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# Only When We Agree! How Value Congruence Moderates the Impact of Goal-Oriented Leadership on **Public Service Motivation**

# Research Article

Abstract: Questions of how and when managers can motivate the workforce of public organizations are fundamental for scholars and practitioners alike. A dominant assertion is that goal-oriented leadership strategies, such as transformational leadership, foster public service motivation (PSM). However, existing studies rely on designs that are vulnerable to endogeneity and rarely investigate the scope conditions of the leadership-PSM relationship. Combining a field experiment with 364 managers and surveys of their 3,470 employees, the authors show that transformational leadership and transactional leadership, when induced experimentally, do not have the claimed positive effect on PSM. In fact, the results indicate that goal-oriented leadership can have demotivating effects when employee and organizational values are incongruent. Public managers should therefore carefully assess existing levels of value (in) congruence before implementing goal-oriented leadership strategies, and—in case of value conflicts—seek to align perceptions of the desirable among members of the organization.

# **Evidence for Practice**

- Work motivation is the energy a person is willing to invest in his or her job to achieve certain objectives; values are conceptions of what is desirable to achieve.
- Stimulating work motivation may be of little contribution to organizational performance, if employees expend their energy on objectives that are not aligned with organizational goals.
- Goal-oriented leadership can—at worst—have a demotivating effect on individuals' public service motivation if employee and organizational values are incongruent.
- · To reap the benefits of goal-oriented leadership, it is important to carefully assess existing value conflicts and align conceptions of the desirable among members of the organization.

ow public managers can increase employees' motivation is an important research question **L** and a practical challenge (Park and Rainey 2008). In recent years, scholarly attention has centered on the concept of transformational leadership, which is argued to stimulate employees' public service motivation (PSM) through leadership behaviors such as articulating a vision that appeals to employees' higher-order needs (Paarlberg and Lavigna 2010; Wright, Moynihan, and Pandey 2012). This focus is warranted, because PSM has been linked to behavioral dispositions of public service providers (e.g., Jensen and Vestergaard 2017) and the performance of public organizations (e.g., Andersen, Heinesen, and Pedersen 2014). Existing studies have, by and large, corroborated this assertion, demonstrating positive correlations between transformational leadership and PSM (Caillier 2014b; Jensen and Bro 2018; Park and Rainey 2008; Wright, Moynihan, and Pandey 2012). While studies thus far have made great strides in starting to explore the relationship between transformational leadership and PSM and started to

map its relation to other important organizational outcomes, three critical issues remain unsolved.

First, and in line with calls for greater attention to context (O'Toole and Meier 2014), core contextual factors of the leadership-motivation nexus remain unexplored. As noted by Paarlberg and Perry (2007), employees are likely to be motivated by organizational goals to the extent that those goals fall within employees' "zone of existing values." If values match, employees are more likely to derive motivation from the organization's mission. If values do not match, management interventions may be necessary (Besley and Ghatak 2005). However, the effect of managerial initiatives may also depend on the initial value congruence. In a cross-sectional study, Krogsgaard, Thomsen, and Andersen (2014) find that transformational leadership is positively related to PSM only if employee and organizational values match. Contrary to the common claim, this indicates that goal-oriented leadership strategies do not always increase PSM and challenges the optimistic view

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often characterizing leadership research. Extending this observation, our core argument is that value congruence in an organizational context—that is, the degree to which employees' values and the values of their organization are compatible—create opportunities or hindrances for public managers' use of goal-oriented leadership to motivate their employees. Although leadership over time can impact value congruence—for example, by clarifying, substantiating, and promoting certain values through a vision (Jensen 2018)—we focus on how existing value congruence creates opportunities or hindrances for public managers' use of goal-oriented leadership to increase employees' PSM.

Second, we expand the research scope by assessing the effectiveness of multiple types of leadership. Leadership is a complex phenomenon that consists of many different types of behavior. Prominent among the contenders for being included in this study were goal-oriented behaviors, where the leader directly seeks to clarify organizational goals and motivate employees to attain them, and process-oriented behaviors, such as supporting, monitoring, relation building, and developing employee skills. This is in line with the distinction discussed by Yukl (1999b, 34) between leadership that is concerned with task objectives and leadership that is concerned with people and relations. We decided to focus on the first type of leadership, goal-oriented behaviors, because we prefer a robust test of one main type of leadership, and existing literature reviews indicate that goal-oriented leadership behaviors such as transformational leadership are very relevant in public organizations (Orazi, Turrini, and Valotti 2015; Van Wart 2013; Vogel and Masal 2015). These behaviors focus on activating employee motivation, thereby also potentially attenuating value conflicts in the organizations.

Transformational leadership has received considerable attention in public management research (Vogel and Masal 2015), but it represents only one type of goal-oriented leadership. It is highly relevant to investigate different types of goal-oriented leadership, because they might affect motivation differently. Transactional leadership involves the use of contingent rewards and sanctions tied to organizational goal attainment and is often emphasized as an alternative approach for motivating employees (Jensen et al. 2016; Park and Rainey 2008). Recent studies point to its relevance, demonstrating how transactional leadership instigates a sense of competence (Jacobsen and Andersen 2017)—a feature that has been considered an antecedent of PSM (Vandenabeele 2014). Evaluating multiple types of goal-oriented leadership simultaneously, we expand existing knowledge of the different tools that public managers can use to foster PSM, and we contribute to clarifying commonalities and differences in their relationship with PSM.

Third, most studies probing the transformational leadership-PSM relationship rely on cross-sectional research designs (e.g., Caillier 2014b, 2015; Jensen and Bro 2018; Krogsgaard, Thomsen, and Andersen 2014; Vandenabeele 2014; Wright, Moynihan, and Pandey 2012), which are ill suited to isolate the impact of goal-oriented leadership on motivation. Challenges include reversed causality (e.g., if managers with particular leadership behaviors are recruited based on past levels of employee motivation), simultaneity, and omitted variable bias. Bellé (2013) offers one recent exception, demonstrating motivational effects following a transformational

leadership speech. While his experimental study focuses exclusively on immediate effects, its results show that leadership can indeed alter PSM. Yet ignoring the important aspect of time leaves us ill equipped to offer advice to practitioners on the persistence of any effects of goal-oriented leadership (Stritch 2017, 227). Our final contribution is therefore to build empirical evidence on both the *medium-* and *longer*-term effects of goal-oriented leadership on PSM.

To evaluate the effect of goal-oriented leadership on PSM, we combine a field experiment among 364 managers with a three-wave employee-level panel data set. Measures of PSM were collected prior to the intervention (a one-year leadership training program), three months after, and again 15 months after its conclusion. Using random assignment to treatment and the multiyear survey panel, we estimate the motivational effects of goal-oriented leadership in the medium and longer term and investigate whether initial value congruence moderates these relationships.

