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## Accountability and Coalitions: Evidence from a Negotiation Experiment

**Abstract:** *This article tests the effect of accountability on negotiation outcomes in a face-to-face classroom experiment. Student participants were asked to form coalitions in groups of three. In the treatment condition, negotiators were held accountable by a personal forum during the formation of the coalition. In the control condition, negotiators were not held accountable. Results show that accountability leads to lower group performance in coalition negotiations. Accountability also reduced the willingness of negotiators to include all negotiators in a “grand coalition.” Rather, accountable negotiators reached agreement with a subset of negotiators. Accountability increased the odds of reaching no agreement. These findings challenge the idea of increased performance as a result of public accountability in the context of coalition negotiations.*

### Evidence for Practice

- Accountable negotiators are less likely to form coalitions that include all negotiators—a so-called grand coalition—because negotiators focus on their individual results.
- Accountable negotiators show lower group performance in negotiations.
- The consequences of accountability—such as sanctions—have little impact on the performance of negotiators when negotiations are repeated.

Negotiation is one of the most common activities of all employees (Lægneid 2000; Susskind and Ozawa 1983). Negotiations focus, for example, on buying and selling goods or on problem solving. In the public sector, negotiations involve the coordination of inter- and intradepartmental tasks, the acquisition of goods and services, and the allocation of budgets (Dijkstra, Van Assen, and Stokman 2008). An example is the implementation of health care policies, which includes many stakeholders. During the implementation of these policies, representatives of patients’ federations, hospitals, and government have to negotiate practical implementation (see O’Toole 2000).

Although the outcomes of negotiations by public servants can have great societal impacts, negotiation as a research topic has not gained much attention from public administration scholars. Some exceptions are work on public-private partnerships (Medda 2007), decision making in policy implementation (Torenvlied and Akkerman 2004), and labor relations and collective bargaining (Perry and Angle 1979; Riccucci 2011). As public organizations contribute to the public good by definition, individual negotiation outcomes by civil servants are often public outcomes as well.

Public accountability is consistently rated as the most important public value by civil servants (Van der Wal, de Graaf, and Lasthuizen 2008). Recent developments in Western democracies have only bolstered accountability measures by public organizations (Bovens, Schillemans, and ‘t Hart 2008, 225). However, competing claims have been made about the effects of accountability. Accountability is often viewed as an instrument to prevent corruption of those in power. It is seen as instrument to increase perceived trustworthiness, enhance integrity, and increase performance (Bovens, Schillemans, and ‘t Hart 2008). The problem of who exactly is to blame is a well-known difficulty of accountability (Thompson 2005). Accountability may lead to window-dressing (de Wolf and Janssens 2007) or to task overload for public servants.

While accountability is known to have an impact on the thoughts, feelings, and actions of individuals (Lerner and Tetlock 1999), public administration scholars have neglected its potential effects on specific activities of public servants, such as negotiation. Social psychologists have established that individual negotiators are more “contentious” when they expect to be held accountable (Ben-Yoav

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and Pruitt 1984). Negotiators care for the equality of outcomes when the accountability between negotiators is high (Kramer, Pommerenke, and Newton 1993). When teams of negotiators are held accountable, the responsibility of the negotiated outcome is distributed among the team members (O'Connor 1997).

Still, individuals respond competitively to accountability mechanisms, leading to lower individual outcomes in negotiations (Ben-Yoav and Pruitt 1984). Thus, the effects of accountability on negotiator behavior and outcomes have been investigated in a limited number of studies, while the effect of accountability on negotiating a coalition by public servants has been neglected thus far.

Coalitions as a negotiation outcome are omnipresent in public policy networks (Provan and Milward 2001) and public-private partnerships (see Skelcher 2005), among other settings, which reinforces the need for knowledge on this topic.

In this study, we aim to fill this gap. We ask, *does public accountability lead to different coalitions and lower negotiator performance in coalition negotiations?*

We employed a face-to-face classroom experiment that enabled us to test the causal effect of accountability on negotiation outcomes by public servants. In negotiation research, experiments are often used to establish causal relations. Both laboratory and classroom experiments have been used in a range of negotiation studies (e.g., Embrey, Fréchette, and Lehrer 2014; Sinaceur et al. 2013). Within public administration, the share of experimental work is still relatively small (Groeneveld et al. 2015). Experimental designs are increasingly seen as a rigorous method for testing and developing theory (Anderson and Edwards 2015; Margetts 2011; Perry 2012). Accountability scholars have suggested that experimental research could help answer fundamental accountability questions by disentangling causes and effects (Koch and Wüstemann 2014).

## Theory and Hypotheses

In this section, we first discuss negotiations, accountability in the public domain, and coalitions. Next, we combine these streams of literature to arrive at a set of five hypotheses to be tested in our experiment.

### Negotiations

Negotiation is “the process of back-and-forth communication aimed at reaching agreement with others when some of your interests are shared and some are opposed” (Ury 1993, 4). Examples of public sector negotiations are negotiations in public-private partnerships (Klijn, Koppenjan, and Termeer 1995), allocation of scarce resources within organizations, and negotiations with autonomous bodies—so-called public service bargains (Hood and Lodge 2006).

Negotiation situations share a number of characteristics (Lewicki, Saunders, and Barry 2015). Negotiations have two or more actors that have a conflict of needs or desires. Actors negotiate by choice, and a give-and-take process can be expected. Actors prefer to negotiate and search for alternatives rather than struggle or fight publicly. Negotiation involves the management of tangibles (prices

or terms) and intangibles (such as the need to win or avoid losses and the need to obtain or keep a good reputation). The outcomes of negotiations are influenced by the interdependence of parties' goals (Lewicki, Saunders, and Barry 2015).

Two types of negotiations are often distinguished. Distributive bargaining refers to negotiations in which the achievement of one party's goals blocks the other's goals (Pruitt et al. 1978). Distributive negotiations are also known as constant- or zero-sum games in game theory (see Scharpf 1994). The second type is known as integrative negotiation, in which all parties achieve gains or solve a common problem (Lewicki, Saunders, and Barry 2015). These are known as variable- or non-zero-sum games in game theory (see Morrow 1994; Osborne and Rubinstein 1994; Peleg and Sudhölter 2007; Schelling 1980). Negotiations carried out by public servants may be constant sum (e.g., the acquisition of goods and services) or variable sum (seeking a solution to a policy problem together with other policy actors). In this study, we focus on variable-sum negotiations.

### Accountability in the Public Sector

We define accountability in the public sector as “a relationship between an actor and a forum, in which the actor has an obligation to explain and to justify his or her conduct, the forum can pose questions and pass judgment, and the actor may face consequences” (Bovens 2007, 107).

Because public servants operate on behalf of citizens or civil society based on politically defined mandates, public organizations are held publicly responsible for the outcomes they produce. This responsibility is determined by accountability through various oversight mechanisms (Bovens, Goodin, and Schillemans 2014). Accountability is seen as a mechanism of democratic control that is claimed to increase performance, enhance integrity of public governance, and render perceptions of trustworthiness and transparency with citizens.

Central to the definition used in this study is that there are four distinctive elements (Bovens 2007, 107). An actor and a forum are in a relationship. Within this relationship, the actor has an obligation to explain and justify his or her conduct. Afterward, the forum can pose questions and pass judgment. Finally, the actor may face consequences. These consequences come in the form of sanctions or rewards.

