



Does trust-based management reform enhance employee-driven innovation? Evidence from a Scandinavian capital

Bidrar tillitsreformer til å styrke medarbeiderdrevet innovasjon?

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Abstract

Over the last two decades, public sector trust-based management reform (TBMR) has been on the agenda in Scandinavia. This article analyzes the relationship between such reform and employee-driven innovation (EDI) in schools and home care services through a broadly distributed (large N) survey study analyzed with PLS-PM, based on data from Oslo municipality. It also examines trust and organizational citizenship behavior (OCB) as factors partially mediating this relationship. In units where employees reported successful implementation of the reform, they also reported an increase in EDI. Employees' trust in their managers and OCB mediates the relationship. The study contributes to the literature on trust-based management reform (TBMR) and employee-driven innovation by providing knowledge on the impact of TBMR on trust and OCB and how these factors condition EDI in public organizations.

Keywords

Innovation, Management, Organizational citizenship behaviour, Public sector innovation, Trust based management reform

Sammendrag

Tillitsbasert styring og ledelse står på agendaen i Norge. Denne artikkelen bygger på en studie som analyserer sammenhengen mellom slik styring og ledelse og medarbeiderdrevet innovasjon. Studien bygger på data fra Oslo kommune etter tillitsreformen i 2017 analysert med PLS-PM og samlet inn i en bredt distribuert spørreundersøkelse. Den undersøker også i hvilken grad tillit og organisatorisk medborgerskapsatferd medierer dette forholdet. Analysen viser at ansatte i enheter der de opplever en vellykket implementering av reformen, rapporterer at det foregår mer medarbeiderdrevet innovasjon. Ansattes tillit til sine ledere og organisatorisk medborgerskapsatferd påvirker denne sammenhengen positivt. Det er i dag et økende krav om at offentlig sektor skal innovere i møtet med morgendagens velferdsutfordringer. Studien viser at tillitsbasert styring og ledelse kan bidra positivt i en slik prosess.

Nøkkelord

Innovasjon, Tillitsbasert styring og ledelse, Organisatorisk medborgerskapsatferd, Offentlig innovasjon, Tillitsbasert ledelsesreform

Introduction

Over the last two decades, public sector trust-based management reform (TBMR) has been on the agenda in Scandinavia (see e.g., DFØ, 2023; Johnsen, Svare, & Wittrock, 2022; Bentzen, 2018). Responding to governance systems where more decisions are taken at higher organizational levels, combined with micro-management of frontline workers and high levels of monitoring, reporting, and control, TBMR returns more discretion and autonomy to the lower levels of the organization and lessens 'red tape', based on the assumption that employees can be trusted to work well, or even better, with less micro-management, monitoring, and control (Bentzen, 2018 & 2022).

Public sector trust-based management reform has been justified along several lines of reasoning. For trade unions, it is typically promoted to strengthen the position of their members (Bjerke & Eilertsen, 2021). However, TBMR is also assumed to advance better public services through innovation (Norwegian Ministry of Local Government and Regional Development, 2022; Oslo City Government, 2017; Bentzen, 2022). So far, however, in the TBMR research literature, few thorough examinations of the theoretical basis of these assumptions have been carried out, and there has been little empirical testing of the degree to which TBMR has this outcome.

The current article seeks to remedy this lack by examining the relationship between trust-based management reform (TBMR) and employee-driven innovation (EDI) through a broadly distributed (large N) survey study analyzed with PLS-PM, based on data from Oslo municipality, where a TBMR initiative was introduced as a limited pilot in 2016, and then in the whole municipality in 2017. Further, the study seeks an improved understanding of the TBMR/EDI dynamics by examining the function of trust and organizational citizenship behavior (OCB). OCB here denotes positive and constructive employee actions and behaviors that are not specified in a formal job description and that benefit the organization (Organ et al., 2006). As EDI involves so-called extra-role behavior, some mechanism must be in place to motivate employees to mobilize the extra energy needed to engage in it (Echebiri, 2020; Holmquist & Johansson, 2019). Organizational citizenship behavior (OCB) may be such a mechanism. Thus, we explore OCB as a mediating variable between TBMR and EDI.

The article's primary contribution is to the trust-based management reform literature by exploring the relationship between TBMR and EDI. The primary justification for this focus is that EDI is emphasized as one of the more significant intended outcomes of TBMR, combined with the lack of research exploring the degree to which TBMR has this outcome. A further argument for this focus is the public sector's own emphasis on the need for innovation. If it can be affirmed that TBMR boosts innovation, then policymakers and governments have reason to promote such reforms even more vigorously than today.