The article proceeds as follows. First, we conceptualize PSM, value congruence, and goal-oriented leadership. Next, we outline our arguments why goal-oriented leadership can be expected to affect PSM and how initial value congruence can be an important boundary condition. The research design is then discussed, including the leadership training programs, the panel data, and measurement of our main latent variables—PSM and value congruence. Finally, we discuss our results in light of existing studies, highlight main limitations, and situate our findings in terms of their scholarly and practical implications.

# Conceptualizing Public Service Motivation and Value Congruence

Perry and Wise (1990) set the agenda for studying PSM when they argued that this type of motivation could increase individual performance in public organizations. Since then, several studies have demonstrated that this expectation can be correct, at least under some circumstances (e.g., Andersen, Heinesen, and Pedersen 2014; Bellé 2013). Still, the rapid increase in the number of journal articles investigating PSM (for a recent review, see Ritz, Brewer, and Neumann 2016) has accentuated the need for a clear conceptualization of PSM (Bozeman and Su 2015).

Distinguishing PSM from public values, Andersen et al. (2013) argue that PSM can metaphorically be seen as the "fuel" that provides individuals with energy to expend extra effort in delivering public service, while public values depict specific understandings of what is desirable for other people and society. In other words, values set the direction for behaviors, while motivation refers to the vigor and persistence characterizing those behaviors. PSM can be seen as an individual's latent willingness to contribute to desirable public service (i.e., desirable as seen by each individual based on his or her values) with the intention of improving the well-being of other people and society more broadly. This understanding of PSM is captured by Hondeghem and Perry's (2009) definition, and we correspondingly see PSM as "an individual's orientation to delivering services to people with a purpose to do good for others and society" (Hondeghem and Perry 2009, 6). According to this perspective, PSM can be seen as an individual's motivation to perform services directed toward other people and society and it

highlights the prosocial motive underlying public service-motivated behavior—to "do good."

Values can be defined as "conceptions, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable which influences the selection from available modes, means, and ends of action" (Kluckhohn 1951, 395). In this sense, values describe what employees (individuals) and organizations (groups) see as desirable—or, in the context of PSM, what it means to "do good" for others and society. In line with the majority of studies on value congruence and person-organization fit, we focus on the compatibility between employee and organizational values (Kristof 1996). Do individual employees perceive their values (i.e., understandings of the desirable) to be similar to organizational values as expressed, for example, in vision statements? This is important, as it is nowhere implied that conceptions of what it means to "do good" are monopolized by organizations. Employees may hold conceptions of the desirable that differ from those of other employees or from that of the organization. In case of value incongruence, individual employees may seek to promote select values with great persistence and vigor, but the very same effort may be of little help, or even detrimental, to achieving the broader objectives of the organization. It is therefore critical to study how values—and value congruence—relate to and condition PSM in organizational contexts.

Ample research on value congruence has taken place in industrial and organizational psychology (e.g., Kristof-Brown, Zimmerman, and Johnson 2005; Verquer, Beehr, and Wagner 2003) but also more recently in the field of public management (e.g., Bright 2007; Wright and Pandey 2008). Value congruence occurs when characteristics of the individual (employee values) and the environment (organizational values) match, and it has been found to be especially important for outcomes such as job satisfaction, organizational commitment, and intentions to quit (Kristof-Brown, Zimmerman, and Johnson 2005). While we recognize the potential for leadership to align values of employees and the organization over time (see Jensen 2018), our focus is on value congruence as a moderator of the goal-oriented leadership-PSM relationship. Before we elaborate on our theoretical arguments for this expectation, we first conceptualize two main types of goal-oriented leadership: transformational and transactional leadership.

# **Goal-Oriented Leadership: Transformational** and Transactional Leadership

Leadership is a broad concept that involves a range of activities aimed at influencing and facilitating efforts to reach shared goals (Yukl 2012, 66). The leadership literature offers a multitude of leadership concepts, but an important question is how we can use the generic knowledge about leadership to promote understanding of how public organizations function (Van Wart 2013; Vogel and Masal 2015). In line with Ospina (2017), we argue that we should both establish new theories about public leadership and extend the generic leadership literature to public organizations and thereby contribute to scientific progress and coherence. Classical leadership typologies make a distinction between process-oriented activities, where relation-oriented leadership activities have played a particularly important role, and goal-oriented activities, where the task is central and organizational goals are used to direct,

motivate, and engage employees (Yukl 2012). In order to extend our knowledge about the effects of leadership on motivation, we focus on goal-oriented leadership strategies. Existing literature links goal-oriented leadership behaviors directly with motivation, and we can thus build on the insights from both generic and public management literature on goal-oriented leadership, where transformational leadership has been emphasized as particularly relevant (Wright, Moynihan, and Pandey 2012).

Originally set forth by Burns (1978), and further developed by Bass (1998), transformational and transactional leadership are often referenced as some of the main—and most important—types of goal-oriented leadership. Transformational leadership, in particular, has established itself as a core topic in public management research (Orazi, Turrini, and Valotti 2015; Van Wart 2013; Vogel and Masal 2015). Following recent contributions in the field of public administration (e.g., Caillier 2014a) and the conceptual discussion of transformational leadership by Jensen et al. (2016), we see transformational leadership as a unitary construct. Transformational leadership was introduced as a multidimensional construct consisting of four dimensions (idealized influence, intellectual stimulation, individualized consideration, and inspirational motivation; see Bass 1985); it has also been applied in public management studies (e.g., Oberfield 2012; Trottier, Van Wart, and Wang 2008). However, this approach has received intense criticism for lacking theorizing on how the dimensions interact and whether they overlap conceptually and not least empirically (van Knippenberg and Sitkin 2013; Yukl 1999a). The visionary component of transformational leadership (inspirational motivation) has been highlighted as a core facet of transformational leadership and focusing on this dimension allows us to identify the effects of a narrower and interrelated set of behaviors. More specifically, we draw on Jacobsen and Andersen to define transformational leadership 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" (2015, 832). Hence, and as discussed thoroughly in Jensen et al. (2016), transformational leadership in our understanding refers to the practice of formulating, sharing, and sustaining a set of idealized goals (as captured in the organizational vision) in order to inspire employees to rise above their own self-interests for the good of the organization and its clientele (Jensen et al. 2016).

