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BUILDING SUPPORT? THE IMPORTANCE OF VERBAL REWARDS FOR EMPLOYEE PERCEPTIONS OF GOVERNANCE INITIATIVES

ABSTRACT

The relationship between managers' use of rewards and employees' motivation is controversial, but recent research suggests that employee perceptions of governance initiatives can help us understand the association. Experimental evidence further emphasizes the difference between verbal and material rewards, and this study therefore analyzes real-world public managers' use of these different rewards and their employees' perceptions of a governance initiative. This enables us to shed light on a mechanism through which rewards can be connected to motivation. Can rewards contribute to a supportive perception of governance initiatives and potentially crowd-in motivation? This is analyzed in a multi-level dataset with 82 Danish school principals and their 1,273 employees. Managers' use of contingent verbal rewards is positively associated with employees' perceptions of the relevant governance initiative, while the corresponding association between material rewards and employee perceptions is weak and statistically insignificant when controlling for other types of managerial behavior. Although the findings need to be tested in an experimental design, they suggest that verbal rewards are a promising tool for public managers.

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INTRODUCTION

The basis for managers' use of rewards is the assumption that employees will perform effectively to the extent that their rewards are made contingent upon high performance. There is some support in the literature for this assumption (Bucklin and Dickinson 2001; Lazear 2000; and Vroom 1964), but there is also concern about employee intrinsic motivation, that is, their interest in and enjoyment of the work for its own sake (Le Grand 2003, 53; Gagné and Deci 2005). Rewards are namely relevant not only for employees extrinsic motivation, but also for their intrinsic motivation, and employees' perception of governance initiatives is expected to play a key role.

Governance initiatives are regulative institutions (e.g. laws) that govern public service provision, and they thus contribute to democratic accountability, but unless the managers actively build support for them, they might demotivate the employees, because they are seen as controlling. Especially when managers face a steady stream of national governance initiatives, it is relevant to ask how they can build support for these initiatives and thereby avoid that their employees are demotivated. Should the managers use contingent rewards to do this, or will contingent rewards make employees feel controlled? Especially if manager's use of rewards makes public employees see new governance initiatives as controlling rather than supportive, it might be inadvisable to use rewards in public organizations. Addressing these questions can potentially contribute to the ongoing debate about whether rewards are good or bad for employee motivation and ultimately performance.

Different literatures give very different answers to the questions. Cognitive evaluation theory is very skeptical about rewards, unless they are verbal. Tangible rewards are expected to decrease intrinsic motivation and thus also performance, because they are controlling the relevant behavior and decreasing the individual's perceived competence (Deci et al. 1999). In contrast, expectancy theory argues that organizations must relate rewards directly to

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performance and ensure that these rewards are deserved and wanted by the employees. The idea is that rewards create positive consequences of desired behavior, thereby inducing employees to contribute more to high performance in the organization (Lunenburg 2011). This theory thus emphasizes the incentive effects, while cognitive evaluation theory focuses on the potential reduction of intrinsic motivation. If both effects exist, it is a question of relative strengths. The net effect of incentives on performance can thus still be positive, even if they reduce intrinsic motivation. Furthermore, the effect on intrinsic motivation is not necessarily negative. Motivation crowding theory thus focuses on employees' perceptions of governance initiatives as either controlling or supportive (Frey 1997; and Weibel et al. 2010). If the employees see themselves as being controlled, their intrinsic motivation is expected to decrease. If, on the other hand, they see governance initiatives as supportive, their motivation is expected to increase. Perceptions of governance initiatives is, in other words, a potentially very important mechanism in our understanding of the reward-motivation relationship, and this article therefore investigates how managers can affect these perceptions.

We differentiate between managers' use of verbal and material rewards. As Bellé (2015) points out, the literature on the effectiveness of contingent pay plans in the public sector is sparse, and the situation is even worse for the use of contingent verbal rewards. It is clearly problematic if contingent verbal rewards in fact affect perceptions of governance initiatives, and moreover, motivation and performance. The relevance of filling this gap is very high, because this type of leadership is available to more managers, and is typically less expensive than material rewards are. If cognitive evaluation theory is correct, the risk of crowding out motivation is also lower for verbal rewards than for material rewards and sanctions. The key claim in this article is that verbal rewards can build support for governance initiatives. This is relevant, because a supportive perception is ultimately expected to increase motivation (e.g., Jacobsen et al. 2014; Mikkelsen et al. 2015). The

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specific research question is as follows: How is managers' use of different types of rewards associated with employee perceptions of governance initiatives?

In addition to the academic relevance of the research question, it is also important for practitioners to know how verbal and material rewards can affect employee perceptions and ultimately intrinsic motivation, as it might enable managers to use leadership strategies which build support for governance initiatives and increases employee motivation.