The rest of this article is structured as follows: First there is a chapter on the theoretical basis of the study as a background for the development of the hypotheses that are tested, followed by the method chapter. These chapters also contain a description of Oslo Municipality's trust reform with its theoretical assumptions. Then follow the findings and discussion chapters, and finally the conclusion.

Theory

Trust-based management reform (TBMR)

In the public debate, 'trust-based management reform' functions as a general term referring to a wide variety of initiatives (see e.g., DFØ, 2023; Johnsen, Svare, & Wittrock, 2022; Bentzen, 2018). Despite their differences, a common central feature of these initiatives is

to return more discretion and autonomy to the lower levels of the organization and lessen 'red tape' through reduced levels of micro-management, monitoring, reporting and control (Bentzen, 2018 & 2022). In Norway, Oslo municipality was the first to introduce TBMR in 2017. In 2022, the Norwegian government then introduced the ambition to implement TBMR in the public sector more generally (Norwegian Ministry of Local Government and Regional Development, 2022).

In Oslo, the reform involved a reduction in the number of annual goals set up for the municipal units, and a replacement of more specific goals to more general ones, granting more autonomy to the lower levels of the organization to design and manage the daily work. Further, the city took initiative to remove unnecessary reporting. Trust was used as a headline for the reform as the changes were claimed to be based on trust in the lower organizational levels' ability to make the right decisions, based on employees' professional skills and judgements (Oslo City Government, 2017).

Employee-driven innovation

Employee-driven innovation (EDI) is here defined as 'the generation and implementation of new ideas, products, and processes including the everyday remaking of jobs and organizational practices – originating from the interaction of employees, who are not assigned to this task,' and where 'employees are active and may initiate, support or even drive/lead the processes' (Høyrup et al., 2012, p. 8).

More than one field of literature addresses EDI. On a general level, we have the literature on workplace innovation, which as a general term covers EDI (see e.g., McMurray et al., 2021). Then we have the more specific field of EDI literature. An overview of the Nordic research and policies on EDI can be found in Nordic Council of Ministers (2013), while more recent contributions are, for example, Bos-Nehles et al. (2017), Echebiri (2020), Echebiri et al. (2020), and Renkema et al. (2022). Finally, we have the literature on innovative work behavior (IWB) at the employee level. IWB is 'the intentional creation, introduction, and application of new ideas within a work role, group or organization, in order to benefit role performance, the group, or the organization' (Janssen, 2000, p. 288). There are substantial overlaps between these three fields of literature (Renkema et al., 2022, p. 3530). When relevant, in the present article, we draw upon and address all three fields, as well as the literature on TBMR.

The relationship between TBMR and EDI

In this article, we explore the relationship between trust-based management reform (TBMR) and employee-driven innovation (EDI). TBMR policy documents seem to assume that such a connection exists, the mechanism being that the transfer of professional authority and responsibility to employees through TBMR enhances EDI, as employees can then influence to a greater extent how goals are to be achieved and how tasks are to be solved (Oslo City Government, 2017; Norwegian Ministry of Local Government and Regional Development, 2022). So far, however, in the TBMR research literature, no thorough examination of the theoretical basis of these assumptions has taken place. In addition, there has been little empirical testing of the degree to which TBMR has this outcome. Balla (2021) studies EDI in an urban district in Oslo after TMB. In a Swedish study, Håkansson (2022) examines EDI among care workers in a trust-based developmental project. Neither study was able to conclude whether EDI increased as a result of TBMR.

If we look at some of the factors involved in TBMR reform, however, and consult the EDI and related literature, we find several contributions that may provide some light on the

relationship. For instance, the literature confirms beyond doubt that there is a positive association between autonomy and discretion on the one hand, and EDI on the other (see e.g., Bos-Nehles et al., 2017; Smith, Ulhøi, & Kesting, 2012; Totterdill & Exton, 2017). Echebiri (2020) found that autonomy had an indirect association with EDI through self-leadership.

In Oslo's TBMR, it was emphasized that communication and collaboration – both horizontally and vertically – should be strengthened through the reform. These factors may here be conceived as governance mechanisms that need to be strengthened in response to the reduced top-down management that TBMR involves. However, they are also generally seen as conducive to innovation (Renkema et al., 2022; Dhondt et al., 2017; Hansen et al., 2017). Communication, for instance, is a condition for knowledge sharing, which is an essential resource for innovation (Smith et al., 2012). Finally, the innovation process from idea to implementation typically requires horizontal and vertical collaboration. Thus, it is reasonable to expect that improved communication and collaboration in TBMR will also enhance EDI. This leads to the first hypothesis of this study:

H1: There is a positive association between TBMR and EDI.

