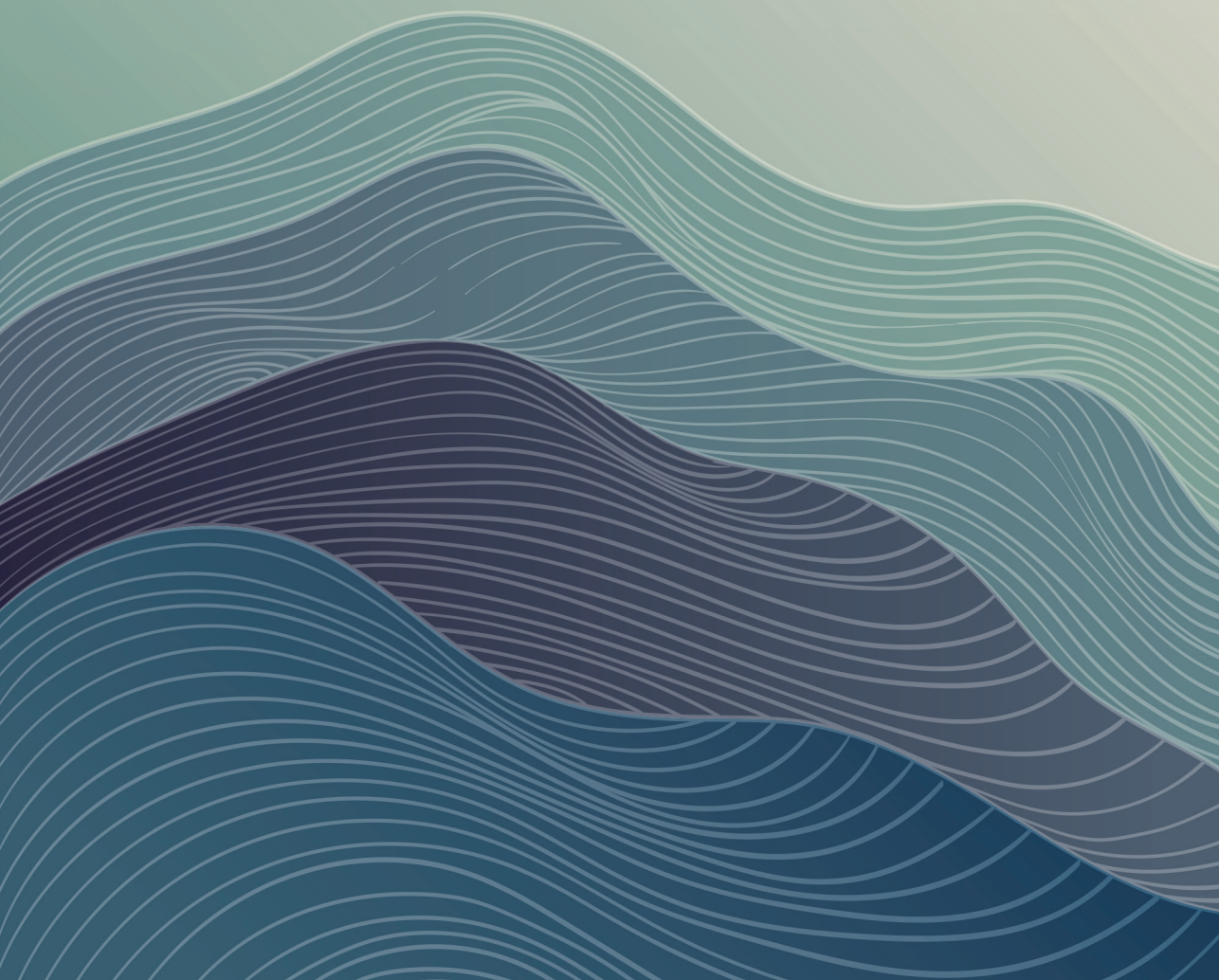
Political Socialization in the Workplace

Establishing the Theoretical and Empirical Connection Between Experiences with Workplace Voice and Political Behavior and Trust

Bram Geurkink



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Contents

1

Synthesis

1.1. Introduction

Political participation, that is, activities by citizens directed at influencing the selection of government officials and the actions they take (e.g., voting, protesting, writing letters), is deemed essential for a vibrant and strong democracy. It underlies democracy's legitimacy and is its guiding force (Dalton, 2008); if citizens avoid politics, contemporary democracies will lose their legitimacy and guiding principle. Political participation is especially important for the representation, responsiveness, accountability and legitimacy of the political system (Bovens and Wille, 2017).

Rates of political participation are relatively low in some countries, and patterns of political participation are changing (e.g., traditional forms of political participation decline and new forms of political participation emerge) in most liberal democratic societies (Faucher, 2015; Dalton, 2008). For example, in some countries, voting rates have fallen, and political party membership has declined. This offers challenges to the contemporary organization of liberal democracies, even if the traditional forms of political participation are replaced by new forms of political participation (e.g., online participation) (Stolle and Hooghe, 2011).

An additional threat to representative democracies, in which *all* voices are supposed to be heard, is the (rising) inequality in political participation, most prominently along educational lines (Bovens and Wille, 2010; Ehs and Zandonella, 2021). This results in the political underrepresentation of certain groups in society (and their preferences), inequalities in terms of who holds political actors accountable, and, consequently, undermines democratic legitimacy (Bovens and Wille, 2010). For example, Schakel (2021) shows that unequal levels of participation among different societal groups result in unequal policy responsiveness and policy outcomes are more in line with higher educated individuals' preferences (see also Epp and Borghetto, 2021). To prevent some groups from having disproportionate influence over political outcomes, more equal political participation is therefore required (Dahl, 1998). These political inequalities are not only limited to political participation but also to a range of political attitudes, e.g., political efficacy and political trust (e.g., Bovens and Wille, 2017), which are often causally linked to political participation (Hooghe and Marien, 2013; Cohen et al., 2001).

This dissertation investigates these inequalities from a political socialization perspective and aims to explain inequalities in political participation and attitudes by studying how people are socialized in the workplace. Studying the workplace as a domain of political socialization is not new. However, probably due to mixed results in previous studies, workplace socialization has largely been overlooked when attempting to understand political inequities. I argue that, nevertheless, there are theoretical mechanisms that link workplace socialization

and political participation and trust and offer potential causes of the mixed findings in previous research. The question that I pose in the dissertation is as follows: How and to what extent does workplace political socialization explain inequalities in political participation and political trust between educational groups in society?

