= High competence condition, LW= Low warmth condition, and HW=High warmth condition.

B Additional tables and Robustness tests (study 1)

Table B1-B4 provide the full regression models for the effect of the warmth and competence treatment, respectively. Thus, the tables show the same findings as figure 3 in the main analysis in a regression table. Table B5-B6 furthermore provide regression models for the full sample.

Table B7-B8 show the effect of warmth and competence for the full sample, yet in these tables the same respondents are compared across the dependent variables. In the main analysis all respondents with non-missing values on the dependent variables are used. Even though the same respondents are not compared across different dependent variables (as a given respondent might have missing values on one or more of the dependent variables, while having valid values on the other DV's), dropping respondents with missing on just one of the DV's would warrant concern about attrition bias. However, table B7-B8 show results where only respondents with valid values on all four DV's are included. The point estimates are very similar to the main results, thus indicating that the results in the main analysis are not driven by using a slightly different number of observations across models with different DV's.

`Table B.1.` Effect of competence treatment: Danish sample

	(1)	(2)	(3)	(4)
	Adm. trust	Pol. trust	Civil servant	Nat. gov. (ANES)
Competence	0.00226	0.00368	0.0105	0.0191
	(0.0158)	(0.0184)	(0.0195)	(0.0182)
Constant	0.622***	0.486***	0.567***	0.443***
	(0.0111)	(0.0130)	(0.0136)	(0.0127)
N	635	633	616	604

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table B.2. Effect of competence treatment: US sample

	(1) Adm. trust	(2) Pol. trust	(3) Civil servants	(4) Nat. gov. (ANES)
Competence	0.0457^{+}	0.0388	0.0619*	0.0290
	(0.0234)	(0.0252)	(0.0294)	(0.0226)
Constant	0.495***	0.403***	0.473***	0.373***
	(0.0163)	(0.0177)	(0.0205)	(0.0157)
N	395	396	389	390

Standard errors in parentheses

$^{+}p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table B.3. Effect of warmth treatment: Danish sample

	(1) Adm. trust	(2) Pol. trust	(3) Civil servants	(4) Nat. gov. (ANES)
Warmth	-0.0148	-0.00973	-0.00786	0.00793
	(0.0151)	(0.0180)	(0.0186)	(0.0182)
Constant	0.631***	0.483***	0.571***	0.434***
	(0.0108)	(0.0129)	(0.0134)	(0.0131)
N	638	639	617	601

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table B.4. Effect of warmth treatment: US sample

	(1) Adm. trust	(2) Pol. trust	(3) Civil servants	(4) Nat. gov. (ANES)
Warmth	0.0300	0.0281	0.0382	0.0346
	(0.0230)	(0.0244)	(0.0277)	(0.0224)
Constant	0.514***	0.427***	0.501***	0.391***
	(0.0164)	(0.0174)	(0.0198)	(0.0159)
N	415	416	410	413

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

`Table B.5.` Effect of competence treatment: full sample

	(1)	(2)	(3)	(4)
	Adm. trust	Pol. trust	Civil servants	Nat. gov. (ANES)
Competence	0.0192	0.0176	0.0308	0.0233
	(0.0136)	(0.0150)	(0.0166)	(0.0143)
Constant	0.574***	0.454***	0.530***	0.415***
	(0.00955)	(0.0106)	(0.0116)	(0.00998)
N	1030	1029	1005	994

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

`Table B.6.` Effect of warmth treatment: full sample

	(1)	(2)	(3)	(4)
	Adm. trust	Pol. trust	Civil servants	Nat. gov. (ANES)
Warmth	0.00325	0.00526	0.0110	0.0192
	(0.0132)	(0.0146)	(0.0158)	(0.0141)
Constant	0.585***	0.461***	0.543***	0.416***
	(0.00944)	(0.0104)	(0.0113)	(0.0102)
N	1053	1055	1027	1014

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table B.7. Robustness: same observations across models. Competence treatment

	(1) Trust nat. gov. (ANES)	(2) Trust civil servants	(3) Adm. trust	(4) Pol. trust
Competence	0.0244^{+}	0.0321^{+}	0.0229	0.0179
	(0.0143)	(0.0169)	(0.0140)	(0.0156)
Constant	0.416^{***}	0.528^{***}	0.570^{***}	0.454^{***}
	(0.00998)	(0.0118)	(0.00979)	(0.0108)
N	982	982	982	982

Standard errors in parentheses. Results shown for the full sample

$^{+}$ $p < 0.1$ * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table B.8. Robustness: same observations across models. Warmth treatment

	(1) Trust nat. gov. (ANES)	(2) trust civil servants	(3) Adm. trust	(4) Pol. trust
Warmth	0.0201	0.0121	0.00611	0.00108
	(0.0143)	(0.0162)	(0.0136)	(0.0151)
Constant	0.417^{***}	0.543^{***}	0.582^{***}	0.464^{***}
	(0.0103)	(0.0116)	(0.00979)	(0.0109)
N	994	994	994	994

Standard errors in parentheses. Results shown for the full sample.