Research has also established a positive association between EDI and several other factors. In this article, we examine two relevant factors. First, as EDI involves so-called extra-role behavior, some mechanism must be in place to motivate employees to mobilize the extra energy needed to engage in it (Echebiri, 2020; Holmquist & Johansson, 2019). Organizational citizenship behavior (OCB) may be such a mechanism. The term 'OCB' here describes positive and constructive employee actions and behaviors that are not specified in a formal job description and that benefit the organization (Organ et al., 2006). Even if some studies have found a positive correlation between OCB and EDI (see e.g., Xerri & Brunetto, 2013, and Khan et al., 2020) there is still scarce research examining this relationship. The present study, thus, also contributes to filling this gap.

We explore OCB as a mediating variable between TBMR and EDI, based on the idea that OCB is both influenced by TBMR, and influences EDI among front-line employees. The first claim is based on the assumption that when employees are granted more discretion and autonomy, they feel more trusted, which again contributes to a feeling of being appreciated (Bernstrøm & Svare, 2017; Bos-Nehles et al., 2017, p. 1235), which results in higher levels of OCB.

OCB has also been associated with other outcomes that may be conducive to EDI. For instance, OCB is expected to reduce the need for resources spent on management and maintenance functions, freeing them up for other useful activities (Organ et al., 2006; Podsakoff et al., 2009), such as EDI. In high-OCB organizations, too, experienced employees are more active in sharing their knowledge with new coworkers, and to provide suggestions for improving unit performance, which are both significant mechanism in EDI (Podsakoff et al., 2009). Hence, this second hypothesis:

H2: OCB will partially mediate the relationship between TBMR and EDI.

Finally, we have trust. Given the emphasis on the term 'trust' in 'trust reform', one should expect that the function of trust in TBMR has been frequently studied, for instance, how variation in trust between organizational members or groups may influence both the degree of success of the reform and its intended outcomes, such as EDI. With a few exceptions, however (see e.g., Bentzen, 2022), this is not the case.

Theoretically, trust should be expected to function as a significant factor in the TBMR/EDI dynamics, as trust has been found to positively determine communication and collaboration in innovative contexts (Shazi et al., 2015; Svare et al., 2020), which are both important conditions for EDI.

In this study, employees' trust in their managers is hypothesized as a partially mediating factor between TBMR and EDI. Regarding the relationship between TBMR and such trust, we assume that TBMR, with its granting of more discretion and autonomy to front-line employees, enhances employees' trust in their managers (Bernstrøm & Svare, 2017; Bos-Nehles et al., 2017), the mechanism being that this granting of discretion and autonomy is experienced as a sign of trust that initiates a positive trust spiral through which employees grant their managers more trust in return (Burgoon et al., 2021; Bentzen, 2018, p. 34).

Regarding the relationship between employees' trust in their managers and EDI, we expect that when employees have lower trust in their managers, they will be more reluctant to share information, for instance, about things that are not working properly, and more reluctant to enter into extra-role activities, fearing that it might backfire on themselves if they are seen as messengers of bad news or if the activities are not successful (Lidman et al., 2023). Thus, a crucial impulse for EDI is hampered. This leads to the third and final hypothesis:

H3: Employees' trust in their managers will partially mediate the relationship between TBMR and EDI.

Figure 1 presents the implied model.

Method

Empirical case: The City of Oslo's trust reform

The City of Oslo is the capital of Norway and the country's largest municipality. It is governed by a city government that is responsible to the city council. The city is divided into 15 urban districts, each with some degree of autonomy.

The current 'Principles for organizational management in Oslo municipality' establishes Management by objectives and results (MBOR) as the City's overall management principle (Oslo City Government, 2011). In MBOR, an organization's strategic goals are defined at the top level, while it is up to the lower organizational levels to decide how these should be realized. To monitor goal achievement, indicators of progress are defined. Monitoring or reporting mechanisms are then set up to follow the development of these indicators.

Another governance mechanism frequently used in Oslo is the purchaser-provider split (PPS). PPS is a service delivery model in which service purchasers are kept organizationally separate from service providers. When PPS was introduced in Oslo's home care services in the early 2000s, the earlier system of more autonomous teams of home care workers was replaced with a system of specialized purchaser units assessing user needs, dimensioning the services level for each user, and defining control outcomes, whereas the care teams were being reduced to mere service providers (Vabø, 2006).

Prior to the introduction of Oslo's trust reform, MBOR and PPS attracted gradually more criticism, especially from trade unions and the political left, and especially in the schools and home care services, as the media presented headlines about 'test frenzies' in schools and the 'tyranny' of the 'stopwatch regime' in home care services.