Transformational leadership is often contrasted with transactional leadership, which refers to the practice of motivating employees through an exchange process involving different types of contingent rewards. Drawing on Jacobsen and Andersen, we define transactional leadership as "the use of contingent rewards and sanctions intended to create employee self-interest in achieving organizational goals" (2015, 832). This understanding of transactional leadership includes the use of contingent sanctions. However, we do not include contingent sanctions in our empirical tests, because the literature offers little reason to expect sanctions to be a lever for increasing PSM. While existing studies point to the limited authority managers of public sector organizations can have to remove, hire, promote, and determine pay (Rainey and Bozeman 2000, 455), the transactional logic extends beyond such pecuniary means. Transactional leaders in public organizations can distribute near-pecuniary and nonpecuniary rewards such

as professional development, delegation and positive feedback contingent on worker effort and performance, making transactional leadership behaviors relevant for our purpose. Similar to Park and Rainey (2008), we see transformational and transactional leadership as distinct but not mutually exclusive behaviors. The "augmentation hypothesis" posits that the combination of the two leadership strategies is particularly effective (Hater and Bass 1988), and it is therefore relevant to also address how a combination of transformational and transactional leadership affects PSM.

# How Goal-Oriented Leadership Affects Public Service Motivation

A persistent argument in the literature is that transformational leaders foster PSM by communicating and sustaining attention on public service-oriented visions (Wright, Moynihan, and Pandey 2012). Paarlberg and Lavigna argue that transformational leaders "elevate the interests of their employees, generate awareness and acceptance of the group mission, and look beyond their own self-interest to the greater good" (2010, 711). In line with these arguments, Bellé (2014) specifically expects transformational leaders to be able to inspire their employees to go beyond their immediate self-interest by linking an inspiring vision to their core values. Corroborating this expectation, Wright, Moynihan, and Pandey (2012) find a positive association between transformational leadership and PSM for senior managers in U.S. local government jurisdictions, while Caillier (2015, 467) identifies positive associations for local, state, and federal government employees in the United States. These and other recent studies have offered insights into the mechanisms underlying the link between transformational leadership and PSM. Drawing on self-determination theory, Jensen and Bro (2018, 538) argue that transformational leaders, by articulating an inspiring vision and showing how employees' everyday tasks contribute to important prosocial values, instigate a sense of competence and relatedness. Basic needs satisfaction is considered foundational for autonomous types of motivation such as PSM (Koehler and Rainey 2008), and empirical evidence lends support to the argument that satisfying basic psychological needs is one way through which transformational leadership stimulates PSM (Jensen and Bro 2018). While our aim is not to explore or validate these and other mechanisms, they provide a theoretical account for how transformational leadership can foster PSM. Following the existing literature, we therefore expect a positive effect of transformational leadership on PSM—under the implicit assumption that employees share the values inherent in the organizational vision and that they will therefore be motivated by leadership behaviors that focus on sharing and sustaining attention on them.

Transformational leadership is not, however, the only goal-oriented leadership strategy that may have important implications for PSM. As noted earlier, transactional leadership is based on an exchange between manager and employee, and this might, at a first glance, seem contrary to the PSM concept. Accordingly, few scholars have tested how transactional leadership is related to PSM. Some types of transactional leadership might, however, increase employees' feeling of autonomy, competence, and relatedness, providing employees with more energy to perform desirable public service in their own understanding of what that means (i.e., increase their PSM). While transactional leaders draw on other means of motivating employees

than transformational leaders, satisfying basic psychological needs is a similar mechanism through which such leaders can stimulate PSM. Jacobsen and Andersen (2017) offer support for this notion in a recent study. Pecuniary and/or nonpecuniary rewards used by transactional leaders signal to employees that they are doing well and thus can foster or reinforce perceptions of being competent in one's job. Consistent with this argument, the authors report a positive correlation between transactional leadership and employees' self-perceived competence (Jacobsen and Andersen 2017). Given that satisfaction of the basic need for competence (similar to the needs for feeling related to other people in one's work) can be considered an antecedent of PSM (Vandenabeele 2014), transactional leaders, too, can be expected to influence employees' PSM. Similarly, this argument is working under the implicit assumption that employees share the values underlying organizational goals: why else should they feel competent when their manager shows them that they contribute to the goals?

Parts of the generic management literature (e.g., Hater and Bass 1988) expect transformational and transactional leadership to supplement each other and thus have augmented effects on employee attitudes and behaviors. Transformational leadership adds meaning and legitimacy to transactional leadership, for example, by making contingent rewards meaningful. On the other hand, transactional leadership helps provide clear signals to the employees about their contribution to the vision. Thus, a combination of transformational and transactional leadership can also be expected to have a positive effect on PSM, again, implicitly assuming that the employees share the values embedded in the organizational vision. This leads us to our first set of hypotheses:

**Hypothesis 1a:** Transformational leadership increases public employees' PSM.

**Hypothesis 2a:** Transactional leadership increases public employees' PSM.

**Hypothesis 3a**: The combination of transformational and transactional leadership increases public employees' PSM.

# How Value Congruence Moderates the Effect of Goal-Oriented Leadership on PSM

Are these parsimonious hypotheses sufficient? In an organizational context with clear and consensual goals, the answer might be affirmative. In many public organizations, however, multiple goals are promoted by various legitimate stakeholders, sometimes resulting in highly ambiguous—or even conflicting—objectives (Chun and Rainey 2005). Consequently, we need to theorize about how different levels of value (in)congruence contextualize the effect of goal-oriented leadership on PSM. Given that the majority of existing studies focus on transformational leadership, we first elucidate the theoretical reasons for expecting value congruence to moderate the impact of transformational leadership on PSM. Next, we extend our argument to transactional leadership.

Transformational leadership is expected to foster PSM, as mentioned, because it appeals to the higher-order needs of employees through the articulation of a vision. However, what happens if the vision does not align with employees' core values?

Can it then be inspiring and, thus, motivating? Our claim is that transformational leaders in organizational contexts characterized by low levels of value congruence will find it difficult to stimulate PSM by clarifying and drawing attention to organizational goals, because these values embedded in the organizational vision will not align well with employees' existing set of values. As noted by Paarlberg and Perry, "organization goals are motivating employees to the extent that such strategic goals reflect employees' internal affective, normative, and task-oriented values, a 'zone of existing values" (2007, 396). In this sense, employees can only be expected to respond to management efforts such as articulating, communicating, and sustaining attention to an organizational vision if that vision—and the idealized set of goals that it consists of—can be linked to employees' existing core values. Pandey et al. (2016) connect transformational leadership with the use of normative public values, arguing that transformational leadership can inspire employees to serve larger public purposes. However, processes of changing employees' values are likely to require substantial effort and time, and it is therefore relevant to examine how initial levels of value congruence moderate the effect of transformational leadership on PSM. We argue that employees will hardly feel their motivation reinforced by larger public purposes, unless such purposes are, at least to some extent, in line with their own values.