*** $p < 0.001$

Figure B1 and table B9-B12 provide results from the robustness test, where I only include "compliers".

`Figure B.1.` Robustness test: Effect of treatment for "compliers"

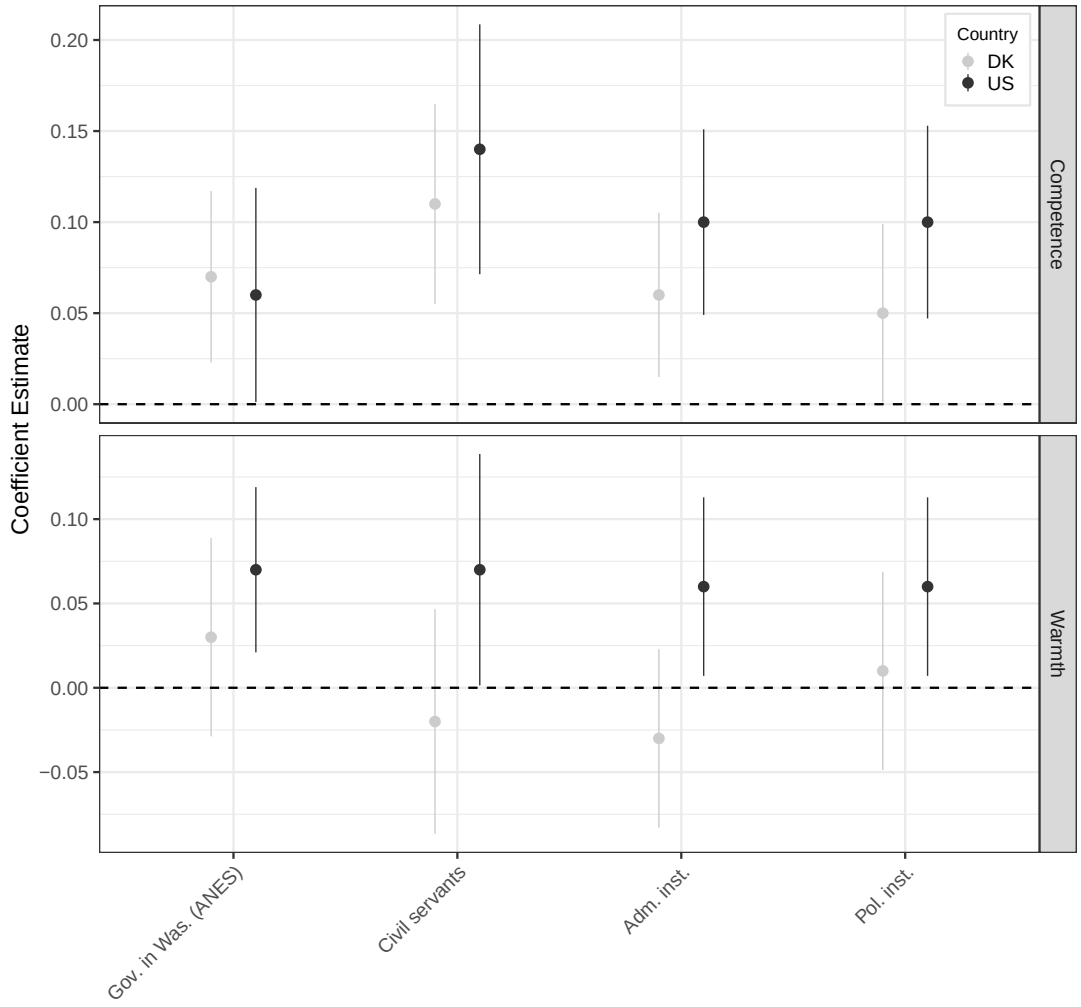

Table B.9. Robustness. Effect of competence treatment for compliers: DK sample

	Dependent variable:			
	Nat. gov. (ANES)	Civil servants	Adm. trust	Pol. trust
	(1)	(2)	(3)	(4)
Competence	0.072***	0.107***	0.061***	0.045*
	(0.025)	(0.028)	(0.023)	(0.025)
Constant	0.091	0.397***	0.299***	0.024
	(0.085)	(0.098)	(0.078)	(0.085)
Observations	282	284	289	289
Note:				*p<0.1; **p<0.05; ***p<0.01

Table B.10. Robustness. Effect of warmth treatment for compliers: DK sample

	Dependent variable:			
	Nat. gov. (ANES)	Civil servants	Adm. trust	Pol. trust
	(1)	(2)	(3)	(4)
warmth	0.027	-0.024	-0.028	0.012
	(0.030)	(0.034)	(0.027)	(0.030)
Constant	0.104	0.537***	0.458***	0.193**
	(0.095)	(0.108)	(0.085)	(0.095)
Observations	197	196	204	203
Note:				*p<0.1; **p<0.05; ***p<0.01