1.2. Political Socialization, Political Participation and Political Attitudes

The question of why individuals participate politically and how political attitudes are shaped is considered by a large body of research using political socialization theory. Political socialization is the process that affects individuals' political attitudes, beliefs and behavior (Greenberg, 2017). It includes the acquisition of skills and knowledge directly but also entails psychological changes that affect political skills and attitudes more indirectly (Dekker and Meyenberg, 1999). Many studies addressing political socialization build upon the impressionable years hypothesis[1], which states that only experiences early in life (often between the ages of 7 and 25) matter for political engagement and attitudes because these attitudes and engagement intentions are still fluid and malleable (Prior, 2010, Janmaat and Hoskins, 2022). Once these political attitudes and engagement are crystallized and stabilized, experiences and life changes later in life are unlikely to have much effect (Janmaat and Hoskins, 2022). Inequalities in political participation, according to this reasoning, result from inequalities in political socialization early in life. Individuals who are raised in an environment that fosters political participation are more likely to participate later in life compared to individuals who were raised in an environment in which the impressionable years were characterized by fewer participation-inducing experiences.

However, empirical research shows that attitudes and participation intentions also change during adulthood (Egan and Mullin, 2012; Schoon and Cheng, 2011; Krosnick and Alwin, 1989; Dudley and Gitelson, 2002). When explaining variations in attitudes and participation during adulthood, studies often refer to important societal and political influences, such as political communication (Van Zuydam and Metze, 2018), political scandals (Von Sikorsk et al., 2020), and (perceived) government performance (Miller and Listhaug, 1999; Krawczyk and Sweet-Cushman, 2017). However, we know that personal

1 Some studies address slightly different hypotheses, which are in some way or another part of, or a specification of, the impressionable years hypothesis. Such as the family socialization thesis (Janmaat and Hoskins, 2021) or the increasing persistence hypothesis (Glenn, 1980)

experiences and interactions in everyday life also affect individuals' political attitudes and behavior, including those in the workplace (Pateman, 1970; Verba et al., 1995). In this dissertation, I will use the insights of the literature on political socialization in the workplace to understand inequalities in political participation and political trust.

1.3. Political Socialization in the Workplace

Before I address the inequalities in political participation and political trust, I address important theoretical and empirical issues of the literature on political socialization in the workplace. Addressing these issues helps to understand the mixed findings in the previous literature on political socialization in the workplace. I will briefly discuss these mixed findings and present the two issues that might be responsible for these contradictory results in the next paragraph. The idea that the workplace has important consequences for individuals' political behavior can be traced back to Tocqueville and Mill, who argue that workplace experiences influence social and political attitudes. The more extensive theorization and empirical assessments of the effect of workplace experiences on political behavior and attitudes flourished in the 1960s and 1970s with, among others, the work of Almond and Verba (1963), Pateman (1970), and Thompson (1970). However, political socialization at work has received less attention in recent decades (e.g., Cook, 1985; Peng, 1994).

A potential reason for the lack of studies addressing political socialization at work for explaining political participation and trust lies in the empirical results of previous research. The results are mixed; some find positive effects, some none, and others find negative effects; furthermore, the results that are found suggest a weak effect at best (e.g., Cohen and Vigoda, 1999; Budd et al., 2018; Schweizer, 1995; Staines, 1980; Hebdon and Stern, 2003; Carter, 2006, Adman, 2008). This might have been interpreted as the effect of workplace political socialization being small to nonexistent, discouraging further research on the idea of the workplace as an agent for political socialization. However, I suggest two alternative explanations for these mixed findings. The current literature does not take into account the potential negative effects of participation in the workplace and often addresses uncommon types of workplace participation. Below, I discuss the most important theoretical mechanisms linking workplace participation and political participation and raise the issues I have with them.

1.4. Theoretical Limitations

The most studied mechanism linking workplace participation and political outcomes is the spillover mechanism; workplace participation affects political efficacy, participation and trust because people learn from participation at work. The skills and attitudes that individuals gain from participation at work spill over to participation and attitudes in the political sphere. However, the current literature often makes the implicit assumption that workplace experiences are always positive and, therefore, stimulate efficacy, participation and trust. However, while experiences in the workplace might be positive and stimulating (e.g., when workers have an impact or feel their opinion is taken seriously), we also know that this is not always the case (e.g., when workers' input is ignored or retaliated against). Previous studies on workplace voice show that many workers report restrictions to or even suppression of workplace voice (e.g., Morrison and Milliken, 2000; Sluiter et al., 2022; Stanojevic et al., 2020). To account for the effects of negative evaluations of workplace participation, I build on Greenberg et al.'s (1996) suggestion that workplace participatory effects are dependent on whether they are regarded as positive or negative. Therefore, positive and negative evaluations of participation can generate different effects. If both positive and negative effects occur, the overall outcome might indicate no effect or a weak effect, which is a possible explanation for the mixed results found in previous research.

An additional way that workplace participation can have negative effects is via an alternative mechanism that links experiences at work and in politics: a competition mechanism. This competition mechanism suggests that time, money and resources spent on participation in the workplace cannot be used for participation in politics (Staines, 1980; Schlozman et al., 1999). This competition mechanism and the abovementioned spillover mechanism can operate at the same time, providing an additional explanation for the mixed findings on the relationship between work and politics. Acknowledging these potential negative effects of workplace participation might help us understand mixed findings in previous research and help us understand under what conditions workplace political socialization stimulates political participation, efficacy, and trust and under which conditions it can reduce it.

The second issue I raise related to the mixed findings in previous research is that these studies examined rather uncommon experiences of workplace participation, such as worker cooperatives or worker ownership (e.g., Greenberg, 1981; Greenberg et al., 1996). However, worker cooperatives are rare and represent uncommon experiences for workers (Molk, 2013). How more common day-to-day experiences with workplace participation socialize people politically is, therefore,

still unknown, while the potential influence and frequency of workplace participation are much greater than those found in the rare types of participation hitherto studied. We do not yet know whether the mechanism of uncommon experiences also applies to more common types of workplace participation. If more common types of workplace participation also have an effect on political participation and attitudes outside of the workplace, the current literature might underestimate the effects of workplace political socialization on political outcomes.

In addition to the mixed findings, the direction of the relationship between work and politics is unclear. Although most studies consider the effect of workplace participation on political participation, the theoretical mechanism also allows a reversed causal direction of this effect. While both have been studied, often only a one-directional relationship has been tested (either one way or the other) (e.g., Adman, 2008; Cohen and Vigoda, 2006). This disregards potential bidirectional effects between workplace participation and political participation. In the next section, I discuss the contributions I aim to make in this dissertation to enhance our understanding of the relationship between work and politics, which will contribute to understanding the inequalities in political participation and political trust.

1.5. Theoretical and Empirical Aims

In this dissertation, I address the above-stated shortcomings in our current understanding of the relationship between workplace voice and political voice to explain inequalities in political participation and trust. I will address these issues in the first part of my dissertation and then provide an answer to the main question in the second part of the dissertation. In this paragraph, I will elaborate on how I address these theoretical issues.