Caillier argues that high-PSM individuals "will be committed to the mission-related goals of public agencies, for the reason that these goals are congruent with their values" (2014b, 223), but our discussion of PSM as fuel and public values as direction implies that this is by no means a given conclusion. Gailmard (2010), for example, stresses that public service-motivated employees can have entirely different perceptions of what is desirable compared with their manager, and such employees will hardly experience increasing levels of PSM if their manager tries to share and maintain their version of the organizational vision. Hypothesis 1b provides a more nuanced and contextualized version of hypothesis 1a, suggesting that transformational leadership positively affects the level of PSM when value congruence is relatively high. It also opens up the possibility that transformational leadership can have a negative effect on PSM in cases in which value congruence is very low. Empirically, the first part is supported by the finding that transformational leadership and PSM are positively associated only when the level of value conflict is not too high (Krogsgaard, Thomsen, and Andersen 2014). The possible negative impact of transformational leadership on PSM is linked to the fact that transformational leadership also clarifies the vision and, thereby, what is stressed as desirable in the organization. If the transformational leader's efforts to clarify the vision demonstrate—contrary to employees' initial beliefs—that there are conflicting understandings of what it means to do good for society and other people, clarifying the vision may lead to less public service-motivated employees. Following this logic, PSM would decline if leaders in organizations with very low value congruence engaged more actively in transformational leadership behaviors. This is another strong theoretical reason for expecting the effect of transformational leadership on PSM to be strengthened by the level of initial value congruence:

Hypothesis 1b: The level of initial value congruence strengthens the effect of transformational leadership on public employees' PSM.

For transactional leadership, expectations of a direct effect on PSM is based on a mechanism whereby the distribution of rewards triggers a satisfaction of employees' basic needs for feeling competent in their jobs. However, if the manager promotes goals that are not seen as desirable by the employee, we cannot expect satisfaction of the basic need for feeling competent to be automatically triggered. Expectancy theory (Vroom 1964) sees employee motivation as dependent on the desire for a given reward (valence), with the perception that greater effort will lead to higher performance (expectancy) and that higher performance will lead to a reward (instrumentality). Assuming that employees have mixed motives for engaging in public service (Wise 2004), it is logical to see the utility/disutility linked to the perceived desirability of attaining specific goals as a motivating or potentially demotivating factor. Transactional leadership also has the potential to make it very clear to the employees what goals they contribute to. Again, this suggests that it is crucial to consider whether the core goals of the organization that transactional leaders link to pecuniary or nonpecuniary rewards are aligned with the existing zone of values that individual employees hold. Similar to hypothesis 1b, we therefore expect the effect of transactional leadership on PSM to be stronger when initial value congruence is higher:

Hypothesis 2b: The level of initial value congruence strengthens the effect of transactional leadership on public employees' PSM.

Finally, given that initial value congruence is expected to positively moderate the effects of both transformational and transactional leadership on PSM, the same is expected for the effect of a combined use of these types of leadership on PSM:

**Hypothesis 3b:** The level of initial value congruence strengthens the combined effect of transformational leadership and transactional leadership on public employees' PSM.

# Research Design, Data, and Methods

In their review of the PSM literature, Ritz, Brewer, and Neumann (2016) note that an important methodological shortcoming relates to the strong reliance on cross-sectional data and methods that do not permit causal inference. Wright and Grant echo this observation, arguing that "existing studies have been limited by their use of cross-sectional survey designs, which are threatened by two broad classes of rival explanations: reverse causality and omitted variables" (2010, 694). Despite recent efforts to accommodate such concerns using experimental designs (Bellé 2013, 2014; Pedersen 2015), prior studies have been precluded from conducting these experimental tests in true field settings and from assessing the persistence of their findings over time. Capturing the impact of exogenous variation in organizational phenomena on PSM in the medium and longer term is difficult but nevertheless the ambition of our study.

### The Field Experiment

Data come from a large experimental leadership training program of public and private managers in Denmark. For the purpose of the experiment, managers from various sectors and functional areas—primary and upper secondary schools, child-care centers, tax offices, and banks-were invited to participate in a free-of-charge

training program. Child-care centers were further disaggregated into subtypes to take into account differences in management structures (see table A1 in the Supporting Information in the online version of this article). Managers volunteering to participate agreed to be randomized to either one of the three training groups (75 percent chance) or a control group (25 percent). Managers assigned to treatment groups received a one-year training program in transformational leadership, transactional leadership, or a combination of the two. Stratified randomization based on sector and functional area of the manager (and thus his or her organization) was performed to ensure even representation across groups but also to allow for independent analyses of subsamples (such as public organizations only). For ethical reasons, managers in the control group did not receive placebo training. In all other respects, however, managers across all groups were treated similarly, including surveys sent to both managers and their employees before and after the training period.

To limit attrition, all participants were guaranteed an evaluation of their individual leadership, and for managers in the control group, privileged access to future training programs. The overall completion rate was 75 percent, with managers in control group marginally outperforming their peers in the treatment groups. Probit regression analysis (not shown) predicting completion of the experiment shows that neither managerial background characteristics such as gender, experience, and education nor initial levels of managers' job satisfaction or leadership strategies predict whether managers completed the experiment. This indicates that attrition is not overly problematic and alleviates concerns that managers dropped out of the experiment in ways that might bias our results. Here, we restrict our analyses to managers and employees of public organizations, yielding a total of 364 managers and their 3,470 employees. Focusing solely on public organizations and their employees, we ensure that managers' behaviors are relevant for PSM and that we test our expectations on a data set that is as comparable to prior studies as possible.

The training program was structured in modules consisting of 28 hours of classroom instruction and exercises over four full days within a nine-month period (September 2014 through May 2015). The content of program was designed based on best-practice knowledge about leadership training and aimed at developing the managers' capacity in order to move from knowledge acquisition and reflections to actual implementation of leadership behavior (Holten, Bøllingtoft, and Wilms 2015). Classroom instruction included short lectures from a skilled leadership expert coupled with self-reflection exercises, group discussions, and hands-on leadership exercises. Experienced researchers who also teach in executive leadership educational programs delivered all instruction. Instructors were randomized to classes across treatment groups to avoid "teacher effects." Between classroom sessions, participants deliberated in network groups. Groups were composed of managers from various types of organizations to stimulate learning. Participants also handed in written action plans with descriptions of their planned behavior and experiences, on which instructors provided individual feedback. The structure and schedule of the transformational leadership, transactional leadership, and combination treatment were identical, and programs therefore only varied in terms of their content (i.e., focusing on vision,

transactions or both). An outline of the teaching philosophy as well as course plans for each treatment is provided in Appendix A in the Supporting Information, and the full teaching manual can be accessed at http://www.leap-project.dk.

