

What Factors Shape Leaders' Attitudes toward Leadership Training Programs? Evidence from a Large-Scale Experiment

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Abstract:

An extant literature has demonstrated how leadership expertise is vital for achieving organizational performance. Consequently, building leadership expertise remains a persistent concern for public and private organizations where considerable investments are made in leadership training. However, the organizational return of investment in management training heavily depends on the leaders' willingness to actually undertake training programs. Unfortunately, we lack theoretical knowledge and empirical evidence of what factors shape leaders' attitudes toward leadership training programs. Therefore, this study examines how different situational and individual factors influence leaders' attitudes toward a leadership training program. Based on a survey experiment among more than 5000 public and private Danish leaders, we examine how different factors affect leaders' attitudes toward leadership training programs in psychosocial work environment. The results show that leaders are more willing to join leadership training and perceive the programs more positively, if the organization experience problems with the psychosocial work environment. In addition, the individual costs in

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time and resources and contextual factors related to the program (length of program and convenience of attending) heavily influence the leaders' attitudes toward the training programs.

1. Introduction

Leadership is vital for organizational performance in both public and private organizations. In addition, leadership has been identified as a critical factor for retention of employees and recruitment challenges, as leadership heavily influence employee well-being (Inceoglu et al., 2018; Montano et al., 2017; Nielsen & Taris, 2019). Many organizations invest intensively in leadership training with the aim of improving leaders' capabilities to increase organizational performance and the psychosocial work environment among employees. From a growing literature on the effects of leadership training programs, we know that such programs can be effective means to provide leaders with the tools to address these demands and hence improve organizational outcomes (e.g., Thaler et al., 2017; Kim & Lee, 2023; Jacobsen et al 2022). Moreover, managers may enjoy individual gains from education such as self-development, job satisfaction and career benefits (Cheng, Caliskan & Zhu, 2023; Hannah & Avolio, 2010; Boyce, Zaccaro & Wisecarver 2010).

However, although there are many positives related to leadership training, leaders often elect not to pursue training programs. One explanation for this may be that leaders face a tradeoff between the situational benefits of leadership training on the one hand, and the individual cost in terms of time, resources and energy that such a training program may require on the other hand. This means that although we know that leadership training may be an effective means for improving organizational performance and employee well-being, we lack knowledge about how these different situational and individual factors matter for leaders' attitudes toward leadership training programs. This is unfortunate, as such knowledge is critical for the success of public and private organizations' efforts to motivate their leaders to undertake leadership training.

In this study, we therefore investigate how different organizational and individual factors affect leaders' attitudes toward leadership training programs. These attitudes concern the leaders' willingness to join the program, perception of the program as being attractive for the leaders and whether the program is perceived as being beneficial for the leaders' employees. Based on the literature on leadership training, we propose hypotheses suggesting that leaders' attitudes toward leadership training programs depend on whether there is an organizational need that the training potentially address. In addition, we hypothesize that leaders are more positive toward undertaking leadership training programs if the leaders do not face individual barriers by having to invest individual resources (time and resources) to undertake a training program.

To examine our hypotheses, we conduct a large-scale pre-registered survey experiment. In this experiment, we provide more than 5000 public and private Danish leaders with different vignettes describing a situation at their work and an opportunity to join a leadership program in psychosocial work environment. Importantly, in these vignettes, we manipulate (1) whether they face a situational problem with the psychosocial work environment, and (2) the different individual costs that leaders may be required to invest in the program. We formulate testable hypotheses for each of these different factors. Following the vignettes, we measure the leaders' willingness to attend a training program and their perception of the program as attractive and a positive for their employees.