The reform was first initiated as a pilot in a limited number of home care services from 2016 to 2017 (Eide, Nilsen, Gullslett, Aaberge, & Eide, 2017). In 2017 the reform was then implemented in the whole municipality, including schools, even if the term ‘reform’ was now downplayed. Instead, in the policy document accompanying the 2017 initiative, trust was declared to be ‘the main principle for management’ in all parts of the municipal organization, along with the aim ‘to build a trust-based culture’ (Oslo City Government, 2017). For simplicity, in this article we will talk about the change initiated in 2016/17 as a trust-based management reform even if it is slightly at odds with the terminology used by the City Government after 2017. While de-bureaucratization and transfer of professional authority to lower organizational levels is central to the reform, innovation is emphasized as an intended reform outcome (Oslo City Government, 2017).

The survey

The study is based on data from an online survey on TBMR in home care services and primary and secondary schools in Oslo municipality in 2020/2021.

The focus on these two sectors, home care services and schools, is legitimated, firstly, in that they were the ones that were most intensively discussed in advance of the TBMR as sectors in need of reform, and secondly, in that they are the sectors with the largest number of employees, which made it easier to recruit the necessary number of respondents.

The home care services in 14 of 15 districts chose to participate in the survey. We selected 30 primary schools and 8 secondary schools out of circa 190 schools to ensure variation in school types, sizes, and locations. In total, 52 organizational units were included. All managers and employees in these units were invited to participate in the survey. All units were at least three years into their implementation of TBMR at the time of the survey.

The questionnaire had questions about TBMR, employees’ trust in their managers, OCB, and EDI, in addition to other variables used in other studies, see for example Johnsen et al. (2022), in total 127 questions. Validated research instruments were used in consultation with research colleagues, where possible. The survey questions used a seven-point Likert scale (1 = not at all to 7 = to a very high degree).

To avoid problems with common method variance (CMV) when all the data come from the same survey (Podsakoff et al. 2003; Chang et al. 2010), we adopted two preventive measures in the research design phase (George & Pandey, 2017). First, respondents were informed that their responses were anonymous, which minimizes the evaluation apprehension and reduces method bias. Second, we counterbalanced the order of the measurement of our dependent and independent variables (Podsakoff et al. 2003; Chang et al., 2010), which makes CMV less likely. After the data collection, we adopted two additional measures to detect and prevent CMV. First, we conducted a Harman’s single-factor test with the complete survey with 87 items for all the responding 1,006 managers and employees, which explained 37 percent of the variation, well below 50 percent, which is the usual threshold indicating substantial CMV problems. Second, we utilized the individual survey responses to form aggregated data for the organizational units following the procedure of Enticott et al. (2008), as recommended by George and Pandey (2017) to ensure a multi-informant design. We, therefore, deem potential CMV problems to have been avoided in the analysis.

Data collection

The survey targeted 5,841 possible respondents. After three reminders, a total of 1,006 managers and employees responded (466 in homecare, 365 in primary schools, and 175 in secondary schools). The total response rate was 17.2 percent, and the response rate was highest

in home care services (21.3 percent), second highest in secondary schools (17.7 percent), and lowest in primary schools (13.7 percent). In this analysis we used the survey data from the responding 858 employees in the 52 organizational units.

Analytical units

In our analytical model, the analytical units are the 52 organizational units referred to above, and not their individual organizational members. The reason is that even if Oslo's TBMR was initiated through a centralized top-down initiative, each unit had some degree of autonomy in how to implement the reform, resulting in significant variations between the units, and there is also a reason to believe that differences in local conditions created additional variation. This is something we wanted to capture in our analytical design. Our focus, thus, is on how the employees in each unit collectively experienced TBE and the other factors included in the analysis.

The focus on employees was inspired by earlier research showing that frontline workers in public organizations experience the reality of their organizations differently than managers. In organizational reforms, one has found only modest levels of agreement between these groups about the impacts of the reform (Walker & Enticott, 2004).

To achieve the analytical aims mentioned above, we did as follows: First we applied the echelon approach to data aggregation (Enticott et al., 2008). Here, one collects data at preidentified levels—called echelons—in the organizational hierarchy. Equal weight is given to each echelon, and organizational scores are calculated from the means of the echelons—in effect, a weighted aggregate. This method captures internal organizational variety in a standardized and comparable format (Enticott et al., 2008, p. 232). Enticott et al. also recommend that the choice and number of echelons used are justified empirically and/or theoretically to represent the social reality of the organization. For instance, one should take into account who the most knowledgeable organizational members are in relation to specific organizational facets (Enticott et al., 2008, p. 246). In our case, we chose the echelon representing the employees, for the reasons already mentioned.