Empirically, we combine a survey of Danish school principals with a survey of their employees (teachers). This enables us to study the associations in a multilevel setting and limit common source bias. We utilize the fact that we asked the school principals about their use of rewards just before a new and very salient governance initiative (Law 409 about teachers' working hours) was implemented. After the implementation had started at the school level, we asked the teachers about their perceptions of this new initiative. This enables us to investigate whether the school principals' use of rewards affected how the teachers came to perceive the governance initiative at the school level. We acknowledge that this is primarily relevant if this perception then affects the teachers' intrinsic motivation and ultimately their behavior. Motivation crowding theory does, however, face a fundamental dilemma, because the theory expects motivation to depend on perception, and both variables are (as mental constructs) measured by asking the same individual. On the one hand, this suggests that there might be common source bias in analyses including both variables. On the other hand, the relevance of analyzing perception hinges on its positive association with motivation. Balancing these two considerations, we do not analyze intrinsic motivation in this article, but we have made an appendix with analyses of the association between managers' use of rewards and employee intrinsic motivation mediated by employee perceptions of the governance initiative. Unlike the analyses in the article, these results are less certain due to potential common source bias and will be discussed with appropriate caution.

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The next section describes the governance initiative we examine in more detail, followed by a discussion of different types of rewards. We then present our theoretical expectations based on cognitive evaluation theory, expectancy theory, and motivation crowding theory. After a description of the research design and methods, we discuss the results and conclude the article by highlighting the most important implications for practitioners and future research.

THE GOVERNANCE INITIATIVE WE EXAMINE: LAW 409

Governance initiatives are regulative efforts aimed at steering public service provision, that is, prescriptions issued by the legitimate decision-makers to organize the delivery of public services. We study a national-level initiative (Law 409) that regulates Danish teachers' working hours and thus the delivery of primary and lower secondary education in Denmark. The relevance of studying perceptions of this specific governance initiative is linked to its high salience for the teachers, both nationally and locally. The governance initiative is the result of a nationwide conflict between the municipalities and teachers. Local government wanted to have the full disposal of the teachers' working hours, while the teachers and their union sought to preserve more time for daily preparation. Collective bargaining did not result in an agreement, and the municipalities locked out 67,000 teachers from April 2 2013 until the lockout ended with a government intervention (Law 409) on April 26 2013. This is the governance initiative we examine, and it is so salient for the teachers that perceptions of other governance initiatives will hardly confound the findings.

The law is thus a new approach to teaching, and the terminology was that it should "normalize" teachers' work. Historically, Danish teachers have had high discretion, and that was changed by Law 409. Almost all teachers saw Law 409 as very controlling at the national and municipal levels, and this makes it very relevant to study how school principals

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can make teachers' perceptions of the implementation of the initiative at the school level less controlling – maybe even supportive – and thus reduce the risk of motivation crowding out.

The next section discusses why we see rewards as a potential way to do this.

DIFFERENT TYPES OF REWARDS

Rewards can be contingent and non-contingent. Contingent rewards are only given if the employee has been doing or completing a given activity (task contingency) or has achieved some specific criterion (performance contingency). The key issue is whether the employee believes that the reward will result from his/her increased effort directly or through the effect of the increased effort on performance. Non-contingent rewards are not seen as linked to either effort or performance, because rewards are not expected while the employee is working on the task (see also Deci et al. 1999). There is no reason to expect non-contingent rewards to affect employee perceptions and intrinsic motivation (Podsakoff et al. 2006, 113; see also Podsakoff et al. 1982), so we accordingly only investigate contingent rewards.

Typical contingent rewards are material goods (e.g., pecuniary or near-pecuniary assets), positive feedback (e.g., verbal praise), and prizes without significant direct material value, but with positive social signals. The last-mentioned symbolic rewards are also called awards (e.g., Kosfeld and Neckermann 2011; Gubler et al. 2014). Material rewards (with assets that have a physical form and are meant to be inducements to engage in a given behavior, e.g., money, and formal promotions) are clearly tangible. Verbal rewards (praise without material consequences such as career advancement) are clearly intangible. Symbolic rewards (such as trophies and good player awards) are tangible according to Deci et al. (2001, 9), while Bellé (2015) treats symbolic rewards, intangible rewards, and nonmonetary rewards as the same phenomenon. We argue, however, that it is important to treat verbal and symbolic rewards separately, because the reward in verbal praise is the positive feedback itself,

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whereas symbolic rewards are designed to increase social recognition from within the organization and/or from an external audience (Bellé 2015; Bénabou and Tirole 2006; and Kosfeld and Neckermann 2011). Given that increased status can ultimately lead to material gains (e.g., through promotion), the clearest distinction outside the laboratory is between verbal and material rewards. In contrast to the situation for symbolic rewards, there is agreement that conditional verbal rewards are expected to have positive effects on intrinsic motivation (Deci, Koestner and Ryan 1999). To be able to formulate clear expectations our focus is therefore on (1) verbal rewards, which are a manager's use of positive contingent feedback, and (2) material rewards, which denote a manager's use of all types of contingent pecuniary and near-pecuniary rewards.