In many public organizations, the relationship between the actor and forum is legally binding. Therefore, it is the expectation of being held accountable (shadow of the future) or facing the consequences of performance that will alter the behavior of negotiators (O'Connor 1997).

### Coalitions

This study focuses on coalitions as an outcome of negotiations. Coalitions are “a collection of parties within a larger social setting who work together to pursue mutually desirable goals” (Lewicki, Saunders, and Barry 2015, 385; Guo and Lim 2007, 1122).

Coalitions have a number of characteristics. They are interacting groups of individuals. Coalitions are deliberately constructed and

issue oriented. They exist independently of a formal structure, meaning that coalitions are not a formal group such as an organization or team that is created by design. Coalitions also lack a formal structure such as internal hierarchy, while leadership roles may form in existing coalitions. They focus on goals external to the coalition. Coalitions require concerted member action (Lewicki, Saunders, and Barry 2015; Stevenson, Pearce, and Porter 1985). Central in formed and pending coalitions is that the actors involved care about the outcomes (O'Connor 1997, 386). Coalition forming demands that negotiators balance individual needs and desires against group needs and desires.

### **Accountability and Negotiations**

O'Connor (1997) found that negotiators paired in teams who are held accountable behaved more dominantly or competitively. Accountable negotiators made fewer concessions and employed more contentious strategies than their nonaccountable counterparts (Klimoski 1972). Compared with nonaccountable negotiators, this could lead to higher individual gains and lower group gains on average (Pruitt et al. 1978).

If mechanisms of accountability indeed lead to competitive rather than cooperative or problem-solving behavior, the difficulty of reaching an agreement will increase, especially in coalitions that aim to solve issues by negotiating. Accountability will lead to more competitive behavior during negotiations because negotiators will feel the social need to perform better for their “forum” (see O'Connor 1997), or they may fear the consequences of bad performance (Bovens 2007).

**Hypothesis 1:** Accountable negotiators will show lower performance at the group level than nonaccountable negotiators.

As accountability leads to more competitive behavior by individual negotiators (Ben-Yoav and Pruitt 1984; Mosterd and Rutte 2000; O'Connor 1997), we expect this mechanism to lead to lower group scores as soon as all negotiators are exposed to accountability. As a result, negotiators will form coalitions that do not incorporate all negotiators but rather a subset of the group.

By reaching an agreement that includes all negotiators that are present—a “grand coalition”—negotiators show that they care more about group outcomes than individual outcomes. This is partly in line with what others have found; negotiators care about individual as well as group outcomes at the same time (Ben-Yoav and Pruitt 1984). However, under pressure of accountability, negotiators must choose between individual and group payoffs.

**Hypothesis 2:** The presence of an accountability forum during negotiations will lead to fewer grand coalitions.

The increased efforts of players to reach an agreement but also to maximize payoffs at the group and individual levels make reaching an agreement that satisfies all negotiators more difficult. We expect that the number of defaults (no deal) will increase as a result of accountability, even in coalition negotiations (see Mosterd and Rutte 2000). When time is limited, negotiators are also forced to reach an agreement. Not reaching an agreement has no payoff.

In the public domain, there are often limited alternatives for certain (policy) coalitions, which forces negotiators to cooperate. Further, as the number of people and thus interests expand vastly when negotiators are being held accountable, the “computational difficulty” of many viewpoints in the negotiation setting drives negotiators to opt for a solution that will yield more points at the individual level. Therefore, reaching a coalition—regardless of size and shape—is more attractive than defaulting. Because negotiators care about the group outcome (hypothesis 2) but also compete as a result of accountability (hypothesis 1), the frequency of defaults will increase.

**Hypothesis 3:** Holding negotiators accountable will lead to a higher chance of default (no deal) compared with nonaccountable negotiators.

We expect that the *consequences* (sanctions or rewards) of accountability will have effects on negotiator behavior. The consequences define the relation between the forum and the negotiator. Public budgets are prioritized, but rewards for good performance are not so common in the public domain (Verhoest et al. 2010, 143). Sanctioning poor performance is a more common practice. From this perspective, negotiators who are sanctioned are “poor performers.”

**Hypothesis 4:** Lower individual negotiation outcomes will lead to a higher frequency of sanctions by an accountability forum.

We also expect that there is a link between the number of defaults (no deal) as a coalition outcome and the chances of a sanction. Poor negotiators will fail to order their preferences (especially given the presence of a forum) and therefore will also fail to reach an agreement.

In terms of payoffs, not reaching an agreement can be viewed as the worst potential outcome for negotiators both individually and at the level of the group. The payoff at the individual and the group level is zero in this scenario.

**Hypothesis 5:** Not reaching an agreement (no deal) will lead to a higher chance of facing negative consequences (sanctions).

### **Method**

In this section, we set out the experiment that we conducted to test our hypotheses. First, we explain the setting, experimental context, and participants. Next, we describe the design, experimental procedure, experimental conditions, and post-test questionnaire.

#### **Experimental Setting, Context, and Participants**

The hypotheses were tested in a campus-based, face-to-face experiment conducted at a Dutch university. In total, we carried out two control sessions and three treatment sessions that were administered consecutively. All sessions were carried out on the same day and in the same classroom. Graduate and undergraduate student subjects were recruited from a course in a public administration program.

The participants were given a negotiation task that enabled us to examine the causal effect of accountability on negotiating a coalition. Face-to-face negotiation enhances the mundane reality for participants in the experiment (Bozeman and Scott 1992). A classroom setting gives the researcher situational control during the experiment (Morton and Williams 2010).

We asked the participants to negotiate a coalition in triads in a game that is best described as a “coalition game” in which utility is transferable (Peleg and Sudhölter 2007). Forming coalitions while weighing individual and group payoffs is central to negotiation in both public and private sector settings (Lewicki, Saunders, and Barry 2015).

### Rewards

The participants were not compensated financially for participation, as is customary in experimental economics (Charness and Kuhn 2011). Rather, the experiment was part of a public administration course, and the negotiation was structured such that scores could be compared after the experiment ended. The student with the highest score was rewarded with a box of chocolates. This reflects that we incentivized the participants to perform well on an individual level, which could only be achieved by striking a balance between individual and group interests.

### Design

A between-subjects design was used. The independent variable (accountability) was manipulated to test its effect on the dependent variable (negotiation outcomes). We focused on two levels of negotiation outcomes. At the group level, we focused on group scores and the coalition type that was agreed upon, whereas at the individual level, we focused on the individual scores as an indicator of negotiator performance.

In the control condition, subjects played the coalition game in groups of three individuals. In the treatment condition, the subjects played the same game in the presence of a randomly matched viewer who acted as an accountability forum (see the Procedure section).

During the experiment, subjects played a coalition game. The players’ task was to form a coalition and divide its value between or among its members. Different types of coalitions were worth points for the group of subjects. The goal for each player was to obtain the highest individual score possible. The negotiation centered around the division of points within the coalitions that were formed. In other words, the players could decide among each other how they would divide the points that a certain coalition was worth.