In our analytical model, thus, the analytic units are the organizational units. The value for each unit for each variable is the mean of the values of the unit's employees. Table 1 reports descriptive statistics for all the indicators and the variables.

Measuring concepts

The analysis is based on perception data from a survey. We therefore measured the concepts as latent variables.

Trust-based management reform (TBMR) is measured with five questions. The questions address dimensions central to the reform as defined in Oslo's policy documents (Oslo City Government, 2017). In two questions the respondents are asked whether they have experienced an increase in discretion and autonomy after the reform (var3 and var6 in Table 1). Additionally, there were three questions addressing horizontal and vertical communication and collaboration that were seen as essential to the reform ($\alpha = 0.91$).

Trust between managers and employees was measured with five questions borrowed from an instrument developed by Gillespie (2015). The questions are designed to measure trust in different work contexts along two dimensions: reliance trust (var34 \times , var36 \times , and var38 \times in Table 1) and disclosure trust (var40 \times and var41 \times) ($\alpha = 0.94$). The instrument is designed to capture behaviors in which employees expose themselves to vulnerability to the actions of their leaders, which goes to the core of the definition of trust (Mayer et al., 1995).

Table 1. Assessment of the measurement models (N = 52)

Variable and indicator	Measurement model	Min	Max	Mean	Variance	Skewness	Kurtosis	Henseler's rho (ρ_A)	Dijkstra-Jöreskog's rho (ρ_C)	Cronbach's alfa (α)	AVE	Weight	Loading
TBMR	<i>Latent variable (Mode A consistent)</i>							0.92	0.91	0.91	0.68		
var3	Fewer and clearer goals	2.40	5.33	3.43	0.33	0.71	1.10					0.20***	0.70***
var5	Better and more open communication	2.38	5.33	3.82	0.50	0.03	-0.40					0.26***	0.92***
var6	More professional judgment and independent decisions	2.95	5.80	4.10	0.45	0.31	-0.45					0.23***	0.80***
var9	Improved collaboration between management, employees, and employees' organizations	2.18	5.56	3.72	0.60	0.30	-0.43					0.26***	0.92***
var10	Improved collaboration and coordination across units	2.67	5.44	3.89	0.38	0.25	-0.46					0.21***	0.74***
Trust	<i>Latent variable (Mode A consistent)</i>							0.95	0.94	0.94	0.77		
var34x	Rely on your leader's work-related judgements	3.67	6.50	5.33	0.34	-0.41	0.36					0.21***	0.83***
var36x	Depend on leader to handle an important issue on your behalf	3.83	6.25	5.10	0.35	-0.24	-0.50					0.21***	0.83***
var38x	Depend on your leader's support in difficult situations	4.14	6.50	5.43	0.44	-0.26	-0.89					0.24***	0.95***
var40x	Confide in your leader about personal issues that are affecting your work	3.21	5.89	4.93	0.45	-0.66	-0.52					0.23***	0.92***
var41x	Discuss how you honestly feel about your work, even negative feelings, and frustration	3.47	6.11	5.06	0.39	-0.77	0.21					0.21***	0.84***
OCB	<i>Latent variable (Mode A consistent)</i>							0.87	0.85	0.85	0.49		
var72	Attend functions that are not required but that help the organizational image	2.40	5.33	3.63	0.36	0.24	0.55					0.18***	0.57***

Variable and indicator	Measurement model	Min	Max	Mean	Variance	Skewness	Kurtosis	Dijkstra-Henseler's rho (ρ_A)	Jöreskog's rho (ρ_C)	Cronbach's alfa (α)	AVE	Weight	Loading
var73	Keep up with developments in the organization	4.00	6.00	5.20	0.15	-0.64	1.54					0.19***	0.60***
var74	Defend the organization when other employees criticize it	4.29	6.25	5.30	0.21	-0.26	-0.62					0.26***	0.81***
var75	Show pride when representing the organization in public	3.93	6.00	5.22	0.30	-0.87	-0.02					0.28***	0.89***
var77	Express loyalty toward the organization	4.50	6.60	5.70	0.15	-0.62	1.14					0.22***	0.70***
var78	Take action to protect the organization from potential problems	4.00	6.00	5.21	0.21	-0.59	0.11					0.18***	0.57***
EDI	<i>Latent variable (Mode A consistent)</i>							0.91	0.90	0.90	0.75		
var79	We try new ways of doing things at work	4.25	6.29	5.19	0.20	0.09	-0.29					0.33***	0.79***
var81	When something does not function well at work, we try to find new solution	4.27	6.13	5.24	0.19	0.05	-0.49					0.42***	0.99***
var85	We were often successful at work in implementing my ideas and putting them into practice	3.47	5.67	4.86	0.24	-0.39	0.15					0.34***	0.81***

Noter: AVE = Average variance extracted. * = t-value > 1,960 (p < 0.05), ** = t-value > 2.576 (p < 0.01), *** = t-value > 3.090 (p < 0.001).