THEORETICAL EXPECTATIONS FOR THE ASSOCIATIONS BETWEEN REWARDS, PERCEPTIONS, AND MOTIVATION

Three strands of literature are especially relevant for public managers' use of different types of rewards: expectancy theory, cognitive evaluation theory, and motivation crowding theory. Expectancy theory suggests that a person is motivated to the degree that he/she believes that effort will lead to acceptable performance, which will then be rewarded with something of positive value for the employee (Lunenburg 2011). The straightforwardness of this theory has, however, been severely questioned by studies finding many important mediators and moderators, for example employee and organizational characteristics, environmental conditions, and pay system design (Perry et al. 2009). The performance appraisal structure may, for example, moderate the association, while the perceived pay system may be an important intermediate variable (*ibid.*). Rewarding performance has even been found to decrease performance under certain circumstances (Andersen and Pallesen 2008). Lavy (2015), however, makes it very clear in his study of public Israeli high schools

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that material (in his case: monetary) contingent rewards can have positive effects. Based on an experiment conducted 15 years ago in Israel, Lavy (2015) concludes that pay for performance to teachers improved a wide range of student outcomes such as university enrollment and annual earnings. Making pay contingent on effort and performance may thus reinforce the relevant behaviors in some circumstances, but it is hardly the whole story, especially in public organizations (Perry et al. 2009). Cognitive evaluation theory offers an explanation for these mixed findings.

Cognitive evaluation theory, which is an integrated part of self-determination theory, expects the effect of contingent rewards to depend on the character of the rewards. Both material and symbolic rewards are expected to decrease intrinsic motivation, because they can be used to persuade people to do things they would not otherwise do, that is, to control their behavior (Deci 1971, 1972; and Deci et al. 1999). In contrast, verbal rewards – positive feedback – are closely connected to the activity itself, and this type of reward is therefore less likely than tangible rewards to be seen as controlling. Deci et al. (2001: 3) argue that “verbal rewards can have a significant controlling aspect leading people to engage in behaviors specifically to gain praise”. Specifically, verbal rewards are only expected to be seen as controlling if people feel pressured to think, feel, or behave in particular ways (ibid.: 4). Controlling feedback could for example be statements including the word “should”. Deci et al. (1999: 629) exemplify it with the statement “Excellent, you should keep up the good work”. It is questionable whether this statement is actually a reward (and not an order), and this article focuses on statements which are clearly seen (by the employees as well) as praise linked to effort or results. Due to the explicit positive performance feedback, cognitive evaluation theory predicts that contingent verbal rewards are likely to enhance perceived competence and thus increase intrinsic motivation (Deci et al. 2001).

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Whether positive verbal feedback is generally applied in a manner that does not threaten the autonomy of the individual might depend on the national culture, and it is reasonable to assume that feedback is normally relayed in a non-controlling manner in low-power distance Denmark (Hofstede 2015). In their meta-analysis Deci et al. (1999) also found that verbal rewards enhance intrinsic motivation, while material rewards undermine intrinsic motivation. The last-mentioned finding might contrast with Lavy's (2015) result that performance was higher when material rewards were used for Israeli teachers. Extrinsic motivation may, of course, be so strong that it completely dominates intrinsic motivation in terms of affecting behavior and performance as discussed in the introduction, but it is plausible that both types of motivation matter for most public employees, although to a different degree for different individuals. Even if extrinsic motivation is more important for behavior, it can be useful to analyze the association between rewards and intrinsic motivation, if intrinsic motivation can be increased for a given level of extrinsic motivation.

Motivation crowding theory argues that this is indeed the case. The key claim is that the association between rewards and intrinsic motivation depends not only on the type of reward, but also on how employees perceive a given intervention. If an intervention is perceived as controlling, motivation crowding theory expects the intervention (e.g., a reward) to reduce intrinsic motivation (crowd it out), and the expectation is that intrinsic motivation is enhanced (crowded in) if the employees see the intervention as supportive (Frey 1997). This has been confirmed by many recent public administration studies (Georgellis et al. 2011; Meier 2014; Jacobsen et al. 2014; and Mikkelsen et al. 2015). Weibel et al. (2010) argue that the motivation crowding mechanism is especially relevant for interesting tasks, but the mechanism has also been supported for lower-skilled jobs such as eldercare and child care assistants (Andersen et al. 2015). Motivation crowding theory is in fact based on parts of cognitive evaluation theory and an early formulation of self-determination theory, and the

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motivation crowding effects are seen as linked to reduced need fulfilment in terms of autonomy, competence, and/or relatedness (Gagné and Deci 2005). If it is correct that verbal rewards are generally seen as less controlling than material rewards, the expectations of cognitive evaluation theory and motivation crowding theory are compatible: Employees with managers, who to a higher degree use verbal contingent rewards, will feel less controlled and have greater intrinsic motivation than other employees.