I aim to contribute to the **theoretical** understanding of the link between work and politics by (a) taking into account potential political participation inducing and reducing effects of workplace socialization (i.e., positive and negative evaluations of participation) and (b) theorizing that different theoretical mechanisms that link behavior and experiences at work and in politics can work simultaneously (i.e., the spillover mechanism and competition mechanism can operate at the same time)

The **empirical** aims of the dissertation are threefold. First, I will apply the theoretical mechanisms and propose positive and negative evaluations of more common types of workplace participation. I assume that the proposed effects of uncommon types of participation can also be applied to these more common types of participation. Second, I develop a measurement of workplace efficacy to

explicitly test the spillover mechanism linking work and politics. This provides empirical insight into the effect of the feeling that one can have an influence at work on political efficacy and political participation. Third, I empirically test different theoretical mechanisms and bidirectional effects simultaneously and allow for the possibility that experiences at work affect political behavior and that experiences in politics also affect workplace behavior.

By addressing these theoretical and empirical aims, which I will do in Chapter 2 and Chapter 3 of this dissertation, I provide the steps necessary for explaining inequalities in political participation and trust using workplace political socialization. Before I discuss this dissertation's individual chapters and their findings, I first discuss the data I used to address the questions raised: The Work and Politics Panel Survey.

1.6. The Work and Politics Panel Survey

To address the issues presented above, I use two waves of the Work and Politics Panel Survey (Akkerman et al., 2017, 2018), which is a survey I collected together with a team of sociologists and psychologists as part of the 'Linking the discontented employee and the discontented citizen' project. The survey was conducted by Kantar Public, which approached 12,013 respondents from a pool of 135,000 respondents. These respondents were representative of the Dutch labor force with regard to education level, age, and gender. For the first wave, the survey had a response rate of 64%, resulting in 7,599 respondents. All 7,599 respondents were invited to participate in the second wave, of whom 6,008 completed the survey (79%).

This survey is a unique source of rich information about respondents' experiences both at work and in politics. With regard to workplace participation, we know whether individuals have had an issue in the workplace and, if so, whether they voice (i.e., workplace voice) this to either their supervisor, their coworkers, or to a range of other outlets. Furthermore, we know whether individuals are or were members of the work council and the labor union. I also have information on how individuals evaluate workplace participation: we know how supervisors and coworkers responded to workplace voice and the extent to which the problems employees addressed were resolved.

To measure political participation, the dataset contains information on what types of political participation individuals participated in before wave 1 and between wave 1 and wave 2. Most research agrees that casting a vote during an election and joining a political party are forms of political participation, but there is debate on how far to stretch the concept of what is political participation

and what is not. In this dissertation, I take Verba and Nie's (1972) definition as a starting point: "*those activities by private citizens that are more or less directly aimed at influencing the selection of governmental personnel and/or the actions they take*" (p. 2). This paves the way for including a wide variety of forms of political participation, including protests, signing petitions, donating money, and contacting politicians. However, it also limits the scope of political participation, for example, by stressing that it has to be focused on governments (instead of other institutions or organizations) and that it has to be intentional (instead of unintentional).

For political participation, the dataset contains information about individuals' evaluation: we know their satisfaction with the government's response after the 2018 Dutch Intelligence and Security Services Act referendum, whether respondents' preferred party gained seats after the national election, and whether respondents' preferred party formed a coalition. Additionally, for Chapter 5, we collected information about individuals' political trust, both at wave 1 and wave 2. We asked respondents about their political trust in different political institutions, which I combined to capture levels of political trust.

To measure individuals' efficacy, I first differentiate between internal and external efficacy. Internal efficacy refers to confidence in one's own personal skills and resources to express their interest and influence decision-making. External efficacy concerns individuals' ideas about the responsiveness of authorities and the extent to which these authorities listen to and care about individuals' wants and needs (Craig and Maggiotto, 1982). Second, I argue that it is useful to distinguish between situation-specific types of efficacies. Therefore, we collected data about both individuals' efficacy in the workplace (workplace efficacy) and their political efficacy. The items used for political efficacy are based on existing validated scales, while we created and validated the items used to measure workplace efficacy ourselves. I find that the newly developed measurements of internal and external workplace efficacy are coherent constructs that are distinct from their political counterparts.

Next, to these main variables of interest, the dataset contains information on individuals' experiences at work, in politics, and beyond, which we used as controls in the models presented below or to validate questions and items used in this dissertation. I use this dataset to address the previously discussed limitations and the corresponding contributions throughout the chapters following this synthesis. In the next section, I discuss the results of the individual chapters.

1.7. Chapters of the Dissertation

I discuss the chapters of this dissertation, the theoretical problems they address, their empirical findings and the implication of these findings for our knowledge about the effects of political socialization in the workplace. In Chapters 2 and 3 of this dissertation, I contribute to the understanding of the effect of workplace participation on political participation by addressing the abovementioned theoretical and empirical issues. Specifically, in Chapter 2, I develop the abovementioned new measurement of workplace efficacy and increase the theoretical understanding of the spillover between work and politics by incorporating positive and negative evaluations of participation at work. In Chapter 3, I test different theoretical mechanisms that link work and politics (i.e., spillover mechanism and competition mechanism) and apply analyses that allow distinguishing between different mechanisms to determine which mechanism is at play between work and politics (or which mechanism applies under what condition).

Chapters 2 and 3 are important theoretical, methodological and analytical building blocks for Chapters 4 and 5. I aim to increase the understanding of the link between workplace political socialization and behavior and attitudes in politics, which are necessary to understand political inequalities in political participation and trust. Using the knowledge from Chapters 2 and 3, in Chapter 4, I study not only the relationship between workplace participation and political participation but also address inequalities in political participation. Specifically, I focus on the role of workplace political socialization in explaining educational inequalities in political participation. Chapter 5 addresses inequalities in political trust and studies how political socialization in the workplace affects political trust and educational inequalities in political trust.