The coalition game is denoted as follows. The value ( $v$ ) of staying alone for players A, B, and C is 0. The value of a coalition between A and B is 60; between A and C, 40; between B and C, 70. The grand coalition among all players A, B, and C gives a total value of 80.

$$\begin{aligned}v(A), v(B), v(C) &= 0 \\v(AB) &= 60 \\v(AC) &= 40 \\v(BC) &= 70 \\v(ABC) &= 80\end{aligned}$$

Our coalition game is a variable-sum game, meaning that the sum of all players’ payoffs depends on their employed strategies. Further, the game has an infinite amount of solutions for the players (Osborne and Rubinstein 1994, 257; Telser 1994). Moreover, the core is empty.<sup>1</sup> This means that the solutions formed by the players, known as payoff vectors, are inherently unstable (Parkhe 1993; Song and Panayides 2002). For every solution the players agree on, there is another agreement that has a higher value ( $v$ ) for at least one player. An illustration of this is when the value is evenly divided among the players. The “grand coalition” (one-third of  $v(ABC) = 26.6$ ) in this game results in fewer points for the individual players than the points that a coalition between A and B will generate (one-half of  $v(AB) = 30$ ) (for A and B, that is). Players may also choose to distribute points of this coalition differently, but always rounded off to 0.5 point.

Also, the players’ positions differ in negotiation power. For this reason, the participants are rotated over the players’ positions. Theoretically, player B is the strongest, followed by C and then A.<sup>2</sup>

Our experimental setting is an artificial situation, but it is comparable to many negotiations in the public domain. In public negotiations, a single optimal solution does not exist because of the multitude of interests that vary over time and space (Head 2008). There are different solutions that will satisfy actors in different configurations and require collective action (Van Bueren, Klijn, and Koppenjan 2003). Theoretically, players have an incentive to negotiate endlessly in this coalition game, as they will never reach a stable solution (Telser 1994). Mundane deadlines or limited resources will then define the end of a negotiation. Think of policy targets or the end of a financial year. For the same reason, a time limit ends negotiation rounds in this experiment.

### Procedure

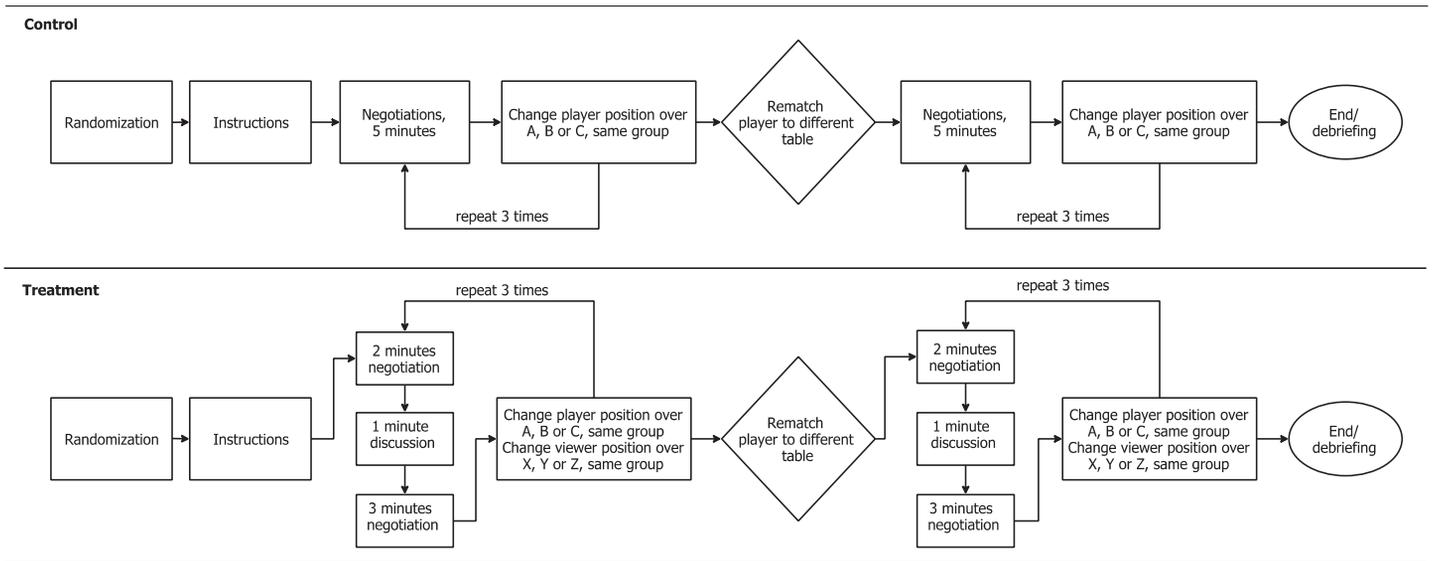
A pilot round with six subjects was administered before the final experiment took place. The pilot round led to improvement of the instructions and of the relationship between the negotiator and viewer (forum) by adding green and red cards instead of written feedback.

During the experiment, randomization was ensured by letting the subjects draw from preprinted number cards that corresponded to the numbered tables in the room upon entry to the classroom. When seated, the participants received an instruction sheet (see appendix A in the Supporting Information online), and the instructions were read out aloud by the researcher. After the students’ questions had been answered, the negotiations began.

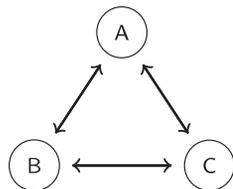
Following each negotiation round, the subjects had to note their individual scores and group scores on paper. In total, the participants played this game six times with rematches of players. For each of the six rounds, the subjects had five minutes time of “play.” During the experiment, a time constraint ended the negotiation rounds (see figure 1). Finally, the subjects could ask questions and were extensively debriefed and informed about the purpose of the experiment.

### Control Condition

In the control condition, the subjects played the coalition game six times in total (see figure 2). After each round, the subjects were



**Figure 1** The Order of Events during the Experiment, Control, and Treatment Conditions



**Figure 2** Negotiating a Coalition in the Control Condition

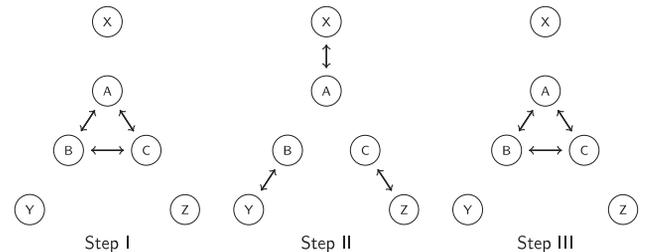
assigned a different position (A, B, or C). After three rounds, the subjects were regrouped across tables.

**Treatment Condition**

In the treatment condition, the subjects were matched in groups of three. There were negotiator and viewer roles. All negotiators in this condition played the role of negotiator as well as the viewer role. The negotiators played the same coalition game, but now every negotiator had a viewer (a personal accountability forum) to which he or she had to report to. This viewer received 30 percent of the players’ (A, B, and C) points, which were not deducted from the players’ total. Therefore, the viewer had an interest in giving feedback and interfering with the process. The viewers watched the negotiation process and were allowed to give feedback at set instances. The responsibility for the negotiated outcomes remained with the players. All viewers and negotiators were able to see each other.