OCB was measured with six questions based on Lee and Allen (2002), see Table 1 for details ($\alpha = 0.85$).

Employee-driven innovation (EDI) was measured with three questions borrowed from Lukes and Stephan's (2017) Innovative Behavior Inventory, which in this case is used as a proxy for EDI. The original scale contained 23 questions along 7 dimensions. In the original instrument, all questions started with 'I,' inviting an individual focus. We replaced the 'I' with 'we,' inviting a more collective team focus. In the present study, EDI is measured with two questions dealing with idea generation (var79 and var81 in Table 1) and one question dealing with innovation outputs (var85) ($\alpha = 0.90$).

The multivariate analyses of the path models were done with PLS-PM in ADANCO 2.3.2 (Henseler & Dijkstra, 2015) and we report the results following the recommendations of Benitez et al. (2020). PLS-PM is a suitable estimator because we analyze a path model with latent variables, and the sample size is small (Henseler, 2021). The latent variables were estimated with the Mode A consistent estimator (PLSc). All the 19 indicators for the latent variables were highly significant ($p < 0.001$). Three of the 19 indicators for the latent variables had loadings below 0.707 (the minimum was 0.57) but were kept due to their theoretical importance for measuring the variables. All the resulting latent variables had satisfactory construct reliability (>0.80). Convergent reliability measured by average variance extracted (AVE) >0.50 was highly satisfactory, with only OCB having an AVE score of 0.49, marginally below the recommended threshold of 0.50. The highest hetero-trait-mono-trait (HTMT) score was 0.70, well below the common threshold of 0.85 and significantly below 1, indicating satisfactory discriminant validity. The measurement models were therefore satisfactory for the analysis.

Table 2. Descriptive statistics and bivariate correlations for the latent variables (N = 52)

	1	2	3	4
1 EDI				
2 TBMR	0.64***			
3 Trust	0.61***	0.59***		
4 OCB	0.69***	0.65***	0.40***	

Notes: * = p-value < 0.05 , ** = p-value < 0.01 , *** = p-value $p < 0.001$, two-tailed p-values. Max hetero-trait-mono-trait (HTMT) = 0.70.

Table 2 reports the bivariate correlations for the latent variables.

Findings

Table 3 reports the results for the measurement models and the structural model. Preliminary criteria for good overall model fit for structural models in PLS-PM are that the standardized root mean squared residual (SRMR) <0.08 and below the 95 percent confidence interval ($<HI95$). The SRMR for the estimated model was 0.08 and lower than the 95 percent confidence interval ($HI95 = 0.10$), which indicates that the estimated model is significant at the 5 percent level. The SRMR value of 0.08 indicates that the model has an acceptable fit (Henseler, 2021). Low values for d_{ULS} (squared Euclidean distance) and d_G (geodesic distance) imply good model adaptation. Values of 0 would be a perfect fit between the empirical covariance matrix and the model-estimated covariance matrix. These measures were 1.34 and 1.30, respectively, and below their $HI95$. The measurement models explain 62 percent (adjusted $R^2 = 0.60$) of the variance in the dependent variable EDI, and 43 (adjusted $R^2 = 0.42$) and 35 percent (adjusted $R^2 = 0.33$) of the variation in OCB and employee trust, respectively.

Table 3. Assessment of the results from the PLS-PM analysis (N = 52)

	Beta	t-value	95 percent confidence interval	Effect size Cohens f ²
TBMR -> EDI	0.13	0.69	[-0.26, 0.51]	0.02
TBMR -> Trust	0.59***	5.59	[0.38, 0.78]	0.53
TBMR -> OCB	0.65***	5.82	[0.45, 0.82]	0.74
Trust -> EDI	0.35**	2.64	[0.05, 0.57]	0.21
OCB -> EDI	0.47*	2.58	[0.11, 0.83]	0.33
Endogenous variables	R ²	Adjusted R ²		
EDI	0.62	0.60		
Trust	0.35	0.33		
OCB	0.43	0.42		
Goodness of fit estimated model	Value	HI95		
SRMR	0.08	0.10		
d _{ULS}	1.34	1.86		
d _G	1.30	2.40		

Notes: * = t-value > 1,960 (p < 0.05), ** = t-value > 2.576 (p < 0.01), *** = t-value > 3.090 (p < 0.001). SRMR = Standardized root mean squared residual. d_{ULS} = Squared Euclidean distance. d_G = Geodesic distance.