1.7.1. Chapter 2: Political Participation and Workplace Voice: The Spillover of Supervisor Suppression

In Chapter 2, I aim to establish the connection between people's voices at work and their political voices by building upon the spillover mechanism. Specifically, I examine how experiences with workplace voice expression affect political efficacy and political participation. The spillover mechanism suggests that by participating in one sphere (e.g., politics), individuals gain the feeling that participation can or does have an impact, which fosters participation in other spheres of life (e.g., at work) (Pateman, 1970; Greenberg et al., 1996; Cohen and Vigoda, 1999). I study the effects of positive and negative experiences in understanding the spillover mechanism between work and politics. Thereby, I test whether negative evaluations of participation at work also spill over to the

political sphere and reduce political participation. Additionally, I develop and test a measurement of workplace efficacy, allowing me to empirically test the theoretical mechanism that links experiences at work to political participation. I theorize and model the spillover mechanism from supervisors' responses to workplace voice (support or suppression by the supervisor) to political participation using the first wave of the Work and Politics Panel Survey.[2]

In this chapter, I first find that supervisor responses to workplace voice matter for workers' political efficacy and political participation. This shows that addressing more common interactions in the workplace broadens our understanding of the linkage between work and politics; not only do relatively rare types of workplace participation affect political participation, but this is also the case for more common forms of workplace participation. Second, I find that the type of response is important for understanding the effect of this response; positive and negative evaluations of participation (i.e., support or suppression by the supervisor) have different effects. While positive evaluations of workplace participation foster political participation via efficacy, I find more complex effects for negative evaluations. Negative evaluations reduce individuals' confidence in the responsiveness of supervisors and result in reduced political participation. I find that negative evaluations can also boost political participation via a direct effect (separately from the spillover mechanism). Last, in the second chapter, I conclude that workplace efficacy, the feeling that one can address and influence situations in the workplace through voice, is an important mediator between evaluations of workplace voice and political efficacy; indeed, most of the effects of workplace participation flow via workplace efficacy. In short, this chapter demonstrates how evaluations of workplace participation matter for political participation; these evaluations (positive and negative) affect workplace efficacy. Positive evaluations of participation increase workplace efficacy, while negative evaluations lower workplace efficacy. In turn, this workplace efficacy spills over into political efficacy, which affects different modes of political participation.

1.7.2. Chapter 3: Democratic Spillover and Spillback: The Reciprocal Relations between Participation at Work and in Politics

The aim of Chapter 3 is to test the spillover mechanism and the competition mechanism simultaneously. Specifically, I examine to what extent the spillover and competition mechanisms explain the two-way relationship between workplace participation and political participation and to what extent evaluations of

2 At the time of doing the analysis for Chapter 2, the second wave of the Work and Politics Panel Study was not available.

participation affect this relationship. I test bidirectional effects between workplace participation and political participation. I build upon previous research that often takes a one-directional approach to understanding the link between workplace participation and political participation (Cohen and Vigoda, 2006; Budd et al., 2018). Thereby, I address some of the theoretical and empirical problems addressed above.

First, I derive expectations from different mechanisms that link work and politics. While the spillover mechanism, as discussed and tested in Chapter 2, expects that individuals learn from participation in one sphere that transfers to the other sphere, the competition mechanism suggests that participation in different spheres of life competes for individuals' scarce resources (Staines, 1980; Schlozman et al., 1999; Hebdon, 2005). Devoting time and energy to participating at work reduces the time and energy available to devote to participation in politics; hence, there is a negative relationship between participation at work and in politics. If both of the mechanisms apply, the potential positive effect of learning from participation at work might be canceled out by the negative competition effects of participation at work. This could explain the mixed results in previous research; there is a learning effect of workplace participation, but at the same time, the resources invested in workplace participation limit participation in politics. These effects can cancel each other out, but depending on which mechanism operates more strongly, it can also go one way or another (i.e., either a positive or negative total effect). I use analyses that allow me to distinguish between these mechanisms. That is, I include measurements of efficacy that allow me to distinguish spillover effects from potential competition effects. I build on my findings from Chapter 2 and integrate the evaluations of participation within both mechanisms to obtain a better understanding of the linkage between workplace participation and political participation. To study these aspects, I use the first and second waves of the Work and Politics Panel Survey.

In this chapter, I find support for the spillover mechanism but not for the competition mechanism. Additionally, I find that there are indeed bidirectional effects between work and politics: workplace participation affects political participation, and political participation affects workplace participation. However, the results are not always as hypothesized. While following the spillover mechanism, workplace participation and political participation are mostly positively linked, some spillover pathways linking workplace participation and political participation indicate negative effects of workplace participation on political participation. Once again, this shows the added value of addressing the potential negative effects of participation in one sphere on participation in the other. Last, I find that evaluations of participation matter both in politics

and in the workplace. Positive evaluations of participation result in higher levels of efficacy than negative evaluations of participation. As discussed earlier, Chapters 2 and 3 serve as important building blocks to answer the question about how political socialization in the workplace helps us understand inequalities in political participation and trust. In Chapters 4 and 5, I will address this question.

1.7.3. Chapter 4: Political Socialization and Political Participation

The aim of Chapter 4 is to examine the role of workplace political socialization in understanding inequalities in political participation attributed to differences in educational attainment. Specifically, I examine how and to what extent social capital, political discussion and participation in workplace politics mediate the relationship between education and political participation. Studies have consistently shown that individuals with higher levels of education, or those with more years of education, are more likely to participate in politics (e.g., Converse, 1972; Verba et al., 1995; Persson, 2015). Some fear that this inequality has led to a so-called 'diploma democracy' (Bovens and Wille, 2017), in which those with a high level of education dominate the political arena and the preferences of higher educated individuals are better represented in policy compared to the preferences of lower educated individuals (Schakel, 2021). In the scientific debate on understanding educational differences in political participation, three explanations dominate. The first explanation emphasizes the role of socialization and the acquisition of skills in school: in school, individuals gain certain skills, norms and knowledge that foster political participation (e.g., Kingston et al., 2003; Pallas, 2000; Verba et al., 1995). Hence, more years in school results in higher levels of political participation. Second, a sorting effect of schooling is presented as a potential mechanism. Individuals with a higher level of education obtain different positions in society, which induces their political participation (Muller and Shavit, 1998; Nie et al., 1996). The networks of higher educated individuals encourage participation more strongly than do the networks of lower educated individuals. These two explanations suggest an (indirect) causal effect of education on political participation. A third explanation contests this causal effect of education on political participation and proposes that education is only a proxy of family political socialization (e.g., Berinsky and Lenz, 2010; Kam and Palmer, 2008). These family socialization experiences affect both attained and pursued education and affect political participation. Regardless of the causality, the difference in political participation between educational groups undoubtedly exists. I build on the explanations for educational inequalities in political participation and argue that political socialization and the acquisition of political

skills not only take place during childhood and adolescence but also continue during adulthood. Individuals with different levels of education work in different types of jobs, which results in different experiences and social interactions in the workplace. My expectation is that experiences in different types of jobs result in different levels of political socialization and, consequently, different levels of political participation between individuals with different levels of education. I use wave 1 and wave 2 of the Work and Politics Panel Survey to study the role of political socialization in the workplace in educational differences in political participation.