Our results show that both a situational problem and the individual costs of undertaking leadership training influence leaders' attitudes toward leadership training programs by affecting their willingness to join such programs and their perceptions of such programs as being attractive and beneficial for their employees. When they experience a situational problem related to the psychosocial work environment, the leaders are more willing to participate and perceive the programs more positively. In addition, we find that leaders are significantly less willing to undertake leadership training when the programs require individual investments by being lengthy and inconvenient (by

requiring physical attendance). However, the most important factors for leaders' attitudes toward leadership training programs are whether their organization *finance* the program and provide *time* for the manager to participate in the program within normal working hours.

The study makes two important contributions to the literature on leadership training. First, our theoretical framework represents a novel effort to bridge the gap between the mechanisms driving leaders' willingness to undertake leadership training defibrinating between the tradeoff between situational problems and individual costs. While previous studies tend to apply either an individual perspective (e.g. Gagné & Deci, 2005) or an organizational level perspective (Meyer et al., 2007; Parish et al., 2008), we contend that the decision of whether to attend leadership programs is a result of several factors that may be related to the situational problems and individual costs of taking leadership training. Second, while an extensive and growing body of public management literature provides valuable insights into how motivation for learning have consequences of leadership training (e.g., Hiller, 2023; Kim & Lee, 2023; Thaler et al., 2010; Chen et al., 2021), we know little about what actually affects leaders' attitudes toward leadership training programs and in particular what makes them willing to undertake a program. This is, however, important, as the societal investments in implementing and providing leadership training ultimately relies on the leaders' willingness to accept such education (Maurer & Lippstreu, 2010).

The paper is organized as follows. In section 2 we describe the overall theoretical framework and the pre-registered hypotheses. We are not fully sure if we apply the right literature and we welcome any suggestions. In section 3, we present the research design and methods applied. In section 4, we show the results of the survey experiment.

2. Theory

Previous research on leader development emphasize the need to consider the individual differences in leaders' willingness for joining training programs (DeRue & Meyers, 2014; Hannah & Avolio, 2010). While leadership can be learned (Avolio et al., 2013), it is a complex skill that requires significant effort (DeRue & Ashford, 2010). Identifying leaders who are willing to invest seriously in leadership training is therefore crucial. Leaders' attitudes towards leadership training is important for whether leaders ultimately decide to undertake leadership training programs, but also for whether leadership training programs are effective, as more motivated leaders are more likely to gain the full benefits from leadership training (Colquitt et al., 2000; Dopson et al. 2019; Noe et al., 1997).

The training literature has generally recognized that leaders' willingness to participate in training program can be influenced by both individual and situational characteristics (e.g., Boyce et al 2010; Mathieu & Martineau, 1997; Noe & Wilk, 1993; Tannenbaum & Yukl, 1992). Former contributions, however, tend to study leaders' willingness for leadership training focusing on the leaders' individual gains such as cognitive interest in specific subjects, communication improvement, professional advancement, self-development, and willingness to learn (Hannah & Avolio, 2010; Boyce; Zaccaro & Wisecarver 2010; Wallance et al. 2021). Few, however, take the opposite perspective and examine the individual costs that leadership training may require. Additionally, previous studies often emphasize situational factors like organizational support, noting that leaders are more inclined to invest in leadership training when leadership training is valued and supported by their organization (Giauque et al., 2012; Maurer & Lippstreu, 2010). However, less attention has been given to situational factors such as whether leaders are facing an immediate or acute leadership challenge. In the following, we argue that a more critical perspective on the individual costs and situational demands associated with leadership training may be crucial in shaping leaders' attitudes toward participating in such programs. **(Needs to be further developed)**

Situational challenges create an urgency that can push leaders toward development opportunities. When leaders face specific organizational problems—such as lagging team performance, ineffective collaboration, or declining employee morale—leadership training becomes a practical avenue for acquiring the skills needed to address these issues (Maurer & Lippstreu, 2010; Hannah & Avolio, 2010). The relevance of situational problems can increase leaders' motivation to engage in training, as it promises solutions that can alleviate or resolve current challenges. In fact, evidence suggests that leaders' motivation to develop is stronger when they perceive that training can directly improve their effectiveness in handling current organizational needs (Giauque et al., 2012; Maurer & Lippstreu, 2010). Leaders' attitudes towards leadership training may thus become more positive, viewing it as a valuable tool for achieving immediate, high-impact results, when faced with concrete situational challenges. Without these situational challenges, leaders may deprioritize training in favor of other operational tasks (Birdi et al., 1997). Thus, we expect that:

H1: Leaders have more positive attitudes towards leadership training in mental work environment when their employees' report problems related to the mental work environment

Leaders are, however, often highly conscious of the *individual costs* associated with undertaking additional training, including the time, effort, and potential diversion from immediate responsibilities. Thus, leadership training can require a significant commitment of personal time, energy, and cognitive resources, which are often scarce for individuals in high-level positions. Leaders are more likely to be motivated to participate in training when the perceived individual cost is manageable or offset by anticipated benefits (Ford et al., 2014). For instance, DeRue and Ashford (2010) emphasize that leadership development requires substantial effort, suggesting that leaders who perceive high costs are likely to be less motivated to engage in these programs. Additionally, Noe et

al. (1997) found that leaders with high workload demands may deprioritize training, opting instead to focus on immediate operational tasks that they believe will yield more immediate results.

Work-life balance is a critical factor influencing the career paths of many leaders, as noted by Selden and Moynihan (2000). Leadership training, while essential for professional development, can also add to the pressures leaders face in managing their personal and professional lives. This is particularly true when such training requires a significant time commitment, necessitating leaders to navigate the challenges of balancing their existing responsibilities with the demands of training.

The duration of training programs can significantly impact leaders' perceptions of their ability to maintain a healthy work-life balance. Extended training sessions may lead to increased stress and time away from essential job functions, prompting leaders to view training as an additional burden rather than an opportunity for learning. Furthermore, the location of the training can exacerbate these concerns; programs held on location as opposed to online sessions can require travel time, further encroaching on leaders' already limited schedules. Thus, we expect.

H2: *The length of the leadership training in mental work environment affect leaders' attitudes towards education concerning mental work environment (non-directional hypothesis)*

H3: *The location of leadership training in mental work environment affect leaders' attitudes towards the education (non-directional hypothesis)*

Moreover, leaders are likely to exhibit a more positive attitude toward leadership training if their demanding schedules and the additional time they dedicate to training are acknowledged and recognized by their organization (Cascio, 2021). Previous research indicates that employees are more inclined to invest in their own development when they feel valued and supported by their organization (Giauque et al., 2012; Maurer & Lippstreu, 2010). Similarly, the presence of

organizational support can significantly enhance leaders' willingness to engage in leadership training. Such support can manifest in various forms, including the allocation of resources, and the implementation of supportive policies (Gagné et al., 2020). For instance, when organizations are willing to finance leadership training programs and provide leaders with time off to attend these sessions, it not only alleviates the perceived burden of participation but also reinforces the message that the organization prioritizes their professional development. Thus we expect:

H4: *Leaders have more positive attitudes towards leadership training in mental work environment when their organization offers to cover the expenses of the training program (directional hypothesis)*

H5: *Leaders have more positive attitudes towards leadership training in mental work environment when the leaders are granted time off from work to undertake the training program (directional hypothesis)*

3. Research Design

To examine our hypotheses, we conducted a vignette survey experiment on Danish leaders across the private and the public sector. Here, we presented the leaders with a vignette describing a situation at work and a specific leadership training program that they could potentially join. Throughout this description, we manipulated the different factors that we were interested in examining. Specifically, we manipulated the situational need (the challenge that the organization faced), individual costs related to joining a leadership training program (length and location of the program) and organizational support related to the leadership training program (cover of program costs and time

off). The main advantage of conducting such as vignette experiment is that we can estimate the causal effect of each of the factor that we are investigating and compare their individual effect sizes with each other to examine their relative influence.