The coalition game was played for two minutes (step I) (see figure 3). Then, the players had to report to their viewers. The viewers were allowed to react on the strategy, earnings, and results of their negotiator only (one minute) (step II). Then, A, B, and C played for another three minutes (step III). This process was repeated six times in total (see figure 1). In between, negotiators and viewers were rematched over the groups. The subjects were matched in such a manner that they could never meet the same player and/or viewer for a second time. As in the control condition, the participants were randomly assigned to different tables after three rounds.

When the negotiation round finished, the viewers had to “pass judgment” (Bovens 2007) by giving either a green or a red card to



**Figure 3** Negotiating a Coalition in the Treatment Condition

his or her matched player (after step III). In the case of a green card, the player was allowed to keep the earned points.

A red card was a penalty for bad negotiation performance in the eyes of the viewer. Players who received a red card had to subtract two points from their round total. This could add up to a total of 12 points being subtracted from the players’ total score.

**Post-Test**

A paper-based questionnaire was administered after the experiment (see appendix B online). This questionnaire contained questions on age, gender, and public service motivation (PSM). We included these control variables because older individuals may have more negotiation experience. Also, the negotiation literature has established that men and women negotiate differently, which stresses the importance of controlling for gender (Lewicki, Saunders, and Barry 2015). Additionally, we expect public administration students to have high public service motivation and, as a result, high motivation to serve the public interest and high compassion levels (Vandenabeele 2008).

**Results**

In total, 87 graduate and undergraduate students were recruited from a public administration course, from which 27 served as the control and 60 served as the treatment. There were 19 groups in total, with 9 groups in the control condition and 10 groups in the treatment condition. The results from one group were excluded from analysis because of unreadable handwriting and

**Table 1** Descriptive statistics ( $n = 87$ )

	% Female	Average Age	Education	PSM
No accountability (control)	41.4%	21.81 (1.798)	5.76 (0.812)	3.46 (0.367)
Accountability (treatment)	25.7%	20.91 (2.485)	5.33 (0.705)	3.32 (0.424)
Overall mean	33.3%	21.19 (2.321)	5.46 (0.759)	3.37 (0.410)
Test statistic	$\chi^2 = 1.510$ $p = .219$	$t\text{-test} = 1.903$ $p = .061$	$w = 1040.5$ $p = .011$	$t\text{-test} = 1.56$ $p = .123$

Note: Standard deviations in parentheses.

calculation errors of the participants. All groups negotiated six times (for five minutes), which yielded 114 negotiated coalition outcomes (54 in the control condition and 60 in the treatment condition).

Age and gender did not differ between treatment and control. The highest level of education differed over the conditions (see table 1). For this reason, the background variables are used as controls in further analyses. The descriptive results confirm that the student subjects are good proxies for civil servants because their public service motivation is relatively high (Leisink and Steijn 2009). The 10-item Dutch PSM scale had moderate reliability (Cronbach's alpha = .60).

A post hoc power test for unequal sample sizes revealed that on the basis of the means, the statistical power in this study is .97 ( $\alpha = .05$ ,  $df = 17$ ,  $N = 10/9$ ,  $d = 1.88$ ), which is more than the recommended statistical power of .80 (Cohen 1988).

### **Accountable Negotiators Will Show Lower Performance at the Group Level than Nonaccountable Negotiators**

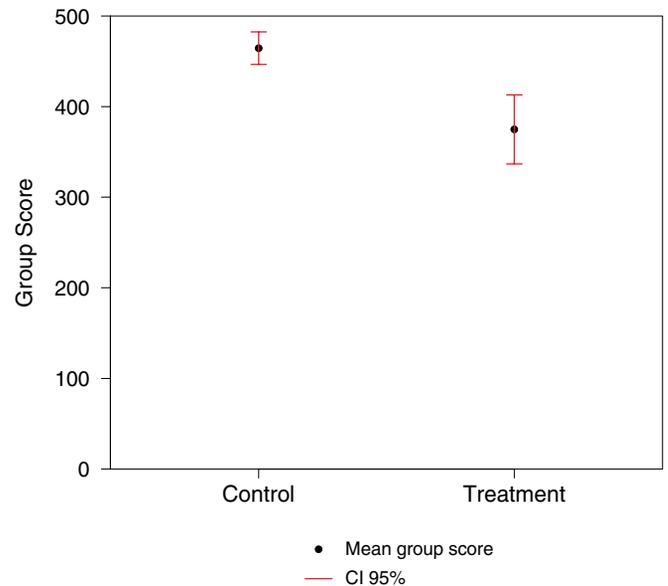
The first hypothesis is supported by our data. Triads of players in the control condition obtained higher group scores ( $M_{\text{control}} = 464.44$ ,  $SD = 27.43$ ) than triads in the treatment condition ( $M_{\text{treatment}} = 374.75$ ,  $SD = 61.44$ ). Figure 4 shows the average total scores of the groups over the entire experiment. The development of the scores over time per round can be found in appendix C online.

As the scores at the group level are not parametric, a Wilcoxon rank-sum test is suitable (Siegel and Castellan 1988). The differences between control and treatment are statistically significant ( $w = 83.5$ ,  $p = .0017$ ).

Group scores, and thus solutions, in the accountability condition are more different from each other than they are in the control condition. This is confirmed when testing the second hypothesis.

### **The Presence of an Accountability Forum during Negotiations Will Lead to Fewer Grand Coalitions**

The second hypothesis is also supported by the data. The negotiators in the accountability condition were less inclined to reach a grand coalition (table 2). The grand coalition (A, B, and C) occurred in 88.9 percent of instances in the control condition, whereas it occurred in 36.7 percent in the treatment condition.

**Figure 4** Average Group Scores over the Entire Experiment**Table 2** Frequency of Coalitions by Condition

	No Accountability Control	Accountability Treatment	Test Statistic
AB	1.9% (1)	15.0% (9)	$\chi^2 = 33.56$ $p < .000$
AC	1.9% (1)	16.7% (10)	
BC	7.4% (4)	25.0% (15)	
ABC	88.9% (48)	36.7% (22)	
No coalition	0.0% (0)	6.7% (4)	
	100% (54)	100% (60)	

### **Holding Negotiators Accountable Will Lead to a Higher Frequency of Defaults (No Deal) Compared with Nonaccountable Players**

The third hypothesis is also supported by the data. Indeed, subjects in the accountability condition show a 6.7 percent rate of defaults, whereas the subjects in the control condition always reached an agreement (see table 2). As players were always able to reach an agreement in the control condition, and did not reach an agreement in only four cases in the treatment condition, the results are statistically significant. Although the absolute numbers are small, the point-wise attractiveness of reaching a coalition outcome (whichever combination of players) is expected to always generate a coalition outcome of some sort.

### Lower Individual Scores Lead to More Sanctions by an Accountability Forum

Analyzing the results for the fourth hypothesis demands that we focus on the effects within the accountability condition only. Therefore, the results from this part of our analysis are of a correlational nature. In total, a red card was given to negotiators in 30.5 percent of all opportunities to do so by the viewers.

Based on the data, we conclude that a lower score predicts a sanction at the group level (see table 3). Note that the betas represent the scores over the length of the experiment (i.e., earning 90.9 points less resulted in one sanction, or 15.15 fewer points leads to a sanction per round on average). The second model adds the covariates age, gender, and PSM. The covariates have no effect on the relationship between individual scores and sanctions.