### Survey Data

Three questionnaires were distributed to employees of all participating managers with exactly one year between each survey. The leadership training program took place between the first two surveys. On August 25, 2014, questionnaires were distributed (by email or, for the smaller subset of employees who did not have an email address, in paper versions) to 19,952 employees. On August 25, 2015, questionnaires were again distributed to the 15,132 employees of managers who had completed the experiment (i.e., had not changed jobs or dropped out of the experimental project for other reasons). New employees also received the second survey, while we did not approach employees who had left the relevant organizations. Finally, we followed up with existing employees in August 2016 to assess the long-term effect. The response rates were 45.3 percent, 41.8 percent, and 34.5 percent, respectively, but they varied across the five areas between 32 percent (schools) and 70 percent (tax departments). Analyses of the medium-term effects rely on public employees who answered the questionnaire in 2014 and 2015, while analyses of the long-term effects only require respondents to complete the 2014 (baseline) and 2016 questionnaires. Next, we explain how PSM is measured. The analyses also include service areas since random assignment to treatment was performed within the single service area to ensure even representation. Descriptive statistics for all variables can be seen in table A1 in the Supporting Information.

#### Measurement

The classical operationalization of PSM was proposed by Perry (1996) and includes four dimensions: self-sacrifice, commitment to the public interest, attraction to policy making, and compassion. Kim et al. (2013) proposed an alternative scale for measuring PSM, but this scale includes a dimension called "commitment to public values," and we wish to analyze PSM as the "fuel" behind individuals' orientation to deliver services to do good for others and society and not the employees' understanding of what it means to do good for these other people and society. Wright, Christensen, and Pandey (2013, 214) have tested whether a global measure of PSM is equivalent to the multidimensional scales. While they provide theoretical justification for the use of global measures and evidence to support the equivalence of commonly used global measures of PSM, they still argue that multidimensional measures are critical to our ability to develop a more nuanced understanding of the origins of PSM. It is unclear which scale has the best measurement properties (Ritz, Brewer, and Neumann 2016, 423), so we use a version of the original scale by Perry (1996), which has been tested and context adjusted in several Danish studies (e.g., Andersen, Heinesen, and Pedersen 2014). Additionally, we check the robustness of our findings for the multidimensional PSM measure by reestimating our analyses using the global PSM measure (see table A3 in the Supporting Information).

To test the psychometric properties of our measure, a four-factor model was specified including three items for commitment to the public interest, three items for compassion, three items for self-sacrifice, and two items for attraction to policy making. We conducted a confirmatory factor analysis because this technique enables us to test a priori expectations about the relationships between individual items and latent factors (PSM dimensions). Appendix B in the Supporting Information outlines in greater detail the estimation procedure. All standardized factor loadings for the PSM measure are well above the lower recommended threshold of 0.5 (see table A2 in the Supporting Information). The specified model also performs significantly better than less complex models (e.g., a model in which all items were constrained to load on a single factor, not shown), suggesting that convergent and discriminant validity is achieved. The model fits our data well with a root mean squared error of approximation of 0.04, a standardized root mean square residual of 0.05, and a comparative fit index score of 0.91 (Bentler 1990). On this basis, we generated a composite score for PSM based on additive scales of each of the four dimensions. Each dimension displays internal consistency with Cronbach's alphas, meeting the lower recommended threshold of 0.7. Finally, we rescaled the PSM index to range from 0 to 100, with 100 representing the theoretical maximum score.

Value congruence was measured using employees' perception of a match between their own values and those of the organization. Items were "my values are very similar to the values of the organization," "what this organization stands for is important to me," and "I feel a strong sense of 'belonging' to my organization." Subjective measures of value congruence, and the specific items, have been used in previous studies (e.g., Wright and Pandey 2008), and we therefore rely on this measure to capture the perceived similarity between the person and the environment (the organization). Similar to the PSM items, all questions about value congruence were rated on a fivepoint Likert scale ranging from "completely agree" to "completely disagree." The Cronbach's alpha score for internal consistency was satisfactory, and an additive index of the three items was generated and rescaled to range from 0 to 100.

Measures of value congruence were collected prior to the experiment (in the baseline survey) and after the leadership training programs were concluded. In this article, we use the baseline—or initial—level of value congruence as our moderating variable because this measure (1) depicts the organizational context in which the managers were changing and exercising their leadership behaviors and (2) can be considered fairly exogenous to treatment. At the time of the baseline survey, subjects only knew that they were being randomized to one of four groups (with a 75 percent chance of receiving a year's leadership training), and it is therefore highly unlikely that this fact alone could have affected their employees' perception of value congruence in systematic ways.

# Validation of Experiment

Two questions are important to address before we assess the empirical merits of our theoretical propositions. First, was the experiment successful in creating in expectation equal groups at the outset? Second, was the experiment successful in altering the managers' leadership behaviors?

Table 1 compares mean scores of employees' perceptions of managers' transformational leadership behaviors, transactional leadership behaviors, as well as a series of background variables (i.e., leadership experience, leader gender, and leadership education) by treatment group. Means are tested against the mean of managers in the control group to assess whether the randomization was successful in creating ex ante in expectation similar compositions of managers in the four groups. Average employee perceived transformational leadership is lower for managers in the transformational leadership group compared with managers in the control group, but this is the only difference found across this extensive set of tests. Given that we have multiple treatment groups that all focus on goal-oriented leadership and that our results converge for all these groups, we are not overly concerned that our main findings are merely a product of an initial difference between these two groups.

Table 1 Validation of Experimental Design

	Control: No Training (1)	Transformational Leadership (2)	Transactional Leadership (3)	Combination (4)	Difference (1 vs. 2)	Difference (1 vs. 3)	Difference (1 vs. 4)
Organization level							
Mean employee perceived transformational leadership	72.85	68.86	72.18	71.98	3.99* (1.93)	.679 (1.73)	.873 (1.81)
Mean employee perceived pecuniary reward	37.87	39.55	35.78	38.96	-1.68 (2.15)	2.09 (2.11)	-1.10 (2.10)
Mean employee perceived nonpecuniary reward	66.75	64.99	67.59	66.72	1.76 (2.53)	836 (2.33)	.032 (2.34)
Years in current leadership position	6.55	6.48	5.43	6.30	0.73 (.856)	1.12 (.811)	.251 (.893)
Master in leadership (1 "yes")	.059	.061	.056	.056	002 (.035)	.003 (.034)	.003 (.034)
Manager gender (1 "male")	.520	.488	.615	.517	.032 (.075)	096 (.072)	.003 (.073)
Number of Obs.  Employee level	101	82	91	89			
Public service motivation	63.79	63.73	63.11	64.57	.052 (.549)	.672 (.535)	788 (.532)
Value congruence	72.34	71.29	72.82	74.58	1.04 (.901)	484 (.861)	-2.25** (.862)
Number of Obs.	858	843	865	904			

Notes: Means are reported by treatment status and tested against the mean of the control group. One organization has missing values on organizational level variables tested and is therefore omitted. Two-sided t-tests. \* p < .05; \*\* p < .01.