Survey experiment

To examine the effect of each of these factors, we developed a survey experiment that manipulated the different independent variables of interest. Table 1 below displays this experiment. Information in brackets were randomly manipulated in each vignette. The leaders only received the vignette once.

Table 1: Survey experiment

Variable	Vignette
Situational need	Imagine a situation at your workplace where the latest mental well-being survey/WRA (has shown that there is [no particular problems of well-being; a high degree of well-being; a significant low level of job satisfaction; a high degree of stress; a high conflict-level] among your employees.
Individual costs: Length of program	You will have the opportunity to take management training/course in mental working environment, which is set to last [1 day; 3 days; 5 days; 10 days].
Organizational support: Economy	Your organization/company provides [no funding; partial funding; full funding] for the course.
Organizational support: Time off	You get [time off; partly time off; not time off] from your work to complete the education/course.
Individual cost: Location	The training [can be taken online; requires physical attendance].

As the table shows, we first manipulated the situational need for the leader to undertake a leadership training program in psychosocial work environment. We did this, by manipulating different issues that the latest WRA (Workplace Risk Assessment) emphasized of concrete issues in the work place. Here, the WRA could either show “no particular problems of well-being”, “a high degree of well-being” or alternatively issues in the form of “a significant low level of job satisfaction”, “a high degree of stress” or “a high conflict-level”. We manipulated two factors related to the individual costs of the leadership training program. These concerned the length of the training program; 1, 3, 5 or 10 days and the location of the program (online program or a program requiring physical attendance). Finally, two factors related to organizational support (funding and time off) were manipulated by either informing the leaders that their organization would provide “no funding”, “partial funding” or “full funding” of the program, while the individual cost related to time were manipulated by informing the leaders that their organization would give them “time off”, “partly time off” or “no time off” from work to undertake the program

Outcome measures:

Following our experiment, we measure the leaders’ attitudes toward the training program by asking them three questions. These were 1) whether they would be willing to accept the leadership training program, 2) whether they believed the leadership training program as being attractive and 3) whether they believed that the leadership training program would make a positive difference for their employees. The respondents could reply on a scale from 0-10 with 0 being “no, not at all” and 10 being “yes definitely”. As stated in the preregistration, we are interested in each of the three outcome variables, however, since the variables were highly correlated and had a Cronbach’s Alpha of .84, for

clarity in the article, we display the results using an index and report the individual effects for each of the three questions in the appendix.

Data collection

A survey company (DST-Survey) collected the data. The survey questionnaire was sent directly to the respondents' digital mail (e-boks). The survey was sent out to 20.000 Danish managers across the private and the public sector. The managers were randomly selected by the survey company. We have attached the full survey in the preregistration. In all, 5.527 leaders completed the experiment, which corresponds to a 27.6 % response rate. Descriptive information on the leaders are displayed below in Table 2.

Table 2: Descriptive statistics

Work in progress...