A reward is expected to be both an incentive and a signal (see also Dickinson 1989). The signal might reinforce the incentive effect if the employees think that the task is important since the manager rewards its successful completion. Being given such an important task and succeeding in completing it can make the employees see the managerial actions as being more supportive and ultimately increase the employees' intrinsic motivation. If the employees believe that the existence of a reward indicates that coercion is necessary to make them complete the task, the signal can be that the task is undesirable (unpleasant to do, less worthy of social recognition, or otherwise not inherently motivating to undertake). The employees would otherwise have done the task without reward. The signal can also be that the employees are incompetent or untrustworthy and must be induced to undertake the task. The context can be important for how the employees understand the signal, but the type of reward itself can also contain a message about how the manager sees the employees' altruism vs. greed (Le Grand 2003; and Bénabou and Tirole 2006). Verbal praise sends a signal from the manager to the employees that they are seen as altruists (since pure egoists would only care about tangible goods), while material goods can signal that the manager thinks that employees are greedy – money-oriented in the terminology of Bénabou and Tirole (2006). In sum, while verbal rewards will dominantly signal that employees are trusted and important, material rewards might signal that tasks are undesirable and that employee are untrustworthy.

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This is highly relevant for the formation of employee perception of governance initiatives. Especially when we analyze real-world situations, it is relevant to include these perceptions as potential mediators of the relationship between managerial use of rewards and employee motivation. Even if they originate from higher levels of government, most governance initiatives are implemented at the organizational level, and we argue that the signals sent by the rewards can affect employee perceptions of all types of governance initiatives. If employees see their managers' use of rewards as signaling that the given tasks are important and that the employees are trusted to do them well, we expect the employees to perceive the managers' implementation of governance initiatives as more supportive and less controlling. In contrast, rewards signaling that employees cannot be trusted to do their best without the rewards might make employees perceive the governance initiatives at the organizational level as even more controlling. Given that material rewards often signal relatively more distrust, while the use of verbal rewards signals trust, hypothesis 1 and 2 follow logically from these arguments.

H1: When managers use contingent verbal rewards, employees tend to see governance initiatives as more supportive at the organizational level.

H2: When managers use contingent material rewards, employees tend to see governance initiatives as more controlling at the organizational level.

HOW THE HYPOTHESES ARE INVESTIGATED

Distinguishing between contingent verbal and material rewards is not the only way to conceptualize the relevant differences in leadership behavior when investigating employee perceptions. The multifactor leadership questionnaire and the literature behind it (see Bass et al. 2003 for an overview) thus distinguish between transformational and transactional leadership. Transactional leadership is further subdivided into rewards and sanctions. While

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the reward dimension can be seen as the sum of all types of contingent rewards, the use of contingent sanctions is a more corrective form of leadership labeled “active management by exception” by Bass et al. (2003). This type of transactional leader “specifies the standards for compliance, as well as what constitutes ineffective performance, and may punish followers for being out of compliance with those standards” (ibid., 208). The discussions above clearly imply that this type of leadership behavior will not be able to induce a more supportive perception of governance initiatives, because potential sanctions linked to employees’ efforts and results will normally be seen as controlling (Frey 1997).

Transformational leadership is seen as “a set of behaviors that seek to develop, share, and sustain a vision intended to encourage employees to transcend their own self-interest and achieve organizational goals” (Jacobsen and Andersen 2015, 832). Although this type of leadership is not the theoretical focus of this article, many of the mentioned theoretical arguments imply that it has the potential to make employees see governance initiatives as more supportive, especially if the manager succeeds in linking these initiatives to the organizational vision in a meaningful way. Studies have, however, shown that it is very difficult for managers to actually succeed in sharing and sustaining the vision, and this means that employee-reported transformational leadership and manager-reported transformational leadership is almost uncorrelated (Jacobsen & Andersen 2015). Still, the distinction between transactional and transformational leadership is very relevant for public management and is increasingly used in public administration studies (Wright et al. 2012; and Moynihan et al. 2012; Jacobsen and Andersen 2015). Although the main conceptualization in this article is different (because we want to focus on the difference between contingent verbal and material rewards) we find it relevant to control statistically for the concepts not captured in the distinction between verbal and material rewards, as all these leadership dimensions can potentially affect employee perceptions of governance initiatives and motivation (e.g., Wright

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et al. 2012). Given that the reward dimension is already part of the conceptualization, transformational leadership and contingent sanctions are included in the framework as control variables.

We also control for the employees' perception of the relevant governance initiative at (1) the national level and (2) the municipal level. Similar to many other governance initiatives, Law 409 was decided on the national level, while the 98 Danish municipalities gave supplementary directions to the schools concerning how the initiative should be implemented. Given that school principals are primarily expected to be able to affect how the employees see new governance initiatives at the school level, we present analyses where we control for the employees' perceptions of the same initiative at the two other levels.