While randomization was performed at the manager (and thus organization) level, employees exposed to one leadership condition or another should also be of similar composition across the four groups at the outset. Table 1 shows that this is indeed the case for both PSM and value congruence with the one exception that initial value congruence in organizations in which the managers are assigned to the combination treatment exceeds that of organizations, in which the managers are assigned to the control group. This difference, however, is also present in the full sample (i.e., all employee responses to the baseline survey) indicating that the difference cannot be attributed to a treatment-specific attrition from the experiment. Furthermore, this seems relatively unproblematic given that we focus on initial value congruence as a moderating variable.

Evaluating the impact of the leadership training intervention on employees' perception of their managers' behaviors, Jacobsen, Bøllingtoft, and Andersen (2016) showcase a consistent pattern. Managers assigned to the transformational leadership condition are seen—in the eyes of the employees—as exhibiting more transformational leadership. Similarly, managers assigned to the

**Table 2** Leadership and Public Service Motivation: OLS, Unstandardized Regression Coefficients

		erm Effects: PSM <sub>2015</sub>	Long-Term Effects: $DV = PSM_{2016}$		
-	Model 1	Model 2	Model 3	Model 4	
Ref: Control group					
Transformational	947*	-4.61**	-1.41*	-5.94	
leadership	(.390)	(1.55)	(.669)	(3.10)	
Transactional	894*	-4.13*	488	-3.50	
leadership	(.420)	(1.76)	(.704)	(3.22)	
Combination	640	-5.50**	-1.62*	-7.41*	
group	(.420)	(1.78)	(.735)	(3.24)	
Public service	.652***	.635***	.624***	.601***	
motivation <sub>2014</sub>	(.014)	(.015)	(.023)	(.024)	
Value congruence <sub>2014</sub>		004		.002	
2014		(.017)		(.034)	
Transformational		.052*		.065	
leadership × Value		(.021)		(.041)	
congruence <sub>2014</sub>					
Transactional		.044		.041	
leadership × Value		(.024)		(.044)	
congruence <sub>2014</sub>					
Combination		.066**		.078	
group × Value		(.024)		(.042)	
congruence <sub>2014</sub>					
Industry (Ref: High scho	ools)				
Tax offices	-1.88***	-1.47**	-1.57*	-1.05	
	(.484)	(.463)	(.720)	(.662)	
Schools	.007	.012	.315	.267	
	(.428)	(.397)	(.819)	(.781)	
Child care: Area	188	411	-1.73	-2.07*	
managers	(.484)	(.473)	(.895)	(.891)	
Child care: With	903	-1.16	367	576	
area managers	(.658)	(.650)	(1.58)	(1.57)	
Child care: Without	.015	269	-1.47	-1.84*	
area managers	(.681)	(.683)	(.915)	(.908)	
Constant	23.63***	24.96***	27.59***	28.89***	
	(1.00)	(1.46)	(1.67)	(2.91)	
N (employees)	3,470	3,470	1,763	1,763	
N (organizations)	364	364	243	243	
$R^2$	.442	.446	.386	.392	

Notes: \*\*\* p<.001; \*\* p<.01; \* p<.05. OLS regression with standard errors clustered by organization presented in parentheses. Three-wave panel with observations before leadership training program (August 2014) and after (August 2015 and August 2016, respectively).

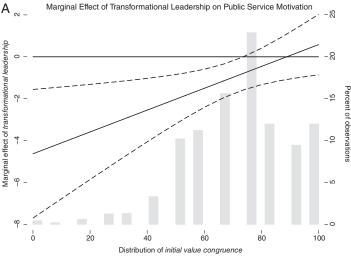
transactional leadership condition were perceived to be displaying more transactional leadership behaviors in comparison with their peers assigned to the control group. This supports the expectation that the intervention was effective in manipulating goal-oriented leadership among participating managers.

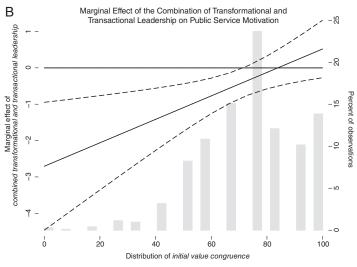
#### Results

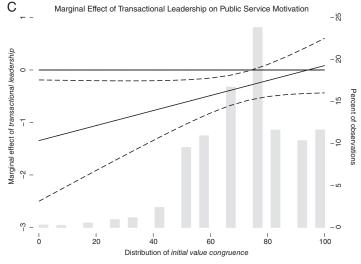
Our presentation of the results is structured in two parts. First, we test the medium-term effects of goal-oriented leadership on PSM (hypotheses 1a, 2a, and 3a) and investigate whether the relationship between leadership and PSM is moderated by the initial level of value congruence (hypotheses 1b, 2b, and 3b). Second, we examine the same hypotheses in the case of the longer-run impacts. As detailed in table 2, the medium-term analyses focus on PSM three months after the training program concluded, while the dependent variable in the other analyses is PSM 15 months after the leadership training program. Regressions are performed as ordinary least squares (OLS) with clustered standard errors by organization. The analyses control for past PSM to account for the strong autoregressive component. Regression coefficients for the leadership variables express the estimated difference after the training program between employees' PSM in organizations in which the managers were assigned to a training group and employees' PSM in organizations in which the managers were assigned to the control group.

Model 1 in table 2 shows the average treatment effect of transformational leadership, transactional leadership, and a combination of the two strategies. The comparison group is employees in organizations in which managers were assigned to the control group. Contrary to the expectation of hypothesis 1a, PSM on average declines among employees in organizations in which the managers were assigned to the transformational leadership group (compared with employees in organizations in which the managers were assigned to the control group). This result also holds for transactional leadership (hypothesis 2a) and for the combined transformational and transactional leadership (hypothesis 3a), although the latter is not statistically significant at the 0.05 level. Therefore, we reject the simple expectation that goal-oriented leadership (on average) increases PSM over time in the investigated types of organizations.

We now turn to the moderation hypotheses to evaluate whether treatment effects of the goal-oriented leadership interventions were heterogeneous across levels of initial value congruence (model 2). Recalling hypotheses 1b, 2b, and 3b, we expect low levels of initial value congruence to be detrimental to the effects of goal-oriented leadership on PSM. The parameter estimates in model 2 support this expectation. The regression coefficients for the interaction terms are all positive and statistically significant in the cases of transformational leadership and the combination of transformational and transactional leadership. The interaction effects are illustrated as marginal effects plots depicted in figure 1. Figures 1a, 1b, and 1c show the estimated marginal effect on PSM of being in the goal-oriented leadership programs as compared with the control group across different values of observed initial value congruence. Similarly, across all figures, we clearly see a pattern in which low levels of initial value congruence (below the mean of approximately 73 on the 0-100 scale) is detrimental to the effects of goal-oriented leadership on PSM. This means that in cases of low initial levels of value congruence, goaloriented leadership can in fact decrease employees' PSM.