The path coefficients are standardized regression coefficients (beta-coefficients). With a given confidence interval, the coefficients should be different from 0. Four of the five path coefficients are highly significant (p = <0.01). Thus, all three hypotheses were corroborated.

The effect of the variables is examined by power size (Cohens f²) which shows how much a variable explains the variance of the dependent variable. F² from 0.02 to 0.15 is weak, 0.15 to 0.35 is medium and 0.35 and higher is large power size. TBMR has a weak direct effect on EDI (f² = 0.02), and large effects on employee trust (f² = 0.53), and OBC (f² = 0.74). Employee trust and OBC have medium effects on EDI of f² = 0.21 and f² = 0.33, respectively.

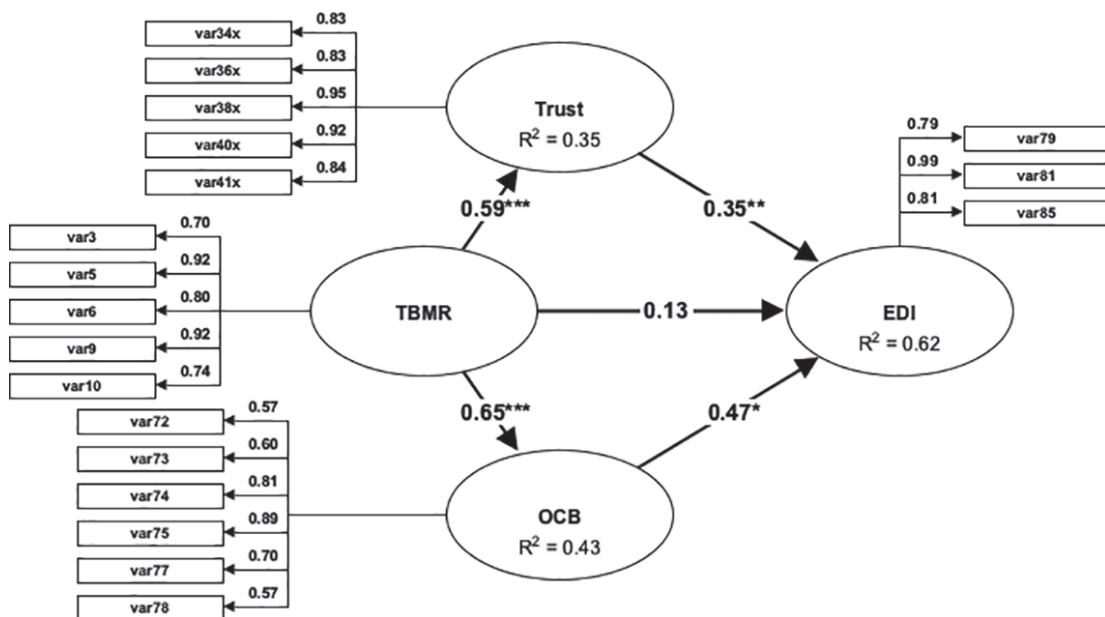


Figure 1. Main results from structural model (N = 52).

Figure 1 shows the path model and the main results of the measurement models and the structural model.

Discussion

Theoretical contribution

Over the last two decades, trust-based management reform has been on the agenda in Scandinavia. Among other things, TBMR is expected to advance better public services through innovation (Norwegian Ministry of Local Government and Regional Development, 2022; Oslo City Government, 2017; Bentzen, 2022). So far, however, in the TBMR research literature, few thorough examinations of the theoretical basis of these assumptions have been carried out, and there has been little empirical testing of the degree to which TBMR has this outcome.

The current article seeks to remedy this lack by examining the relationship between trust-based management reform (TBMR) and employee-driven innovation (EDI) through a broadly distributed (large N) survey study analyzed with PLS-PM, based on data from Oslo municipality. Further, the study seeks an improved understanding of the TBMR/EDI dynamics by examining the function of OCB and trust.

The study tested the following hypotheses:

H1: There is a positive association between TBMR and EDI.

H2: OCB will partially mediate the relationship between TBMR and EDI.

H3: Employees' trust in their managers will partially mediate the relationship between TBMR and EDI.

All three hypotheses were corroborated, that is, our findings confirm that TBMR is positively related to EDI and that trust and OCB act as positive partial mediators.