4. Results

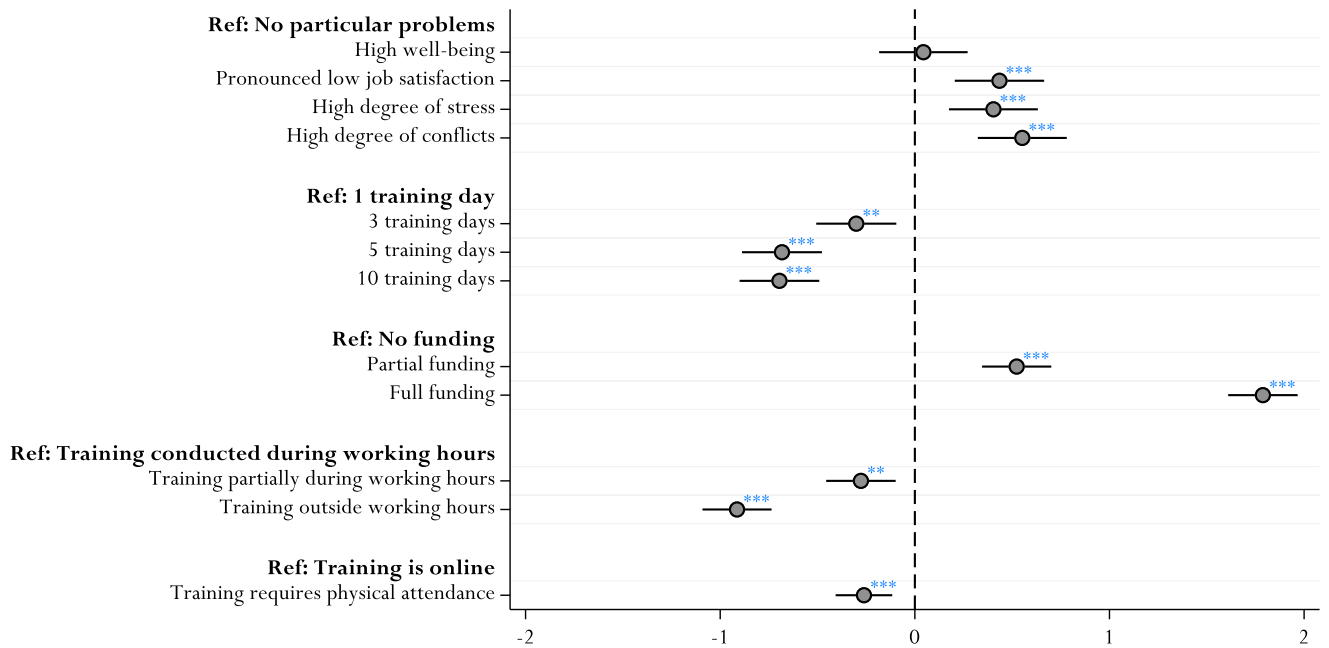
We estimate the effects using OLS. As stated in the preregistration, we use an alpha-level of 0.05 to determine statistical significance. Figure 1 displays the main findings from an index consisting of all three outcome measures. In the appendix, we display the effect the different factors on all three outcome measures separately. With the exception of the outcome measure concerning the leaders' perception of the leadership training program being beneficial to their employees, the effects identified generally displays similar directional patterns across the different factors.

First, looking the situational need, we can observe from Figure 1 that the leaders are more positive toward the leadership training program, when the organizational has an actual need that the program can address. This supports our H1.

Second, concerning the individual cost related to the training program, we find support for H2 and H3, as the length of the leadership training program and the location both affect the leaders' attitudes toward the program. These hypotheses were non-directional. Figure 1, however, quite clearly shows that leaders' attitudes toward leadership training programs becomes significantly more negative, the longer the training programs are and the less convenient they are (physical attendance versus online attendance). However, this effect does not apply to the outcome measure concerning leaders' attitude toward whether the training program would make a positive difference for their employees (see Figure A3 in the appendix). On that particular outcome measure, we find no effect of contextual factors related to the program.

Third, regarding the effect of organizational support, we find substantial and significant effects of having to invest personal economic resources (by not getting funding for the program) and time outside working hours. In particular, the leaders become much more positive toward leadership training programs when they are fully funded by their organization. Overall, there is strong support for H3 and H4.

Figure 1: Effect on the index of all three dependent variables



Explorative analysis?

We have a lot of extra information on the leaders that we could use for making explorative analyses.

5. Discussion and conclusion:

To be continued...