Notes: Marginal effect plots are constructed on the basis of parameter estimates for table 2, model 2. Coefficients for product terms are (A) 0.052, p < .05; (B) 0.066, p < .01; (C) 0.044, p < .1. Shaded bars depict the distribution of observed initial (baseline) value congruence. Dashed lines illustrate 95 percent confidence intervals.

Figure 1 Marginal Effect Plots of Goal-Oriented Leadership on Public Service Motivation for Different Values of Initial Value Congruence, Medium-Term Effects

To assess the robustness of our medium-term findings and to take the issue of time seriously, models 3 and 4 in table 2 present the effect of our goal-oriented leadership interventions on PSM measured 15 months after the leadership training program concluded. The long-term results generally conform to the same pattern as evidenced for the medium-term results. Regression coefficients are negative for the three treatment groups, but only the transformational leadership and the combined transformational and transactional groups are statistically significant at the 0.05 level (see table 2, model 3). However, one should be attentive to the rather large drop in the number of respondents because of panel attrition. This yields lower statistical power in the long-run estimations and may inflate standard errors. In terms of moderation, we also see a pattern similar to that of the medium-run effects with positive regression coefficient estimates. However, given the smaller sample size and an additional full year between measurements, it is not surprising that these results do not reach statistical significance 15 months after the training concluded. The findings thus bolster our confidence in the argument that initial value incongruence can be detrimental to the motivational effects of goal-oriented leadership. However, we cannot be confident how long this effect persists. This makes it relevant to discuss how public managers can create a shared understanding of purpose among the organization's members to—at least in medium term—buffer against potential detrimental effects of goal-oriented leadership on PSM.

#### Discussion

Employees in public organizations are often said to be infused with values and driven by their meaningful work (Paarlberg and Perry 2007; Perry and Wise 1990), but can public managers cultivate value-based motivation such as PSM? The immediate, and to some perhaps unsettling, reply to this question is no. When public employees are exposed to a manager who promotes organizational goals more actively, employees who disagree the most with these goals become less motivated. In contrast, we only find weak evidence of increased motivation among value-congruent employees.

This study set out to contribute to three central shortcomings in the literature on leadership and PSM. The first contribution is to move past the simplistic assumption that leadership—and particularly transformational leadership—is always positive in organizations. As we have discussed and shown here, leadership can have negative implications for employee motivation depending on the level of agreement between employee and organizational values. Thus, contrary to the common notion in the literature, increased use of leadership might actually decrease PSM for employees whose values are highly incongruent with those of their organization. This finding also addresses a fundamental problem in the leadership literature, that is, the tendency to confound leadership with its effects (van Knippenberg and Sitkin 2013). Our article shows how important it is to avoid this. Given that the effect of leadership is found to depend on value congruence, assuming that goal-oriented leadership behavior automatically motivates employees is oversimplified and a critical problem. Our findings thus fall in line with calls for increased focus on the contexts under which leadership matters (O'Toole and Meier 2014) and echo cautions that "it would be a mistake to overstate the possibilities of this mode of managing or to assume it can work under any circumstances" (Moynihan, Pandey, and Wright 2014, 100).

This leads us to the second contribution, namely, to expand the narrow focus on transformational leadership in many studies. Our results highlight the relevance of transformational leadership, transactional leadership, and the combination of these two strategies and show that the effects of all these approaches can depend on the congruence between employees' values and the values of their organization. If these results turn out to be robust, they support the argument that no one type of leadership is always useful, but that managers have an array of available tools that might be more or less useful depending on the context. Along the same lines, it is important to acknowledge that leadership entails a wider range of behaviors than the goal-oriented ones studied here. Therefore, we cannot conclude that other types of leadership—such as relations-oriented leadership—would yield the same effects on employee motivation.

The final contribution is to apply panel data in an experimental framework. Earlier studies have predominantly relied on crosssectional data, and the problem of doing so is clearly accentuated by our study. The field experimental findings shown here fail to replicate the simple associations from existing cross-sectional studies suggesting that more sophisticated research designs are needed to assess the effects of goal-oriented leadership on PSM. As shown here, the effect of leadership might differ radically from correlations at one point in time. Therefore, we highlight the need to continue to use research designs that permit causal inference. The findings in Bellé's (2014) experiment suggest that leadership can have shortterm positive average effects on PSM, but the question is whether these short-term increases represent positive changes in a relatively simple case of valence. It is difficult to disagree with the need for assembling more surgical kits within a set time frame as in the Bellé study, whereas employees in a real-world work setting face much more complex sets of goals. In other words, the potential for value incongruence is much higher in actual work settings compared with the one studied by Bellé, and transformational leadership is therefore also more likely to have heterogeneous effects on employee motivation than formerly portrayed.

Furthermore, it is unclear whether the effects, for example in Belle's study, are effects on the individuals' deeper orientation (their lasting motivation) or whether it is a question of their state of mind in the specific situation. Especially in relation to transformational leadership, our study also highlights the need to look at the content of the visions linked to the values of the employees. Transformational leaders might indeed do more to align the values of the employees with those of the organization (metaphorically speaking, the direction of the car) and less to increase their motivation (provide more fuel). As shown here, if the transformational leader applies a vision that is not seen as desirable by the employee, transformational leadership actually decreases PSM. We therefore urge future studies to take the question of value fit into account when studying effects of transformational leadership.

In relation to this, our study can hopefully also contribute to the understanding of PSM as a dependent variable and PSM as a dynamic rather than completely stable construct. This study addresses the call for more studies on PSM over time (see Wright and Grant 2010 and the critique presented by Bozeman and Su 2015) and shows that PSM actually is susceptible to change although we should not expect individuals' PSM to change

fundamentally. PSM seems to be somewhat dynamic but also more stable in ordinary situations than in the more extreme cases that recent research has looked at (see, e.g., Kjeldsen and Jacobsen 2012 for a study on entry on the labor market). In other words, it seems that PSM can be changed, especially by dramatic events in the individuals' work life, but that there are also elements of stability in PSM. This is highly relevant for the pace with which leadership behavior can be expected to change employees' PSM. Our results suggest that effects can be identified already within one year and that they are also stable over the following year.