In this chapter, I find that education level is strongly related to workplace political socialization. For most types of workplace political socialization under study (e.g., political discussions and workplace participation), I find that higher educated individuals have more access to political socialization in the workplace compared to lower educated individuals. Furthermore, I find that most forms of workplace political socialization (i.e., work council membership, labor union membership, positive evaluations of workplace participation, and political discussion) relate positively to political participation. In short, the different political socialization experiences that differently educated individuals have (e.g., higher educated individuals who have more political socialization at work) might help us understand educational inequalities in political participation.

1.7.4. Chapter 5: Workplace Political Socialization and Political Trust

The aim of Chapter 5 is to understand how workplace political socialization affects educational differences in political trust. Specifically, I examine how and to what extent political socialization in the workplace affects political trust and to what extent this socialization reduces or increases the political inequalities between educational groups. Previous literature shows large educational inequalities in political trust, with higher educated individuals displaying greater political trust (Bovens and Wille, 2017; Christensen and Lægreid, 2005; Mayne and Hakhverdian, 2017; Van Elsas, 2015). A dominant explanation for these inequalities is that more education and higher education levels socialize students in a more trust-promoting way compared to less education or lower education levels (Hoskins, 2017; Mayne and Hakhverdian, 2017). Students' interactions with other students and teachers, the feeling to be able to freely discuss political topics, and participation in school politics affect political trust outside the classroom. Similar to the argument made in previous chapters, I argue that political socialization is not limited to schools or adolescence. As also witnessed by the results of the previous chapters, adults are also socialized politically at work, and political trust can change after individuals leave school (Dawson et al., 1977; Jennings and Niemi, 1978; Mortimer and

Simmons, 1978; Niemi and Sobieszek, 1977). Therefore, I build on the literature on political socialization at school and parallel some of the mechanisms offered by this literature to the workplace by studying the role of political discussion at work, an open workplace climate, and participation in workplace politics to understand political trust. Additionally, I address potential compensating or accelerating effects of political socialization in the workplace on political socialization acquired early in life. Some argue that the lack of socialization in one sphere of life (e.g., schools) might be compensated for by socialization in another (e.g., at work) because the new experience can have a greater impact on those who received little socialization in the other sphere (Hoskins et al., 2017; Kahne and Middaugh, 2008). However, others argue that those already politically socialized are more open to new socialization experiences; therefore, political socialization in the workplace will only increase political inequalities in trust (Campbell, 2008). I study the potential compensatory or accelerating effects of workplace political socialization using the first and second waves of the Work and Politics Panel Survey.

The results of this chapter show that political discussion at work, an open workplace climate, positive evaluations of participation in the workplace, and the feeling that one has an influence at work relate positively to political trust. These effects are robust and remain significant when I include measurements of political satisfaction and political interest. Second, when addressing the potential compensating or accelerating effect of political socialization in the workplace, I find support for some compensation effects and no support for acceleration effects. Although I do not find a significant difference between all educational groups for all types of political socialization, the general patterns support the expectation that individuals with less education benefit more from political socialization in the workplace (in terms of political trust) compared to higher educated individuals.

1.8. Conclusion

In my dissertation, I have studied how political socialization in the workplace affects political attitudes and participation. Additionally, I studied how political socialization in the workplace affects inequalities in political participation and trust along educational lines to answer the following question: How and to what extent does workplace political socialization explain inequalities in political participation and political trust between educational groups in society? The most important finding is that political socialization at work matters for political participation and trust. Experiences at work and political behavior and

attitudes are related; individuals' experiences at work affect how they feel and act as citizens, and vice versa. Additionally, I find that political socialization at work affects inequalities in political participation and political trust. Thereby, I add a new explanation for educational inequalities in political participation and trust. My dissertation makes certain theoretical and empirical contributions, which I discuss below.

1.8.1. Theoretical Contributions

My dissertation expands the theory on the link between workplace participation and political participation and trust in three ways. First, I find that evaluations of workplace participation matter for the effects of participation on workplace efficacy and participation and attitudes in politics. While positive evaluations of workplace participation induce efficacy and participation in politics, negative evaluations decrease them. This helps us understand why previous research found mixed results on the effect of workplace experiences on political participation and attitudes. Not considering the evaluation of participation, positive and negative effects might cancel each other out. This also shows that promoting workplace participation does not always increase political participation. It is important to consider under what conditions this workplace participation takes place: if organizations are not responsive to worker's input through workplace participation, workplace participation will decrease instead of increase political participation, even compared with no workplace participation.

Second, and related to the first contribution, I show no support for the competition mechanism. No support is found for the idea that participation at work and in politics compete for scarce resources. The negative effects previously attributed to the competition mechanism are potentially negative spillover effects; when evaluations of workplace participation are negative, they spill over to lower levels of political participation.

Third, political socialization in the workplace affects political trust. Additionally, I conclude that political socialization experiences in the workplace have varying effects on individuals with different levels of education; lower educated individuals are more affected by these experiences than higher educated individuals. Previous studies indicate potential compensation effects of political socialization in schools for individuals who received less political socialization earlier in life, and the findings of my study imply a similar effect of workplace socialization. Not only that school can have an equalizing effect on political inequalities but I find that also the workplace can perform such a function and even can compensate for the inequalities in schooling. Thus, my dissertation offers a new perspective on educational inequalities and, for those interested in reducing inequalities, offers a potential source for addressing these inequalities.

1.8.2. Empirical Contributions

In this dissertation, I also offer some empirical contributions. I will highlight four contributions to the current literature. First, I conclude that the previously tested mechanisms linking experience at work and behavior and attitudes in politics also apply to common day-to-day experiences. While previous research has mainly focused on uncommon types of worker participation, I find that voicing issues to supervisors and responses to them also result in a spillover effect on political participation and political trust. This shows that more day-to-day workplace interactions can have important effects outside of the workplace as well, and they have the potential to affect political outcomes in society. This relates to the mixed or weak results in earlier research. If not only uncommon types of workplace participation but also day-to-day experiences at work affect political behavior and trust, the overall effect on political behavior and attitudes might have been underestimated (i.e., they are larger than previously found). Although the effects found in this dissertation are small, what is more relevant is how these effects add up when people have these experiences on a day-to-day, or more frequent, basis. Combined and subsequent experiences may result in larger total effects. I will discuss this in greater detail in Section 1.8.4.

Second, I have developed measurements for the feeling of efficacy in the workplace, with an internal workplace efficacy and external workplace efficacy counterpart. These measurements are coherent constructs and mediate most of the relationship between (evaluations of) workplace participation and political efficacy. This allows new research to model the theoretical steps of the spillover mechanism between work and politics more explicitly, thereby contributing to the understanding of this mechanism.