Additionally, a lagged linear regression was calculated in which the sanctions were used as predictor for each round  $t + 1$ . This way, a sanction in round one can be used to predict scores in round two, a sanction in round two predicts the scores in round three, and so on. In our experiment, sanctions in the previous rounds did not significantly predict performance,  $R^2 = .00$ ,  $F(1, 143) = 0.36$ ,  $p = .545$ . There is no carryover effect between subsequent negotiations.

### Not Reaching an Agreement (No Deal) Leads to a Higher Chance of Facing Negative Consequences (Sanctions)

The fifth hypothesis is not supported by the data. Based on the frequency of sanctions, the grand coalition (A, B, and C) led to a sanction in 11.3 percent of the cases. In 17.3 percent of cases, a dyadic agreement resulted in a sanction for players. Not reaching an agreement at all led to a sanction in 33.3 percent of cases.

**Table 3** OLS Predicting Sanctions under the Effect of Accountability

	Model I	Model II	Model III
Constant	1.174*** (0.199)	0.585 (0.943)	1.168 (1.381)
Score	-0.011*** (0.003)	-0.011*** (0.003)	-0.011*** (0.003)
Age		0.015 (0.032)	-0.012 (0.054)
Male		-0.162 (0.186)	-0.185 (0.193)
PSM		0.115 (0.188)	0.137 (0.195)
Education (secondary school)			-0.119 (0.628)
Education (applied university)			0.018 (0.706)
Education (college-level BA/MA)			0.165 (0.689)
<i>N</i>	53	53	53
<i>R</i> <sup>2</sup>	0.215	0.237	0.250
Adjusted <i>R</i> <sup>2</sup>	0.200	0.173	0.133
Residual SE	0.572 (df = 51)	0.581 (df = 48)	0.595 (df = 45)
<i>F</i> -statistic	14.007*** (df = 1; 51)	3.726** (df = 4; 48)	2.142* (df = 7; 45)
AIC	95.09	99.62	104.71
Durbin-Watson (1 > criterion < 3)	1.81	1.83	1.84

Note: Standard errors in parentheses. No VIF values < 10 and average close to 1, Cooks-*d*, all < .4, normality of errors, and heteroscedasticity met.  
\*\*\*  $p < .01$ ; \*\*  $p < .05$ ; \*  $p < .1$ .

A pooled binomial logistic regression analysis was calculated using the coalitions as predictors for sanctions (sanction or no sanction) (table 4). The grand coalition is used as the reference category (most occurring). Not reaching an agreement significantly predicts the odds of receiving a sanction (odds ratio = 3.93, 95 percent confidence interval, 1.04–14.87,  $p = .043$ ). Put differently, not reaching an agreement is associated with a 79.7 percentage point higher chance of receiving a sanction (compared with reaching an agreement). At the same time, reaching a dyadic coalition (AC) is significantly associated with a 75.45 percentage point higher chance of receiving a sanction. As the AC coalition is also associated with sanctions and the model quality is not satisfactory, (i.e., high AIC and low pseudo- $R^2$ ) we decided to reject the fifth hypothesis.

### Discussion

Many New Public Management public sector reforms hinge on the idea that public accountability increases public performance (Bovens, Schillemans, and 't Hart 2008). Dubnick (2005) notes that empirical tests of the link between public accountability and performance are scarce. Moreover, decisions are increasingly taken by means of negotiation in governance networks, while public accountability structures have not adapted to these newer forms of decision making.

Our experiment consistently shows that public accountability leads to different coalitions and more no-deals. The group-level payoffs seem to be prioritized when negotiators are not held accountable. Conversely, when negotiators are held accountable, individual payoffs seem to be prioritized. Although the data do not allow us to make causal claims on the sanction part of the experiment, the results suggest that sanctions have a small or no effect on subsequent

**Table 4** (Binomial Logistic Regression) Predicting Sanctions from Coalition Type

	Model I	Model II	Model III
Constant	-2.061*** (0.401)	-2.906 (2.546)	-5.091 (3.803)
No coalition	1.368** (0.679)	1.324* (0.687)	1.237* (0.700)
AB	-0.241 (0.843)	-0.331 (0.853)	-0.391 (0.857)
AC	1.123** (0.562)	1.004* (0.574)	1.031* (0.590)
BC	0.174 (0.626)	0.062 (0.634)	0.154 (0.645)
Age		-0.035 (0.090)	0.104 (0.156)
Male		0.616 (0.545)	0.629 (0.550)
PSM		0.353 (0.510)	0.307 (0.522)
Education (secondary school)			-0.377 (1.315)
Education (applied university)			-0.943 (1.642)
Education (college level BA/MA)			-2.335 (1.790)
<i>N</i>	169	169	169
Log-likelihood	-71.916	-70.964	-69.314
AIC	153.832	157.929	160.629
Hosmer and Lemeshow <i>R</i> <sup>2</sup>	0.052	0.056	0.086
Cox and Snell <i>R</i> <sup>2</sup>	0.046	0.056	0.075
Nagelkerke <i>R</i> <sup>2</sup>	0.077	0.095	0.126
% correct predicted	28.1	28.2	28.5

Note: Standard errors in parentheses.  
\*\*\*  $p < .01$ ; \*\*  $p < .05$ ; \*  $p < .1$ .

negotiations. Our findings have implications for public accountability as well as for coalition negotiations in the public sector.

### **Public Accountability**

Our main finding is that group-level performance of negotiators is reduced by public accountability. In our experiment, individual negotiators were held accountable for their actions. A question remains whether performance of organizations instead of individual negotiators would also be lowered by public accountability. This question is relevant as individual negotiators may be held accountable by their superiors, while the organization they represent will be held accountable by a political forum or citizens.

In our experiment, the viewers were instructed to rate their negotiators. If the goal of public accountability is to increase performance, the accountability structure may need to focus more on process rather than output. Similarly, if including all actors in a coalition is a goal, viewers may need more precise process benchmarks instead of just rating their negotiators.

Although our negotiation setting is a low-stakes game for the players, the viewers indeed sanctioned poor performers, while those sanctions as such seem to have had no effect at all on the future negotiations of the sanctioned. Although these findings are preliminary, they imply that accountability forums do indeed sanction poor performance, but the sanctions do not impact the future behavior of organizations. Additionally, the worst-performing negotiators are not sanctioned hard. Implying compassion for the negotiator or social reciprocity between actor and forum.

### **Public Negotiations**

Public organizations are increasingly held accountable by citizens. In our experiment, negotiators seem to focus on including all players as much as possible. As negotiators knew beforehand that they would negotiate in multiple rounds, the focus on the group could be a result of *forward induction*. This does not offer an explanation for the higher number of no-deals when negotiators are held accountable. Our findings also provide some support for the idea that negotiations behind closed doors may result in better group outcomes than negotiations that are subject to public accountability (Chambers 2004).

Also, it seems that a focus on accountability of the output reduces the attention of negotiators to the results at the group level. Negotiation results in the public sector are frequently about the group level or even about generating a public good.

For practitioners, there are a number of relevant takeaways. Negotiators should pay specific attention to payoffs of parties at the group *and* individual levels when parties are expected to be held accountable. Practitioners should expect that negotiators are more likely to form smaller coalitions. The consequences of public accountability—such as sanctions—have little effect on future negotiations.