Our results show that the effects of increased leadership can be negative, but it is important to state that this is only true for PSM and only if values are incongruent. Although the results are hardly surprising for managers used to maneuver contexts of conflicting values, they are highly relevant for practitioners who wish to set a clear direction for their organization. The managers in our study set a clearer direction for their organization, and this resulted in less fuel (PSM) among some employees. On the one hand, this can be said to illustrate the challenges of leadership in the public sector. It is thus important to note that leadership not only contains the potential for inspiration and motivation but also for causing disillusion and demotivation. That said, we only observe decreasing motivation among employees whose values are incongruent with those of the organization, and these employees may have been driving in a wrong direction in the first place. If so, it could in fact be a problem that they were highly motivated. In the case, that employees are oriented toward other values than those prioritized by the organization, the manager faces a critical task of making them aware of organizational priorities and ensure that they "pull" in the right direction. A related study (Jensen 2018) has shown that transformational leadership, over time, indeed can reduce misfits (i.e., value incongruence) when employees clearly see the impact of their work on lives of other people and society at large. Thus, organizational goal attainment most likely depends on both employee PSM and value congruence (and a number of other variables), and reduced motivation therefore does not necessarily lead to worsened organizational performance.

Still, our findings are relevant for the discussion about dark sides of PSM and leadership. Although PSM and leadership are predominantly found to play positive roles in organizations, they are both increasingly associated with negative effects. Recent studies have shown that PSM can be associated with stress perceptions (Giaque, Anderfuhren-Biget, and Varone 2012), lower well-being (van Loon, Vandenabeele, and Leisink 2014), and presenteeism, which can lead to sickness absence (Jensen, Andersen, and Holten 2017). In this article, we show that the value-based foundations of PSM can also pose a challenge to the potential for maintaining PSM over time, when value incongruence becomes apparent. The generic leadership literature (e.g., Conger 1990) has already pointed to potential dark sides of leadership such as personality-related challenges with leaders' tendencies toward narcissism, ego inflation, and self-overrating. We show that goal-oriented leadership in public organizations can also entail institutionally grounded dark sides. Understandings of what is valuable in public organizations is often a contested matter (Andersen, Boesen, and Pedersen 2016), and professional employees often prioritize professional norms, which can conflict with the values prioritized by public organizations and their management.

Public managers are often confronted with challenges of balancing conflicting values at the frontline, and their actions have impact on employees.

Examination of leadership, values, and PSM is far from finished with this article. First, a potential critique is that our subjects might be too constrained to exercise effective leadership. This does not, however, seem to be the case for the goal-oriented leadership strategies investigated here. Based on employees' assessments of their managers (not shown here), most managers are indeed portrayed as quite active. Moreover, the majority of managers stated during the training period that they found their new leadership skills useful and were actively adapting their leadership behaviors based on what they learned. Nonetheless, it would be interesting for future studies to shed more light on the relative importance of leadership at different levels and the importance of aligning leadership strategies among managers in organizations with multiple tiers. Still, we hope that future research will also focus on other types of managers.

Second, a number of issues pertaining to our experiment are worth considering. Attrition from the experiment- if systematically related to treatment or factors affecting both leadership behaviors and PSM—could render our estimates biased. Contamination across experimental conditions could mean that managers assigned to control group also were stimulated to reflect on or adjust their leadership behaviors (e.g., if they interacted and discussed the content of the leadership training with peers assigned to the goaloriented leadership conditions). These and other issues constitute valid concerns and deserve serious considerations when interpreting the results of this study. While we cannot rule out these concerns completely, several observations bolster our confidence in the reported results. First, attrition analyses indicate that neither background characteristics of the managers nor initial job satisfaction or goaloriented leadership behaviors predict noncompletion. Managers opting out of the experiment predominantly reported one of two reasons for their decision: illness or change of job. On this basis, we have little reason to believe that the comparability of groups created by the random assignment and demonstrated in table 1 is violated due to attrition. Second, potential contamination would yield a more conservative test of our theoretical propositions. Given the fact that we find systematic differences between the goal-oriented leadership conditions and the control group suggest that contamination is not overly problematic. If anything, our study results might underestimate the effect of the leadership conditions, accentuating our recommendation to proactively and carefully assess existing levels of value (in)congruence before implementing goal-leadership strategies. These considerations suggest that it is highly relevant to replicate the study, thus also increasing the generalizability of the findings.

### Conclusion

Do our findings suggest that PSM can be affected by leadership behavior? The answer is that it depends on the initial value congruence. In the investigated context of relatively low (but varying) value congruence, increased goal-oriented leadership on average reduces PSM over time. However, this effect is driven by the negative impact on PSM for employees whose values are incongruent with the organization's values. Transformational leadership, transactional leadership, and the combination of these leadership strategies affect PSM negatively if there is value

incongruence. For employees who initially share the organizational values, both types of goal-oriented leadership seem to increase PSM a little, which is consistent with studies relying on an implicit assumption about value congruence.

Our results imply that managers have the opportunity to affect the motivation of their employees but that they should be aware that the effect is likely to be negative among employees who disagree with the direction set by the manager. Thus, setting a clear direction and promoting organizational goals can come at the cost of demotivating some employees. It seems that increased goal-oriented leadership makes it clear to the employees whether they agree or disagree with their manager's presentation of the organizational values. This either motivates them (if they agree) or demotivates them (in case of value incongruence). If PSM is very important in a given organization, we suggest that managers pay close attention to employees' values as a first step in the effort to develop, share, and sustain a clear and compelling vision and/or to use verbal rewards linked to this vision. Other studies (Jensen 2018) suggest that transformational leadership has the potential to increase value congruence over time, so this mechanism should also be considered in managers' decisions about this leadership strategy.

Although the article contributes to our knowledge about the effect of leadership on PSM, research on the association between leadership behavior and employee PSM is far from complete. We suggest that future research continues the effort to apply panel data, preferably with experimental variation in leadership and in the length of time between change in leadership and measurement of PSM. It is also important that the statistical power is relatively high in future studies so that we can obtain more complete answers concerning leadership and motivation. Given that we have 3,470 employees working under 364 managers and find a conditional relationship between goal-oriented leadership and PSM that can be negative, one important implication is that we should stop believing that leadership "automatically" increases motivation under all circumstances. However, this should not refrain us from finding ways in which public managers can motivate their employees. This line of research has major implications for practitioners and is at the core of public management as an academic discipline and scholars will therefore do well to expand our knowledge on the complex relationships between leadership and work motivation.

#### **Notes**

- 1. Analyses were also performed using the post-leadership training program scores on PSM only. While this procedure yields higher sample sizes (because they do not require that individual employees completed the baseline survey), empirical results are largely similar to the findings reported in table 2. Detailed results of the robustness tests can be obtained from the corresponding author.
- For the global PSM measure, we find similar patterns with positive interaction terms for transformational leadership, transactional leadership, and the combination of the two strategies. However, only the regression coefficient estimate for transactional leadership in the medium term is statistically significant at conventional 0.05 level.

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#### **Supporting Information**

A supplementary appendix may be found in the online version of this article at http://onlinelibrary.wiley.com/doi/10.1111/puar.13008/full.