More classical control variables such as the age, gender, geographical region and tenure might also affect both perception of governance initiatives and employee motivation and are therefore also included in our analysis. Figure 1 illustrates the tested associations, with bold arrows showing the associations described in the hypotheses. As discussed in the introduction, the article focuses on governance initiatives, and the dotted lines in Figure 1 illustrates that analyses including intrinsic motivation are only shown in the appendix. This choice is based on the fact that while we use separate data sources to investigate use of rewards (manager-reports) and perceptions of governance initiatives (employee-reports), it is not possible to measure employee perceptions and employee motivation in different data sources (both variables are internal states for the same individuals). Furthermore, we cannot be certain that there is not reverse causality in the relationships between use of rewards and employee motivation (these associations are, however, measured using separate data sources). The reason why reverse causality is not a serious problem for the association between managers' use of rewards and employee perceptions is that we asked the managers about their use of rewards before the relevant governance initiative was implemented, while

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we asked employees about their perception of the school level implementation after the initiative had taken effect.

[FIGURE 1 HERE]

Finally, we also present robustness tests where we use the employees' ratings of their managers' use of rewards and other leadership behavior. These measures conceptualize leadership as seen by the employees, but the analyses might be biased by the fact that the variables were measured in the same data source as employee perceptions and motivation. Additionally, they do not have the same advantage as the main analysis in term of the time difference in the measurements (before and after implementation of the governance initiative). Still, if all analyses give similar findings, it supports the overall result.

RESEARCH DESIGN AND METHODS

As mentioned, we test the hypotheses in a study of public primary and lower secondary schools in Denmark. Danish schools deliver similar services, and this limits the number of potential confounding variables. The managerial distance from the managers (school principals) to the employees is relatively short. There are on average around 40 teachers on each school (Danish Ministry of Education 2014b). As indicated above, the schools were investigated in the middle of a turbulent period. The recent school reform, which introduced new learning methods, more hours of teaching each day, regular physical exercise, and greater focus on performance goals (Danish Ministry of Education 2014a), took effect as of August 1, 2014. The governance initiative that we are studying, namely the new working hour rules (law no. 409, 2013), took effect at the same time. These rules give the managers considerable discretion over employee working hours, including how much time they have to be present at the school (ibid.; and Danish Ministry of Education 2014a). We analyze the perception of the governance initiative as implemented at the organizational

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(school) level, and we control statistically for each employees' perception of the initiative at the national and municipal levels.

Data

The data consist of surveys of managers and employees combined in a multilevel dataset. The data were collected as part of a large leadership development program, the LEAP project. We offered all Danish primary school principals (and managers from four other sectors) a 75 percent chance of participation in a free-of-charge leadership development program. Answering the survey was part of the sign-up procedure for the managers. The employee survey was then distributed to all employees in organizations where the manager had agreed to participate in the project (before the leadership development program started). The recruitment procedure limits the generalizability of the results (i.e., only managers who showed interest in leadership development). Still, the response rate was relatively high for managers (46 percent); in fact, the non-response problem was bigger for the employees (the response rate was 32 percent for the employees in the primary school area). We have excluded 183 employees due to a lack of information on key variables. Likewise, we have excluded schools where fewer than five employees answered the survey (20 employees distributed among 7 managers). The final dataset contains 82 managers and 1,273 employees. The employee survey was collected between August 25 and September 16, 2014, while the manager survey was conducted in April 2014 (for more information on data collection, see LEAP 2014). Our design is cross-sectional, but the multilevel structure allows us to measure the independent and dependent variables using separate data sources collected before and after the implementation of the relevant governance initiative, which limits common source bias and potential problems with reverse causality.

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Measurement

We constructed additive indexes, ranging from 0 to 100, for perception of governance initiatives, use of contingent verbal rewards, use of contingent material rewards, use of contingent sanctions, transformational leadership and intrinsic motivation. If possible, we used questions validated in earlier studies, and all items were five-point Likert scales ranging from “strongly disagree” to “strongly agree.” Some of the respondents forgot to answer one of the items or did not want to answer that particular item. To reduce information loss, missing values for respondents with only one missing value for the given concept were replaced with the mean for the other respondents for that specific item. The combination of ordinal Likert scale items to indexes which are scaled from 0 to 100 increases the reliability of the measures as long as factor analyses and reliability tests indicate that the items reflect the same latent variable. The indexes can then be treated as interval scales, allowing us to use regression analysis and interpret the findings in a more understandable way.

To obtain measures of the use of contingent material and verbal rewards, contingent sanctions, and transformational leadership, managers and employees were asked about their level of agreement with three or four Likert-scale statements per concept (see Tables A1 and A2 in the Appendix for wordings). All items are based on existing measures (House 1998; Jacobsen and Andersen 2015; Bass et al. 2003; Rainey 2009; Trottier et al. 2008; Moynihan et al. 2012; Podaskoff et al. 1996; and MacKenzie et al. 2001). It should be noted that the Danish verb “belønne” (used in the items measuring material rewards) covers a meaning between “recompense” and “reward”, indicating that the respondents (as intended) have understood the questions as being about material rewards. We used confirmatory factor analysis to test whether the individual items reflected the expected dimensions. Tables A1 and A2 show factor loadings and an acceptable model fit for both managers and employees.

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All indexes have good internal consistency with Cronbach's alpha ranging from 0.763 to 0.938. Figures A1 and A2 show the distributions for managerial behavior.