### **Limitations**

Finally, we discuss some limitations and avenues for further research before final conclusions can be drawn from our study.

A first limitation is that we employed student subjects in our experiment. This raises the question of whether public servants

who negotiate a coalition would respond in a similar fashion. The use of student-based samples in experimental research has been criticized because of limited statistical generalizability (for an overview, see Charness and Kuhn 2011; Morton and Williams 2010). Psychologists and behavioral economists are struggling with the question of when and how using students in experiments is appropriate (Charness and Kuhn 2011; Druckman and Kam 2011; Open Science Collaboration 2015). In public administration, there is no real consensus on this matter, but a substantial share of experimental studies in public administration make use of student participants (Bouwman and Grimmelikhuijsen 2016; Li and Van Ryzin 2017). Our study focuses on the behavior of individuals in negotiations and groups of individuals at the psychological micro level of aggregation (Grimmelikhuijsen et al. 2016; Meier and Funk 2017; Tepe and Prokop 2017). Using students creates a problem especially when “the treatment effect is moderated and the moderating variable varies between students and nonstudent samples” (Druckman and Kam 2011, 51; Tepe and Prokop 2017). Also, distinctive characteristics of students, such as relatively low age and higher education, compared with practitioners, could have influenced our findings.

Second, a face-to-face negotiation is more realistic to subjects compared with computerized laboratory negotiation settings and therefore has higher ecological validity, but it does introduce the risk of exogenous (confounding) influences, such as social effects of liking or body language of the participants. The participants in our experiment could see each other and possibly knew each other beforehand. Despite randomization, some familiarity with one another might have biased the results. Additionally, experimenter demand effects may have influenced the findings. This is a trade-off between mundane realism (Bozeman and Scott 1992), on the one hand, and experimental control, on the other hand. The choice for a face-to-face experiment is partly legitimized by the fact that negotiations are most often a face-to-face activity and that negotiators and an accountability forum may also know each other.

Third, in our study, negotiators and viewers switched roles for practical reasons, while in the public domain, the role of viewer and negotiator will be more stable over time. More research is needed to study the repeated and asymmetric character of the relation between actor and forum, in which for example building trust or familiarity could play a moderating role. Also, the viewer in our study obtained 30 percent of payoffs of the negotiators. Varying on this strength, that is, setting the payoff for the viewer at 10 percent or 60 percent, might provide insight into how the relationship between forum and negotiator works. Unfortunately, our data do not enable us to answer to what extent individual negotiator payoffs under public accountability pressure are conditional on the group results.

### **Replication**

Future research efforts should be aimed at replicating this study in different settings by using different types of experimental designs such as a computerized experiment that strips off more context for higher internal validity. Alternatively, a field experiment with practitioners that focuses on the link between public accountability and negotiator or organizational performance seems like a good

step forward to see how our findings travel to more context-rich environments.

### Public and Private Sector Negotiations

Another promising way forward would be to study differences between public sector and private sector negotiators in their responses to accountability. Accountability in the public sector is more stringent compared with the private sector, especially with regard to processes and general policy (Mulgan 2000). Moreover, public and private sector employees seem to differ consistently in some personality characteristics such as compassion, self-sacrifice, altruism, and risk perceptions (Perry and Wise 1990; Vandenaebale 2007; Wildavsky and Dake 1990). The differences in specific characteristics may play an important role in negotiations as well.

### Conclusion

Our study makes two important contributions to the literature. First, this article brings together accountability and negotiation literature in the public domain, which has not been done before to our knowledge.<sup>3</sup>

Second, accountability scholars have suggested to use experiments to test the impact of accountability on public sector organizations and employees (Koch and Wüstemann 2014). By using a face-to-face negotiation experiment, we balanced high internal validity of the study and reasonable reality for the participants. While acknowledging that further refinements are necessary, we have made an important first step in studying effects of accountability on public negotiators by means of an experimental design.

In line with earlier studies on negotiations, we found that public accountability leads to lower performance in negotiations at the group level (see table 5) (Klimoski 1972; O'Connor 1997). This is an important finding, as negotiating in a coalition differs in many respects from simpler dyadic bargaining settings that are often used in experiments (Lewicky, Saunders, and Barry 2015; Murnighan 1986; Stevenson, Pearce and Porter 1986).

Next to lower performance, the frequency in which negotiators reached a grand coalition was reduced under the influence of accountability in our experiment. Recent research has found that civil servants and public administration students are relatively cooperative in a range of settings (Esteve, Van Witteloostuijn, and Boyne 2015). This may partly explain the high number of grand coalitions in the control condition. Within the accountability treatment, our finding seems to suggest that negotiators opt for higher individual payoffs at the cost of cooperation with all negotiators.

**Table 5** Summary of Findings

	Hypothesis	Findings
1	Accountable negotiators will show lower performance at the group level than nonaccountable negotiators.	Supported
2	The presence of an accountability forum during negotiations will lead to fewer grand coalitions.	Supported
3	Holding negotiators accountable will lead to a higher chance of defaults (no deal) compared with nonaccountable negotiators.	Supported
4	Lower individual negotiation outcomes will lead to a higher frequency of sanctions by an accountability forum.	Supported
5	Not reaching an agreement (no deal) will lead to a higher chance of facing negative consequences (sanctions).	Refuted

Further, accountability led negotiators to not reach any agreement at all. When an agreement was reached, it appears that negotiators focused on smaller coalitions and higher individual results instead of group results. This finding is particularly interesting because the size of the sanctions in our experiment was limited in size and the experimental game was a low-stakes setting. One should interpret this finding with caution: time pressure in general seems to produce nonagreements in negotiations (Carnevale and Lawler 1986; Mosterd and Rutte 2000).

When focusing on only the treatment condition and using cross-sectional data, we found that poorer performing negotiators received more sanctions from their accountability forum. Also, sanctions did not improve performance in subsequent negotiation rounds.

Accountability is claimed to reduce corruption and increase trust and performance. We contribute to the inconclusive theoretical discussion on the effect of accountability in the public sector by providing empirical evidence that public accountability leads to different coalitions and lower group outcomes in negotiations. Our findings underscore that the adverse effects of public accountability on individual and group outcomes as well as organizational performance should not be overlooked.

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### Notes

1. Proof that the core is empty (e.g., Raiffa, Richardson, and Metcalfe 2002):

$$X_A + X_B \geq v(AB) = 60$$

$$X_A + X_C \geq v(AC) = 40$$

$$X_B + X_C \geq v(BC) = 70$$

$$2X_A + 2X_B + 2X_C \geq 170$$

$$X_A + X_B \geq X_C \geq 85$$

(Core is empty because  $85 \geq X_A + X_B + X_C = 80$ ).

2. Shapley values indicate the bargaining power of the players (Raiffa, Richardson, and Metcalfe 2002). Shapley values for players: A = 20, B = 35, C = 25.
3. Some international relations studies focus on the related concept of transparency and negotiations (e.g., Stasavage 2004).