Third, I show that political socialization experiences in the workplace are unequally available to individuals with different levels of education; higher educated individuals are more likely to be socialized politically in the workplace than lower educated individuals. This helps to understand the political inequalities in participation and trust between different education levels. In combination with the previously discussed finding that lower educated individuals benefit more from political socialization in the workplace, it also results in opportunities to reduce political inequalities between educational groups, something I will discuss in more detail in the next Section 1.8.3.

Fourth, I find bidirectional effects between workplace participation and participation in politics; work experiences affect politics and vice versa. This shows that studying the effects in isolation can be interesting, but it only tells part of the story. This calls for a more integrated view of the effects of changes in workplace regulations since these effects are not limited to workplaces

and to the way we approach political participation; political participation and the experience that individuals have with political participation also affect workplace participation.

My study provides potential reasons for the mixed findings in earlier research on political socialization in the workplace. However, it is difficult to make bold conclusions based on one dataset. Nevertheless, it shows at least that we should not ignore political socialization in the workplace, especially not when the goal is to understand inequalities between groups in society.

1.8.3. Societal Relevance

Political participation and political trust have attracted much attention among policy-makers. Most of the scientific research has focused on the political socialization of individuals in their so-called formative years (i.e., under the age of 25) since they expect that these are the years during which attitudes and behavioral intentions are mostly developed (see Easton and Dennis, 1969; Jennings and Niemi, 1981; Jennings et al., 2009; Neundorf et al., 2013; Achen, 2002). This provides fruitful guidance for promoting trust and participation in society in the long run, for example, by applying changes to our school system.

The findings of my dissertation inspire a broader spectrum of interventions, providing opportunities for policy-makers to improve political participation and political trust and reduce inequalities. Following the abovementioned focus of political socialization studies, there is much attention given to building civic skills so that citizens are active and engaged when leaving schools. My dissertation shows that this can be taken a step further since school programs could be designed to not only focus on civics at school but also prepare individuals on how to be active and engaged workers after they leave school. Teaching students how to effectively express their interests in the workplace might have positive effects on their future lives and society in general. In particular, focusing on students in vocational programs might be fruitful since they often feel less equipped to articulate work-related problems.

In addition to these adjustments at school, the findings from this dissertation also provide insights on how to affect political participation and trust later in life among people who are no longer attending school. Previous research shows that workers with insecure labor contracts are less likely to participate in the workplace (Sluiter et al., 2022). Governments can have an effect on this in three ways. First, they can reduce temporary and insecure labor contracts and promote more secure contracts through legislation. In the latest coalition agreement in the Netherlands, it was recognized that too many people are dependent on temporary employment contracts and that better regulations are necessary (Rijksoverheid, 2022). Second, governments are also big employers themselves,

so they could start by looking at the working conditions in public organizations. In 2017, the highest shares of temporary contracts were found in the education and government sectors in the Netherlands (Van Echtelt and De Voogd-Hamelink, 2017), which are two sectors that the Dutch government could have a direct impact on. Changing the way governments threat their employees themselves might provide a standard for other sectors and this standard might spill over to other organizations. Third, the government could invest more in protecting employees who speak up in the workplace. Legal protection of vulnerable employees in particular (e.g., those with temporary contracts) can increase employees' feeling that they are free to speak up about workplace issues that may, in turn, affect political inequalities in participation and trust through the mechanisms uncovered in this dissertation. My study on the link between workplace participation and political participation and attitudes thereby provides an extra argument in the ongoing debate about the costs and benefits of temporary contracts (e.g., WRR, 2020; AD VALVAS, 2022). These recommendations are consistent with the recommendations of the committee-Remkes that civic skills should be improved in and outside of schools (Remkes et al., 2018). The workplace might serve as an environment in which this could take place.

1.8.4. Considerations, Limitations and Suggestions for Future Research

There are some limitations and some new pathways for further research. First, new research could focus more on the causality and the direction of the effects found in this dissertation. My dissertation used the Work and Politics Panel Survey to test the hypotheses. Chapter 2 uses only the first wave of this panel survey and can, therefore, be interpreted cross-sectionally only. The other chapters use two waves of the survey, which solves some of the problems that involve purely cross-sectional analyses, but the validity of the conclusion with regard to causality is weak at best. The main question of the dissertation entails differences between groups in society, and cross-sectional analyses are useful in addressing differences between groups. However, casual theoretical assumptions have also been made, which have only partly been tested. I have attempted to identify problems of self-selection, reversed causality and spurious correlation, but limited options were available considering the data. Experiments are a good method to obtain a good understanding of cause and effect, and although the treatment under study is difficult to implement in a real-life experiment, lab experiments identifying the effect of different supervisor responses to workplace voice could provide fruitful insights into these effects. The downside of such experiments is the limited external validity, especially regarding common day-to-day experiences.

Second, further research might strengthen the understanding of the long-term effects of the experiences under study in this dissertation. Two waves of panel data provide limited information with regard to the duration of the effects found, the accumulation of the effects found and the potential compensation that positive and negative effects can have on political behavior and attitudes. Notwithstanding the short-term effects found in this study, it would be an interesting endeavor to investigate how long certain effects prevail, what the effects are of multiple experiences, and how these interact with previous experiences. All of these questions were outside of the scope of this dissertation because of data limitations but are important when potential policy interventions are considered.

Third, the interaction of political socialization in different stages of life also requires more scrutiny. The question of whether political socialization compensates for or deepens inequalities in political socialization earlier in life is an important question. In this dissertation, I study the effects of workplace political socialization and its effect on inequalities in political participation and trust. Schooling and the type of jobs that individuals hold are related, and therefore, it is difficult to disentangle the amount of political socialization individuals have in school and the political socialization they have at work. I took education level as a proxy for the amount of political socialization that individuals had at school, and previous research has shown that this correlates strongly. However, information on the amount and type of political socialization that individuals had in school, their families and other environments would provide a better idea of the interaction between these types of political socialization and workplace political socialization. This can contribute to the understanding of how workplace political socialization can accumulate or compensate for inequalities in political socialization earlier in life.

Fourth, the external validity of the findings in this dissertation requires attention. I used data from the Netherlands to test my hypotheses. Although I have no reason to expect these mechanisms to work fundamentally differently in other political systems and workplaces, comparative research on workplace socialization is welcomed. The measurements that I developed facilitate comparative research beyond the Netherlands, so new research addressing cross-country differences might provide fruitful insights into the effects of, for example, different political systems, different labor market characteristics (such as the role of labor market institutions or unionization) or different hierarchy structures between workers and supervisors on the mechanisms discussed in this dissertation.