Employees and managers often see the leadership performed by the manager differently (Jacobsen and Andersen 2015), and this is also the case for our data, where the correlations between employee-reported managerial behavior and manager-reported managerial behavior are weak (see Table A6 in the Appendix). We focus on the manager-reported managerial behavior to reduce common source bias (Jakobsen and Jensen 2015), but robustness tests are shown with employee-reported managerial behavior. The distributions of manager-reported verbal rewards and transformational leadership are left-skewed, but the limited variation only makes our analysis more conservative. The distribution of residuals is close to normal and therefore not a statistical problem (Rabe-Hesketh and Skrondal 2012).

The dependent variable – perception of governance initiatives at the organizational level – reflects how supportive versus controlling the employees perceive the relevant government initiative (Law 409, the new working hour rules) at school level. We capture the controlling aspect in two negatively worded questions and the supportive aspect in two positively worded questions. The measurement is inspired by Jacobsen et al. (2014), who studied student plans as an older governance initiative concerning Danish teachers. More specifically, we asked the employees about their perception of their manager's implementation of the governance initiative using the four questions shown in Table A3. After construction for reflective indexes for controlling and supportive perceptions, these dimensions were combined in an overall index. A confirmatory factor analysis shows the two expected dimensions (controlling and supportive perceptions). The two dimensions correlate satisfactorily ($r=0.65$), and the final index is scaled so that it ranges from 0 (totally controlling perception of the government initiative) to 100 (totally supportive perception).

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The internal consistency of the index is good (Cronbach's $\alpha = 0.829$), and the distribution of the index shows considerable variation (see Figure A1 in the Appendix).

We have also measured the employees' perception of the governance initiative at the municipal and national level in the same manner as the perception at school level. The questions used are shown in table A3. The employees perceived the governance initiative as more controlling at the municipal and national levels compared to the school level. Moreover, there is little variation in the employees' perception at these higher levels (see figure A1 in the appendix).

Furthermore, the appendix does, as mentioned, show analyses of employees' intrinsic motivation. We measure intrinsic motivation on a four-item reflexive index using items previously used in Denmark (Jacobsen et al. 2014; and Mikkelsen et al. 2015). A confirmatory factor analysis shows acceptable, significant factor loadings from 0.580 to 0.830, and the fit indexes show an acceptable model fit (see Table A3 in the Appendix). The internal consistency of the index is good (Cronbach's $\alpha = 0.828$). The index ranges from 0 (minimum intrinsic motivation) to 100 (maximum intrinsic motivation). The distribution, which can be seen in Figure A3, is somewhat left-skewed. The mean is 76.816, and the standard deviation is 15.836, indicating that the variable is not problematically censored. Tenure and age are measured in years, and gender is a dichotomy (one coded as female). These variables are self-reported in the relevant questionnaire and/or coded from the individual's personal identification number (which contains date of birth and a four-digit number which is even for females and odd for males). Span of control is measured as the total number of employees (teachers and other employees, e.g., administrative staff) who report to the manager and received the employee survey. Information about this comes from lists of employees' email addresses and names provided by the managers. Table 1 shows descriptive statistics for the variables in the study.

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[TABLE 1 HERE]

Regression Methods

Since we have data at both organizational and employee levels, we apply a multilevel regression with random intercept to investigate our hypotheses. We follow the general recommendation in the literature and use maximum likelihood estimation (Hox 2010; and Rabe-Hesketh and Skrondal 2012). Tests done on the “empty” model suggest that there is significant variation among organizations and autocorrelation among employees working in the same organization. These within-organization similarities between perceptions of the government initiative were expected, both due to the fact that they have the same leader and due to their interaction as colleagues. Since we use multilevel modeling, we correct the standard errors that might be underestimated in regular ordinary least square regressions due to autocorrelation (Rabe-Hesketh & Skrondal 2012).

The random intercept model is applied since we are interested in the variation among organizations in manager-reported managerial behavior. Manager-reported behavior does not vary within the organizations, since only one leader in each organization reports it. Hence, the random effects model that exploits both within- and between-variation is preferable.

RESULTS

Hypothesis 1 expects that employees tend to see the implementation of governance initiatives at the organizational level as more supportive when managers use contingent verbal rewards. This is supported in Table 2 (Model 1), which is a multilevel random intercept regression of employee perception of governance initiatives. Substantively the association is quite strong,

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given that a one-point change in the use of verbal rewards is estimated to mean a difference of 0.33 points on the scale for supportiveness of the perception of governance initiatives (both variables are scaled from 0 to 100). Model 3 in Table 2 shows that the results are consistent when the use of contingent verbal rewards is reported by employees.

[TABLE 1 HERE]

Table 2 does not support Hypothesis 2, which expects that when managers use contingent material rewards, employees will tend to see governance initiatives at the organizational level as more controlling. Although the association between the use of contingent material rewards and perception of governance initiatives as supportive is negative (indicating that where material rewards are used employees might indeed see the relevant governance initiative, the new working hour rules, as slightly more controlling), the association is statistically insignificant and substantively very weak. Likewise, the association is statistically insignificant when the use of contingent material rewards is reported by employees (Model 3, Table 2).