The study contributes to the TBMR literature by being the first study that empirically tests the relation between TBMR and EDI with data from a broadly distributed (large N) survey. Further, testifying to how trust functions as a partial mediator in the relationship, it shows that trust cannot simply be granted as a stable factor in TBMR, but may vary between organizational units, and influence EDI as an intended outcome.

Regarding what it is in TBMR that advances EDI, we found that it is the transfer to front-line employees of more discretion and autonomy, and the enhanced communication and collaboration that lies at the core of the reform. This corroborates earlier research in this area (Renkema et al., 2022; Bos-Nehles et al., 2017; Smith, Ulhøi, & Kesting, 2012; Totterdill & Exton, 2017; Hansen et al., 2017).

Regarding the type of EDI that the study measures, it involves improvements in how ordinary work tasks are handled. This fits well with the assumptions found in the policy documents accompanying TBMRs that TBMR will lead to more EDI, as employees can then influence to a greater extent how goals are to be achieved and how tasks are to be solved (see e.g., Oslo City Government, 2017).

The questions forming the basis of the trust measure, addressing vulnerability both related to reliance and disclosure, testify that both are relevant in creating a climate conducive to EDI. From earlier studies, we know that, for instance, the willingness to ask 'stupid questions' without fear of being ridiculed or share other similarly 'risky' thoughts and feelings is essential to an innovation-friendly climate (Svare et al., 2020; Shazi et al., 2015). This is captured by the disclosure questions, while the responses to the reliance questions relate to the collaborative aspect of innovation.

Finally, we take the findings related to OCB to confirm earlier research on how OCB is dependent on certain leadership styles (see e.g., Khan et al., 2020), here represented by TBMR, which has a degree of similarity to both transformational leadership style and

empowering leadership style. Further, we interpret our findings to mean that OCB boosts an organizational climate that encourages engagement to improve work routines or services. Further, the study builds an improved understanding of the TBMR/EDI dynamics by confirming the function of OCB and trust relative to these factors, in line with the call of Geus et al. (2020) for more research using stronger survey designs regarding the outcomes of OCB in public organizations.

Our study's unique contribution is the evidence it provides to support the idea that TBMR in public sector organizations increases EDI, provided that employees' trust in their managers and OCB is sufficiently high.

Practical implications

The study's pragmatic implication is that as the transfer of more discretion and autonomy to frontline employees along with enhanced communication and collaboration may be seen to lie at the core of a trust-based management reform, these factors cannot be ignored, but have to be systematically advanced through such reforms. Also, one must make an effort to strengthen employees' trust in their managers, and OCB, as well as ensure that these factors are not jeopardized – perhaps unintentionally – by other factors, actions, or events during a trust-based management reform.

Limitations

This article has some limitations. One relates to the survey's relatively low response rate. The survey was conducted in early 2021 under the height of the Covid-19 pandemic. Staff in many municipalities, and especially in home care and schools in the cities such as Oslo, may have been especially affected by the measures taken in responding to the pandemic. The development of average response rates in surveys seems to vary between disciplines and over time (Hiebl & Richter, 2018; Holtom et al., 2022). Still, the response rate is close to what has become usual in many surveys today of around 20 percent. Regarding the analytical model, there are several other factors that potentially mediate the relation between TBMR and EDI than the two included in the study. Our findings, obviously, do not exclude that other factors are also involved and is an interesting topic for future research.

Conclusions

In this study, we employed structural equation modeling to analyze a path model with individual survey data from 858 employees aggregated into 52 organizational units. In units where employees reported successful implementation of TBMR, they also reported an increase in EDI. Employees' trust in their managers and organizational citizenship behavior (OCB) mediates the relationship. The study contributes to the literature on TBMR and EDI by providing knowledge on the impact of TBMR on trust and OCB and how these factors condition EDI in public organizations.

Acknowledgements

This paper is part of the 'Improving trust-based management in Nordic urban governance and management education' project, financed by the Norwegian Research Council (302053). Thanks to Tina Øllgaard Bentzen, Katriina Byström, Sofie Aas Dalsgaard, Jesper Rosenberg Hansen, Tobias Johansson, Svetlana Norkin, Sven Siverbo, Mia Vabø, and the contact people in the City of Oslo, for their co-operation in developing the questionnaire and facilitating the data collection. Thanks to all the respondents in the City of Oslo who took the time to answer the survey. Thanks also for comments when an early version of

the article was presented for the Network for Organizational Research in Norway (NEON) annual conference, 23–24 November 2022, Drammen, Norway. Finally, we acknowledge the constructive comments from the anonymous reviewers and the journal editor.

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