### References

- Anderson, Derrick M., and Barry C. Edwards. 2015. Unfulfilled Promise: Laboratory Experiments in Public Management Research. *Public Management Review* 17(10): 1518–42.
- Ben-Yoav, Orly, and Dean G. Pruitt. 1984. Accountability to Constituents: A Two-Edged Sword. *Organizational Behavior and Human Performance* 34(3): 283–95.
- Bouwman, Robin, and Stephan Grimmelikhuisen. 2016. Experimental Public Administration from 1992 to 2014: A Systematic Literature Review and Ways Forward. *International Journal of Public Sector Management* 29(2): 110–31.
- Bovens, Mark. 2007. New Forms of Accountability and EU-Governance. *Comparative European Politics* 5(1): 104–20.

- Bovens, Mark, Robert Goodin, and Thomas Schillemans, eds. 2014. *The Oxford Handbook Public Accountability*. Oxford: Oxford University Press.
- Bovens, Mark, Thomas Schillemans, and Paul 't Hart. 2008. Does Public Accountability Work? An Assessment Tool. *Public Administration* 86(1): 225–42.
- Bozeman, Barry, and Patrick Scott. 1992. Laboratory Experiments in Public Policy and Management. *Journal of Public Administration and Research Theory* 2(3): 293–313.
- Carnevale, Peter J. D., and Edward J. Lawler. 1986. Time Pressure and the Development of Integrative Agreements in Bilateral Negotiations. *Journal of Conflict Resolution* 30(4): 636–59.
- Chambers, Simone. 2004. Behind Closed Doors: Publicity, Secrecy, and the Quality of Deliberation. *Journal of Political Philosophy* 12(4): 389–410.
- Charness, Gary, and Peter J. Kuhn. 2011. Lab Labor: What Can Labor Economists Learn from the Lab? In *Handbook of Labor Economics*, edited by Orley Ashenfelter and David Card, 4A:229–330. Amsterdam: Elsevier.
- Cohen, Jacob. 1988. *Statistical Power Analysis for the Behavioral Sciences*. Mahwah, NJ: Lawrence Erlbaum.
- de Wolf, Inge F., and Frans J. G. Janssens. 2007. Effects and Side Effects of Inspections and Accountability in Education: An Overview of Empirical Studies. *Oxford Review of Education* 33(3): 379–96.
- Dijkstra, Jacob, Marcel Van Assen, and Frans N. Stokman. 2008. Outcomes of Collective Decisions with Externalities Predicted. *Journal of Theoretical Politics* 20(4): 415–41.
- Druckman, James, and Cindy Kam. 2011. Students as Experimental Participants: A Defence of the “Narrow Data Base.” In *The Cambridge Handbook of Experimental Political Science*, edited by James N. Druckman, Donald P. Green, James H. Kuklinski, and Arthur Lupia, 41–57. Cambridge: Cambridge University Press.
- Dubnick, Melvin. 2005. Accountability and the Promise of Performance: In Search of the Mechanisms. *Public Performance & Management Review* 28(3): 376–417.
- Embrey, Matthew, Guillaume R. Fréchette, and Steven F. Lehrer. 2014. Bargaining and Reputation: An Experiment on Bargaining in the Presence of Behavioural Types. *Review of Economic Studies* 82(2): 608–31.
- Esteve, Marc, Arjen van Witteloostuijn, and George Boyne. 2015. The Effects of Public Service Motivation on Collaborative Behavior: Evidence from Three Experimental Games. *International Public Management Journal* 18(2): 171–89.
- Fehr, Ernst, and Bettina Rockenbach. 2003. Detrimental Effects of Sanctions on Human Altruism. *Nature* 422(6928): 137–40.
- Grimmelikhuijsen, Stephan G., Sebastian Jilke, Asmus Leth Olsen, and Lars Tummens. 2016. Behavioral Public Administration: Combining Insights from Public Administration and Psychology. *Public Administration Review* 77(1): 45–56.
- Groeneveld, Sandra, Lars Tummens, Babette Bronkhorst, Tanachia Ashikali, and Sandra van Thiel. 2015. Quantitative Methods in Public Administration: Quantitative Methods in Public Administration: Their Use and Development through Time. *International Public Management Journal* 18(1): 61–86.
- Guo, Xiaojia, and John Lim. 2007. Negotiation Support Systems and Team Negotiations: The Coalition Formation Perspective. *Information and Software Technology* 49(11): 1121–27.
- Head, Brian W. 2008. Wicked Problems in Public Policy. *Public Policy* 3(2): 101–18.
- Hood, Christopher, and Martin Lodge. 2006. *The Politics of Public Service Bargains: Reward, Competency, Loyalty—and Blame*. New York: Oxford University Press.
- Klijin, Erik-Hans, Joop Koppenjan, and Katrien Termeer. 1995. Managing Networks in the Public Sector: A Theoretical Study of Management Strategies in Policy Networks. *Public Administration* 73(3): 437–54.
- Klimoski, Richard J. 1972. The Effects of Intragroup Forces on Intergroup Conflict Resolution. *Organizational Behavior and Human Performance* 8(3): 363–83.
- Koch, Christopher, and Jens Wüstemann. 2014. Experimental Analysis. In *Oxford Handbook on Public Accountability*, edited by Mark Bovens, Robert E. Goodin, Thomas Schillemans, 127–42. Oxford: Oxford University Press.
- Kramer, Roderick M., Pamela Pommerenke, and Elizabeth Newton. 1993. The Social Context of Negotiation Effects of Social Identity and Interpersonal Accountability on Negotiator Decision Making. *Journal of Conflict Resolution* 37(4): 633–54.
- Lægreid, Per. 2000. Top Civil Servants under Contract. *Public Administration* 78(4): 879–96.
- Leisink, Peter, and Bram Steijn. 2009. Public Service Motivation and Job Performance of Public Sector Employees in the Netherlands. *International Review of Administrative Sciences* 75(1): 35–52.
- Lerner, Jennifer S., and Philip E. Tetlock. 1999. Accounting for the Effects of Accountability. *Psychological Bulletin* 125(2): 255–75.
- Lewicki, Roy J., David M. Saunders, and Bruce Barry. 2015. *Negotiation*. 7th ed. New York: McGraw-Hill.
- Li, Huafang, and Gregg G. Van Ryzin. 2017. A Systematic Review of Experimental Studies in Public Management Journals. In *Experiments in Public Management Research: Challenges and Contributions*, edited by Oliver James, Sebastian R. Jilke, and Gregg G. Van Ryzin, 20–36. Cambridge: Cambridge University Press.
- Margetts, Helen Z. 2011. Experiments for Public Management Research. *Public Management Review* 13(2): 189–208.
- Medda, Francesca. 2007. A Game Theory Approach for the Allocation of Risks in Transport Public Private Partnerships. *International Journal of Project Management* 25(3): 213–18.
- Meier, Kenneth J., and Kendall D. Funk. 2017. Experiments and the Classical Roots of Public Administration: Comments on the Potential Utility of Experiments for Contemporary Public Management. In *Experiments in Public Management Research: Challenges and Contributions*, edited by Oliver James, Sebastian R. Jilke, and Gregg G. Van Ryzin, 37–56. Cambridge: Cambridge University Press.
- Morrow, James D. 1994. *Game Theory for Political Scientists*. Princeton, NJ: Princeton University Press.
- Morton, Rebecca, and Kenneth Williams. 2010. *Experimental Political Science and the Study of Causality*. New York: Cambridge University Press.
- Mosterd, Igor, and Christel G. Rutte. 2000. Effects of Time Pressure and Accountability to Constituents on Negotiation. *International Journal of Conflict Management* 11(3): 227–47.
- Mulgan, Richard. 2000. “Accountability”: An Ever-Expanding Concept? *Public Administration* 78(3): 555–73.
- Murnighan, Keith. 1986. Organizational Coalitions: Structural Contingencies and the Formation of Process. In *Research on Negotiation in Organizations*, edited by Roy J. Lewicki, Blair H. Sheppard, and Max H. Bazerman, 155–73. Greenwich, CT: JAI Press.
- O’Connor, Kathleen M. 1997. Groups and Solos in Context: The Effects of Accountability on Team Negotiation. *Organizational Behavior and Human Decision Processes* 72(3): 384–407.
- Open Science Collaboration. 2015. Estimating the Reproducibility of Psychological Science. *Science* 349(6251): aac4716-1–8.
- Osborne, Martin J., and Ariel Rubinstein. 1994. *A Course in Game Theory*. Cambridge, MA: MIT Press.
- O’Toole, Laurence J., Jr. 2000. Research on Policy Implementation: Assessment and Prospects. *Journal of Public Administration Research and Theory* 10(2): 263–88.
- Parkhe, Arvind. 1993. Strategic Alliance Structuring: A Game Theoretic and Transaction Cost Examination of Interfirm Cooperation. *Academy of Management Journal* 36(4): 794–829.
- Peleg, Bezalel, and Peter Sudhölter. 2007. *Introduction to the Theory of Cooperative Games*. 2nd ed. Berlin: Springer.
- Perry, James L. 2012. How Can We Improve Our Science to Generate More Usable Knowledge for Public Professionals? *Public Administration Review* 72(4): 479–82.