Models 2 and 4 in Table 2 control for perception of the relevant governance initiative at the national and municipal levels (for manager- and employee-reported managerial behavior, respectively). This does not change the findings substantially, although the associations with the leadership variables become slightly weaker in the analysis with employee-reported managerial behavior (model 4 compared to model 3). As expected, the perceptions on the different levels are correlated, but the key finding is that it does not change the associations between use of rewards and perceptions of the governance initiative at the organizational level.

A related question is whether it is correct that the managers' use of rewards only affect the school level perception of the governance initiative (and not the perceptions of the initiative at the other levels), and a robustness test including perception at the other levels is

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included as table A4 in the Appendix and documents that the main results are robust when we include perceptions related to the other levels in the analysis. While there is no statistical association for national or municipal level employee perceptions, when the use of rewards is measured using manager-reports (model 1 and 3), there are weak associations when we use employee-reports to measure managers' use of verbal rewards. Given that this might be due to common source bias (and given that even this association is substantially weaker than for school level perception of governance initiatives), the results indicate that managers are more able to build support at the school level. Most importantly, this robustness test contributes to strengthen the main argument: That managers' use of verbal rewards is positively related to a perception of governance initiatives at the organizational level as supportive.

None of the other control variables in Table 2 except geographical region and employee-reported transformational leadership is positively associated with employee perceptions of governance initiatives (see Table 2, Models 3 and 4). It is, however, noteworthy that the association between transformational leadership only can be identified, when we look at employee-reports. As discussed in more detail below, the reason for this may be that transformational leadership is socially desirable (biasing managers' self-reports) or it can be due to common source bias, but it may also be necessary for the employees to see the transformational leadership. Even if the leader tries to use transformational leadership, the employees do not necessarily see it. In sum, the only consistent and valid association is between managers' use of verbal rewards and employees' perceptions of the investigated governance initiative at the school level.

The appendix includes a multilevel, random intercept regression of employee intrinsic motivation (Table A5). It is not included in the article itself due to the risk of common source bias between perception of governance initiatives and intrinsic motivation, but it indicates that intrinsic motivation is positively associated with both employee perceptions of

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governance initiatives and managers' use of contingent verbal rewards, suggesting that it is actually relevant to investigate perception of governance initiatives as a potential mechanism in the reward-motivation relationship. This is the case for both manager-reported and employee-reported managerial behavior (Model 2 and 4 in Table A5). The association between use of verbal rewards and intrinsic motivation becomes markedly weaker when perception of governance initiatives is introduced (Model 3 and 5 in Table A5), suggesting that employee perception might mediate parts of the association. Table A5 also shows that the associations between contingent material rewards and intrinsic motivation are negative, but they are weak and not statistically significant. Although the results are consistent with the theoretical expectations and therefore support the relevance of the main analysis, it should be emphasized that the limitations of the appendix-analyses in terms of especially potential reverse causality are much more serious than for the main analyses.

DISCUSSION

The findings suggest that it is important to differentiate between different types of rewards. There is no statistically significant association between material rewards and employee perception, and the supplementary analysis of intrinsic motivation in the appendix also suggests that material rewards and intrinsic motivation are uncorrelated. There are, however, positive associations between verbal rewards and perception of governance initiatives (and intrinsic motivation, although this result should be interpreted with care due to potential reverse causality). The findings are similar for both manager-reported and employee-reported information about the use of rewards. In terms of robustness, the key findings are thus consistent. The findings are in line with the expectations based on cognitive evaluation theory and motivation crowding theory, while they indicate that expectancy theory

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might not be complex enough to help us understand the relationship between rewards, perceptions and motivation.

As a way to explore the validity of these results, it is relevant to touch upon some of the puzzling findings related to the control variables. They illustrate both weaknesses and strengths of the design and might also be interesting in themselves. The results thus show that employee-reported transformational leadership is strongly associated with employee perceptions of governance initiatives as supportive, while there is no association between manager-reported transformational leadership and employee perception. One interpretation is that the result for employee-reports is due to common source bias, and that there is no association. Another interpretation is that many managers overrate their own transformational leadership, meaning that employee-reports are more valid, and the association is in fact positive. Finally, it can also be argued that transformational leadership needs to be perceived by the employees to be able to build support for governance initiatives, and that managers can exert a lot of leadership behavior that is simply not seen by the employees. This implies that employee-reported transformation leadership and manager-reported transformation leadership are in fact two different concepts. It comes down to the question: Are employee or manager reports the best measures of managerial behavior? There is no clear-cut answer. Jacobsen and Andersen (2015) find that employee-reported managerial behavior is more strongly associated with objectively measured organizational performance, but how can we be sure that we are actually measuring behavior and not just employee satisfaction with the managers? This is a very relevant question, because if employee reports are inaccurate measures of actual behavior, it might not change employee perceptions and motivation much if managers try to behave differently, even if there are strong associations between employee-reported managerial behavior and employee motivation (and performance). In this study we find robust results for employee and manager reports for our key variables, and we can

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therefore be relatively certain that statistical associations actually exist; however, our findings on transformational leadership suggest that the choice between employee and manager reports is important – though not necessarily easy. In this study the correlation between manager and employee reports is acceptable for the use of verbal rewards – but there is no correlation for transformational leadership. The International Public Management Journal has adapted a much stricter policy concerning common source bias (Kelman 2015), and this is understandable given the results presented by Jakobsen and Jensen (2015). However, in leadership studies the solution is not always to use manager reports to measure managerial behavior, because these reports can also be biased. A more robust approach is to see whether the results are consistent for both employee and manager reports.