Last, further research could focus on political inequalities along different lines and the interaction of certain inequalities. In this dissertation, I focus on

educational inequalities in political participation and political trust. However, many inequalities between groups in society exist with regard to political participation and trust. For example, inequalities also exist between people with different levels of income and people from different regions within the Netherlands. Further research might investigate differences between other groups and the role that workplace political socialization plays in those inequalities. Additionally, different types of inequalities do not exist independently of each other. Although outside of the scope of this dissertation, more attention could be paid to intersectional inequalities and the role that workplace political socialization plays in developing, strengthening, or reducing these inequalities.

2

Political Participation and Workplace Voice: The Spillover of Suppression by Supervisors.

This chapter aims to establish the connection between people's voice at work and their political voice. I theorize and model a spillover mechanism from supervisors' responses to workplace voice to political participation. Applying structural equation modeling on a unique dataset (N= 3,129), I find that while support and suppression of workplace voice both affect political participation, they do so through different mechanisms. Additionally, I find that supervisors' suppressive responses to employees' voice can trigger both positive and negative effect on different forms of political participation. Thereby, I contribute to the understanding of the link between participation at work and participation in politics.

A slightly different version of this chapter has been published in Political Studies with Agnes Akkerman and Roderick Sluiter (Geurkink et al., 2020). I analysed and interpreted the data under the supervision of Agnes Akkerman and Roderick Sluiter. I drafted the chapter, and Agnes Akkerman and Roderick Sluiter provided critical revisions. All authors approved the final version of the manuscript. The study on which the chapter is based was presented at the PhD Conference in Hannover, Germany, May 14-15, 2018, the Colloquium Social Sciences in Groningen, The Netherlands, 2018, May 22 and IMR Research Day in Nijmegen, The Netherlands, 2018, June 21. It was rewarded the Best Paper Award 2018 at the IMR Research Day in Nijmegen, The Netherlands, 2018, June 21.

2.1. Introduction

In this chapter, I aim to establish the theoretical-empirical connection between people's voice expression at work and their political voice. The recent deterioration of important labor market institutions, such as more relaxed employment protection regulation and the weakened power of trade unions, has fundamentally changed the position of employees *vis à vis* management. Traditional vehicles for collective expressions of worker discontent, such as strikes, have declined, leaving many workers no other option than using individual voice (Budd et al., 2010; Akkerman, 2017). Because work is important for political socialization (Greenberg et al., 1996; Jian and Jeffres, 2008), changes in workplace relations potentially have significant consequences for political participation. In this chapter, I examine how experiences with workplace voice expression affect political efficacy and political participation.

The workplace, like family and school, is considered one of the agents of political socialization (Niemi and Sobieszek, 1977; Greenberg et al., 1996). Work is central in people's lives, and many workplaces resemble the authority structure of political institutions (Pateman, 1970; Peterson, 1992; Greenberg et al., 1996). Political socialization theory argues that the workplace is an environment in which people learn political skills and that certain workplace interactions enhance the feeling that one can influence decision making through political action (Campbell et al., 1954; Bandura, 1994). In particular, the involvement in decision making in the workplace can have learning effect that enhances political skills and the desire to participate politically (Greenberg et al., 1996; Carter, 2006). Although political socialization theory acknowledges that the workplace can be an important agent for training political skills, our understanding of the effect of workplace training for political behavior remains rather limited for three reasons. First, previous studies address (nowadays) uncommon structures, such as worker cooperatives (e.g., Pateman, 1970; Elden, 1981; Greenberg, 1981, 1986), or focus on more general work characteristics such as job autonomy rather than on specific participative interactions (Jian and Jeffres, 2008; Adman, 2008; Lopes et al., 2014; Budd et al., 2018). Nevertheless, more common day-to-day experiences at work are also expected to enhance civic or political skills (Verba et al., 1995; Burns et al., 2001), but are understudied when linking the workplace to political participation. Second, the proposed positive effect of workplace participation on political participation is based on the implicit theoretical assumption that the political arena at work mimics an ideal liberal democracy. While this may be true in some organizations, it is doubtful whether this is a universal characteristic of all organizations and workplaces. Finally, the empirical evidence for the proposed positive effect of

workplace participation on political efficacy is mixed (Carter, 2006; Jian and Jeffres, 2008; Adman, 2008), suggesting that the spillover mechanism is more complex than presently understood.

This chapter contributes to understanding the link between people's working lives and their political lives in three ways. First, I theorize and test the effect of the more common, day-to-day interactions at work that may constitute a learning effect for political action: voicing work-related issues to one's supervisor. I address the effect of supervisor's responses to workplace voice. While some studies have addressed supervisor's *attitudes* towards the voice of employees (e.g., Burris, 2012; Fast et al., 2014; Burris et al., 2017), the effect of the supervisor's *behavior* (i.e., their responses to workplace voice) are understudied (see: Morrison, 2014; Bashshur and Oc, 2015).[3] Second, I argue that employees can be successful at voicing problems but can also experience negative responses, for instance, when their voice is ignored or encountered by retaliation. Greenberg et al. (1996) propose that the effect of workplace participation on political participation is dependent on whether the experience in the workplace is a positive or negative experience. Therefore, I address and empirically test the effect of both the positive *and* negative responses to voice expression at work. Previous studies addressing negative responses to voice in the workplace are confined to individual- or organizational-level effects and do not address the effects on political behavior (e.g., Seibert et al., 2001; McClean, et al. 2013; Burris et al., 2013). Thereby, I connect the research on workplace voice with the research on political socialization (as suggested by Milliken et al. (2015)) Third, I build on previous studies, arguing that the link between experiences at work and political participation is mediated by workplace efficacy (e.g., Elden, 1981; Greenberg et al., 1996), but elaborate the spillover mechanism by separating an internal and external dimension of workplace efficacy, mirroring established measurements of political efficacy. By testing these innovations using structural equation models with original and unique survey data on 3,129 workers in the Dutch labor force, I provide an innovative theoretical-empirical connection between people's voice at work and their political voice, offering a partly new and original explanation for political participation.

3 Previous research did already address the effects of (expected) responses to voice by supervisors. However, while these studies addressed organizational or individual effects (e.g., the likeliness to voice (again) (Saunders et al., 1992); organizational commitment (Farndale et al., 2011); turnover (McClean et al., 2013; Burris et al., 2013), job satisfaction (Cortina and Magley, 2003; Sparr and Sonnentag, 2008), career outcomes (Seibert et al., 2001), and performance evaluations (Burris et al., 2013)) they have not addressed the broader societal consequences of supervisor's responses to voice, such as political participation.