- Perry, James L., and Harold Angle. 1979. The Politics of Organizational Boundary Roles in Collective Bargaining. *Academy of Management Review* 4(4): 487–95.
- Perry, James L., and Lois Recascino Wise. 1990. The Motivational Bases of Public Service. *Public Administration Review* 50(3): 367–73.
- Provan, Keith G., and H. Brinton Milward. 2001. Do Networks Really Work? A Framework for Evaluating Public Sector Organizational Networks. *Public Administration Review* 61(4): 414–23.
- Pruitt, Dean G., Melvin J. Kimmel, Scott Britton, Peter J. D. Carnevale, John M. Magenau, Joseph Peragallo, and Pamela Engram. 1978. The Effect of Accountability and Surveillance on Integrative Bargaining. In *Bargaining Behavior: Contributions to Experimental Economics*, vol. 7, edited by H. Sauermann, 310–43. Tübingen: Mohr.
- Raiiffa, Howard, with John Richardson and David Metcalfe. 2002. *Negotiation Analysis: The Science and Art of Collaborative Decision Making*. Cambridge, MA: Harvard University Press.
- Riccucci, Norma M. 2011. Public Sector Labor Relations Scholarship: Is There a “There,” There? *Public Administration Review* 71(2): 203–9.
- Scharpf, Fritz W. 1994. Games Real Actors Could Play: Positive and Negative Coordination in Embedded Negotiations. *Journal of Theoretical Politics* 6(1): 27–53.
- Schelling, Thomas C. 1980. *The Strategy of Conflict*. Cambridge, MA: Harvard University Press.
- Siegel, Sidney, and N. John Castellan. 1988. *Nonparametric Statistics for the Behavioral Sciences*. 2nd ed. New York: McGraw-Hill.
- Sinaceur, Marwan, Hajo Adam, Gerben A. Van Kleef, and Adam D. Galinsky. 2013. The Advantages of Being Unpredictable: How Emotional Inconsistency Extracts Concessions in Negotiation. *Journal of Experimental Social Psychology* 49(3): 498–508.
- Skelcher, Chris. 2005. *Public-Private Partnerships*. New York: Oxford University Press.
- Song, Dong-Wook, and Photis M. Panayides. 2002. A Conceptual Application of Cooperative Game Theory to Liner Shipping Strategic Alliances. *Maritime Policy & Management* 29(3): 285–301.
- Stasavage, David. 2004. Open-Door or Closed-Door? Transparency in Domestic and International Bargaining. *International Organization* 58(4): 667–703.
- Stevenson, William B., Jone L. Pearce, and Lyman W Porter. 1985. The Concept of “Coalition” in Organization Theory and Research. *Academy of Management Review* 10(2): 256–68.
- \_\_\_\_\_. 1986. Coalitions in the Organizational Context. In *Research on Negotiation in Organizations*, edited by Roy J. Lewicki, Blair H. Sheppard, and Max H. Bazerman, 97–115. Greenwich, CT: JAI Press.
- Susskind, Lawrence, and Connie Ozawa. 1983. Mediated Negotiation in the Public Sector Mediator Accountability and the Public Interest Problem. *American Behavioral Scientist* 27(2): 255–79.
- Telser, Lester, G. 1994. The Usefulness of Core Theory in Economics. *Journal of Economic Perspectives* 8(2): 151–64.
- Tepe, Markus, and Christine Prokop. 2017. Laboratory Experiments: Their Potential for Public Management Research. In *Experiments in Public Management Research: Challenges and Contributions*, edited by Oliver James, Sebastian R. Jilke, and Gregg G. Van Ryzin, 139–64. Cambridge: Cambridge University Press.
- Thompson, Dennis F. 2005. *Restoring Responsibility: Ethics in Government, Business and Healthcare*. New York: Cambridge University Press.
- Torenlvied, Rene, and Agnes Akkerman. 2004. Theory of Soft Policy Implementation in Multilevel Systems with an Application to Social Partnership in the Netherlands. *Acta Politica* 39(1): 31–58.
- Ury, William. 1993. *Getting Past No: Negotiating in Difficult Situations*. New York: Bantam Books.
- Van Bueren, Ellen M., Erik-Hans Klijn, and Joop F. M. Koppenjan. 2003. Dealing with Wicked Problems in Networks: Analyzing an Environmental Debate from a Network Perspective. *Journal of Public Administration Research and Theory* 13(2): 193–212.
- Vandenabeele, Wouter. 2007. Toward a Public Administration Theory of Public Service Motivation. *Public Management Review* 9(4): 545–56.
- \_\_\_\_\_. 2008. Government Calling: Public Service Motivation as an Element in Selecting Government as an Employer of Choice. *Public Administration* 86(4): 1089–1105.
- Van der Wal, Zeger, Gjalt de Graaf, and Karin Lasthuizen. 2008. What’s Valued Most? Similarities and Differences between the Organizational Values of the Public and Private Sector. *Public Administration* 86(2): 465–82.
- Verhoest, Koen, Paul G. Roness, Bram Verschuere, Kristin Rubecksen, and Muiris MacCarthaigh. 2010. *Autonomy and Control of State Agencies*. Basingstoke: Palgrave Macmillan.
- Wildavsky, Aaron, and Karl Dake. 1990. Theories of Risk Perception: Who Fears What and Why? *Daedalus* 119(4): 41–60.

## Supporting Information

A supplementary appendix may be found in the online version of this article at <http://onlinelibrary.wiley.com/doi/10.1111/puar.12858/full>.