In this study the serious limitation is that the design is cross-sectional. It helps a lot that the managers were asked before the implementation of the relevant governance initiative, while the employees were asked afterwards (meaning that employee perceptions could hardly have affected manager-reported use of rewards, because there was no implementation to have a perception of when the managers were asked). Still, before we can conclude that the use of verbal rewards positively *affects* employee perceptions, we need more experimental evidence, which can add to Bellé's (2015) study by ensuring that the causal conclusions can also be generalized to real-world public organizations. Especially if these studies also follow individuals and organizations over time, they may be able to contribute to developing our knowledge about rewards, employee perceptions and motivation.

Concerning the generalizability of the results, several factors prevent us from making statistical generalizations beyond the organizations investigated. The fact that the managers were recruited as part of a larger field experimental leadership project (that will actually try to get experimental variation in the use of verbal rewards) suggests that the managers investigated might differ from the population of school principals in their level of active

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managerial behavior. This is, however, mainly a problem for descriptive generalization (e.g., how supportive is the employee perception of governance initiatives), not for the associations investigated. Here we would argue that the findings regarding verbal rewards can plausibly be generalized to education and similar contexts in countries where feedback is given in a non-controlling way. This means that analytical generalization is more plausible in low-power distance cultures similar to Denmark. By education and similar contexts we mean public service organizations with relatively few hierarchical levels between organization managers and their employees and (2) between the employee and those they serve (here the children and their parents). Teachers are essentially street-level bureaucrats who interact with their students on a daily basis, and many public employees do not have this type of relationship with the citizens that they serve. It might also be relevant to restrict the generalizability to popular services, but it should be mentioned that the Danish teachers were not very popular in the population at the time of our investigation.

Especially the findings relating to material rewards should not be generalized too broadly. While there is little reason to expect variation between sectors and organizations in how controlling verbal rewards are perceived, several studies document that even comparable Danish employees can find material rewards both supportive and controlling (Andersen and Pallesen 2008), and Danish teachers are reputed to have a controlling perception of pay for performance. As mentioned earlier the context might be important for how employees understand the signal of a material reward, and while verbal rewards more unambiguously signal that employees are seen as altruists, material goods can either signal that the manager thinks the employees deserve to be rewarded for completing an important and difficult task, or that the employees are greedy (Bénabou and Tirole 2006). In sum, we argue that the findings can be generalized for verbal rewards, while we must continue to gather evidence on

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material rewards to find out when they are seen as signaling greed and when they are seen as signaling competence and importance.

CONCLUSION

We aimed to investigate the associations between different types of rewards and employee perceptions of governance initiatives, because it might shed more light on the reward-motivation relationship, and we find a robust positive relationship between managers' use of verbal rewards and employees' perceptions of governance initiatives at the organizational level as being supportive rather than controlling. Our investigation of material rewards finds no association with employee perception (or with intrinsic motivation), and the robustness of these finding is increased by the fact that this is true for both employee and manager reports. As discussed above, a key weakness is the cross-sectional design, while a key strength is the multilevel design which allows us to limit common source bias. The findings cannot be statistically generalized beyond the investigated organizations, but analytical arguments suggest that we would find similar patterns for verbal rewards for public service providers in countries similar to Denmark in organizations, where employees are close to both managers and the citizens that they serve.

Despite the mentioned limitations, the article makes several potential contributions to the public management literature. The results suggest that verbal rewards can be a very useful tool in public organizations for building support for governance initiatives and potentially also for increasing (or at least avoiding to decrease) employee intrinsic motivation. Another important contribution is that the article theorizes about and analyses both material and verbal rewards in a public sector setting. Our findings suggest that other research should follow Bellé (2015) and address this long-neglected issue, exploring the effects of different kinds of rewards. As a supplement to Bellé (2015) we find the positive associations for real-world,

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naturally occurring, and enduring rewards, and our limited ability to draw firm causal conclusions can be seen as a result of a design which allows us to study rewards in real-world relationships between employees and their managers. Together the results indicate that academics should prioritize studying verbal rewards, and that practitioners might benefit from using them. We look forward to experimental studies in real-world public organizations, analyzing the relationships between different types of rewards, employee perception of governance initiatives, intrinsic motivation and ultimately performance. Field experimental evidence would thus enable practitioners to utilize this very promising managerial tool to a larger extent.

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