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6. Appendix

Figure A1: Leaders' inclination to accept the management training program

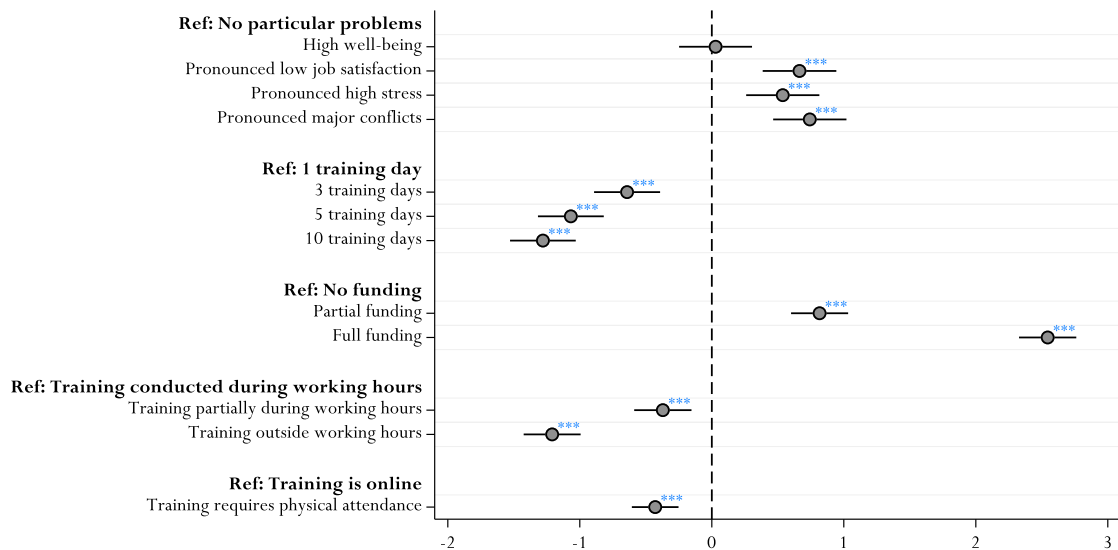


Figure A2: Leaders' attitudes on the attractiveness of the management training program

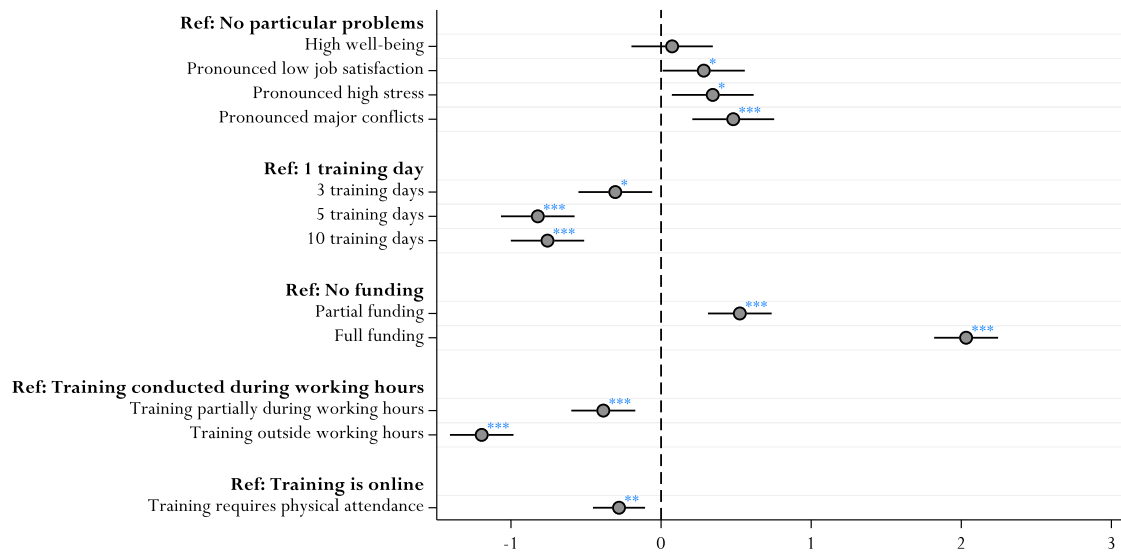


Figure A3: Leaders' attitude toward whether the management training program would make a positive difference for their employees