Table B.11. Robustness. Effect of warmth treatment for compliers: US sample

	Dependent variable:			
	Nat. gov. (ANES)	Civil servants	Adm. trust	Pol. trust
	(1)	(2)	(3)	(4)
warmth	0.069***	0.068*	0.056**	0.063**
	(0.025)	(0.035)	(0.027)	(0.027)
Constant	0.334**	0.529***	0.428***	0.406***
	(0.143)	(0.200)	(0.156)	(0.154)
Observations	224	224	226	226

Note: *p<0.1; **p<0.05; ***p<0.01

Table B.12. Robustness. Effect of competence treatment for compliers: US sample

	Dependent variable:			
	Nat. gov. (ANES)	Civil servants	Adm. trust	Pol. trust
	(1)	(2)	(3)	(4)
Competence	0.059*	0.135***	0.099***	0.102***
	(0.026)	(0.035)	(0.026)	(0.027)
Constant	0.355+	0.057	0.064	0.110
	(0.202)	(0.274)	(0.204)	(0.209)
Observations	239	238	241	241

Note: + p<0.1; * p<0.05; ** p<0.01; *** p<0.001

C Key measures (study 2)

The following show the full question wording of the key measures used in study 2.

Background info (asked pre treatment)

Political interest

How interested are you in information about what's going on in government and politics? (1=Extremely interested; 5=Not interested at all; Don't know)

Left-right position

Where would you place yourself on the following scale? (0=left; 10=right; Don't know)

Experimental treatment

In study 2 the wording of the experimental treatment is as follows. The text in bold font indicates the description of warmth and competence; obviously the text was not showed in bold font to participants.

> Government agencies and organizations deliver many different services to US citizens every day. One of these agencies is the United States Postal Service (US Postal Service) which delivers mail all over the country.
>
> Next, we will ask you to read about an encounter with the public agency US Postal Service. It is very important that you read the description of the encounter carefully, as you will be asked a couple of questions about it later in the survey.
>
> [New screen]
>
> Now, please imagine the following happened to you:
>
> *One day you experience missing an important package and you choose to call US Postal costumer service. When you get through, the US Postal Service employee sounds* ***irritated and cold/friendly and warm*** *in handling your inquiry.* ***You get no apology at all for the delay from the employee/The employee tells you that he is sincerely sorry about the delay****. The employee at US Postal Service seems* ***unskilled/skilled*** *as he* ***asks several times about the tracking number and only slowly/immediately retrieves the tracking number and quickly*** *finds your package in the tracking system. You have a clear impression that the employee is* ***unsure about what to do/know exactly what to do.***

Manipulation check

[The order of the manipulation checks were randomized]

Based on the encounter you just imagined, please indicate the degree to which the following characteristics describe the US Postal Service.

How warm is the US Postal Service?(1=Not at all; 5=extremely)

How competent is the US Postal Service? (1=Not at all; 5=extremely)

Attitudes towards USPS

How much do you personally trust the US Postal Service? (0=no trust at all; 10=complete trust)

General trust measures

[The order of the trust measures were randomized]

How much do you personally trust civil servants (0=no trust at all; 10=complete trust)

How much do you personally trust the political parties? (0=no trust at all; 10=complete trust)

How much do you personally trust the national government? (0=no trust at all; 10=complete trust)

How much do you personally trust the national parliament (Congress)? (0=no trust at all; 10=complete trust)

How much do you personally trust politicians? (0=no trust at all; 10=complete trust)

How much do you personally trust the public administration? (0=no trust at all; 10=complete trust)

How much do you personally trust the police? (0=no trust at all; 10=complete trust)

How much do you agree with the following statement?

Most civil servants can be trusted to do what is best for the country (1=Strongly agree; 5=Strongly disagree)

How much of the time do you think you can trust the government in Washington to do what is right? (Just about always; Most of the time; Only some of the time; Never)

Placebo-test

How much do you personally trust your neighbour? (0=no trust at all; 10=complete trust)

Background info (measured post treatment)

Age

How old are you?

Gender

What is your gender? (Male; Female; Do not want to disclose)

Social trust

Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people? (0=You can't be too careful; 10=Most people can be trusted; Don't know)

Education

What is your highest level of education? (Primary school or lower; high school or vocational education; bachelor's degree; graduate degree or higher education)

Employment

Where are you employed? (Government/public sector; private sector; self-employed; student; unemployed; other)

Race/ethnicity

Which of the following best represents your race or ethnicity? (White; African American; Latino or Hispanic American; Asian American; American Indian or Alaska Native; Native Hawaiian or Pacific Islander; Other)