2.2. Theory

2.2.1 Workplace Voice as Training for Political Skills

I define workplace voice as any activity of an employee directed to the supervisor intended to voice communication in order to improve either personal work conditions or the work conditions of an entire group of employees. While previous studies argued that employee voice has *'the intent to improve organizational or unit functions'* (Morrison 2011, p 375; e.g., Hirschman, 1970; Van Dyne and LePine, 1998; Morrison and Milliken, 2000; Detert and Burris, 2007; Tangirala and Ramanujam, 2008), my definition of workplace voice does allow for more individual concerns and is thereby not necessarily constructive. Workplace voice in this study is related to the concept of 'complaining' (Kowalski, 1996). However, my definition is confined to problems in the workplace and does not include expression of dissatisfaction in general. Additionally, workplace voice relates to the employee dissent model (Kassing, 1997), but focusses more on individual dissatisfaction and not on contradictory opinions in the workplace (i.e., management might have been unaware of the issues this study focusses on) (Kassing, 2000).[4] Workplace issues fitting my definition of workplace voice include contract violations, dissatisfaction with wages, high work pressure, lacking career opportunities, or workplace bullying.

I argue that expressing voice at work prepares individuals for political participation by training political skills, such as articulating interests and speaking up, and strategies, such as the mobilization of others, negotiation, and compromise. While previous research mainly focused on participation in workplace decisions (Sobel, 1993; Verba et al., 1995; Greenberg et al., 1996; Jian and Jeffres, 2008), I argue that the preparation for political action not only lies in the mere training of the expression of issues and interests but also in the feedback the supervisors give byway of their responses to workplace voice. An employee who voices an issue at work can meet a variety of responses by its supervisor (Kassing, 2009). Supportive responses, such as helping to solve the problem or rewarding the employee, constitute positive feedback on voice expression in the workplace. However, if the supervisor punishes the employee after voicing, (e.g., by criticizing or intimidating the employee) or silences the employee after voicing (e.g., by ignoring or refusing to talk about it), an employee receives negative feedback on using voice at the workplace.

4 See Morrison (2011) for a more elaborate discussion on the different definitions of voice and its related concepts.

2.2.2. Political and Workplace Efficacy

The mechanism proposed by political socialization theory for the spillover from workplace participation to political participation is that the experiences at the workplace improve people's feeling of *political efficacy* (Pateman, 1970). Political efficacy is the feeling that one can influence decision making through political action (Campbell et al., 1954; Bandura, 1994) and is developed through a process of social-political learning via political interaction and observation (Beaumont, 2011). Involvement in decision making in the workplace has a learning effect that enhances political skills and the desire to participate politically (Greenberg et al., 1996; Carter, 2006): people generalize problem-solving techniques and civic skills, developed and practiced in the workplace, and use them in other spheres of life, particularly in political life (Verba et al., 1995; Kitschelt and Rehm, 2014). Furthermore, participation in the non-political setting of the workplace exposes employees to political stimuli by engaging in discussions or by attending meetings in the workplace (Verba et al., 1995). Moreover, employees involved in a firm's decision making develop a 'thirst' for participation that spills over to civic and political behavior (Pateman, 1970; Elden, 1981). Thereby, experiences that people have in other spheres of life, especially those to which they devote most of their lives, are likely to affect political behavior (Eckstein, 1961; Almond and Verba, 1963). Thus, previous studies expect that workplace participation affects political efficacy and the desire to participate in civic and political participation (Carter, 2006).

Studies addressing political efficacy commonly distinguish two dimensions: internal efficacy (sense of political competence and influence) and external efficacy (belief in responsiveness of the political system) (Valentino et al., 2009; Wolak, 2017). These two types of efficacy constitute different dimensions of a person's political efficacy (Balch, 1974; Craig, Niemi, and Silver, 1990). *Internal political efficacy* refers to the confidence in one's own personal skills and resources to express political voice and influence political decision-making. *External political efficacy* concerns the trust an individual has in the responsiveness of political actors to listen and care about citizens' wants and needs (Craig and Maggiotto, 1982). These types of efficacy are distinct: one might feel confident about expressing their political voice, but might lack the feeling that the voice is heard by politicians and vice versa (Wolak ,2017).

I use workplace efficacy as a mediator between workplace voice and political efficacy. In line with Greenberg et al. (1996) and in order to better understand the connection between work and politics, I argue that it is useful to explicitly distinguish the efficacy of voicing problems at work as an element in the spillover mechanism. I label this ability *workplace efficacy*: the feeling that one can address and influence situations in the workplace through voice. This concept parallels

political efficacy but is confined to the workplace. I label confidence in one's personal skills to have an influence in the workplace as *internal workplace efficacy* and label trust in the responsiveness of the supervisor (or other authority figures in the workplace) as *external workplace efficacy*.[5]

2.3. Hypotheses

2.3.1. Workplace Efficacy

I expect that internal workplace efficacy is dependent on the "*experience of mastery arising from effective performance*" (Bandura, 1977, 191) at the *workplace*. Almond and Verba (1963) argue that interactions with authority at work can affect an individual sense of competence. Thereby, positive experiences with expressing voice at work may induce the employee's confidence in its ability to successfully address issues and interest. A supportive response of the supervisor towards the voice of the employee will enhance the employees' feeling of being effective in voicing their discontent, which likely boosts their confidence in expressing voice at the workplace. Therefore, I hypothesize the following:

> *Individuals whose voice expression has received a positive response from their supervisor have a higher internal workplace efficacy compared to individuals who did not receive a positive response from their supervisor (H1a).*

It is likely that suppressive responses of the supervisor to workplace voice are disappointing and harmful experiences that negatively affect people's confidence in their skills to address and improve issues at work (Greenberg et al., 1996). Because employees may attribute negative experiences with voice expression at work to a personal lack of skills and competencies (Almond and Verba, 1963), I expect that negative experiences with voice expression reduce workers' confidence in their ability to express voice at work effectively. Supervisor' suppression may result in the feeling among employees that they are not able to speak up about problems they have at work, whereby they start to see themselves as lacking the capacity to have an influence in the workplace (Milliken et al., 2015). Therefore, my hypothesis is as follows:

> *Individuals whose voice expression was suppressed have a lower internal workplace efficacy compared to individuals whose voice expression was not suppressed (H1b).*

5 Although others have already developed measurements to capture efficacy at work (e.g., Duan et al., 2014), my measurements are different from these by distinguishing between internal and external efficacy.

Next, individuals may attribute positive experiences with workplace voice expression to the responsiveness of their boss, enhancing their *external workplace efficacy*. A supportive response of the supervisor to the employee will give the employee the feeling that the supervisor cares about the problems of the employee. This positive experience with workplace voice is likely to increase the employee's feeling that the supervisor is responsive to the employee's needs. I thus expect the following:

> *Individuals whose voice expression received a positive response from their supervisor have a higher external workplace efficacy compared to individuals who did not receive a positive response from their supervisor (H2a).*

Furthermore, experiences with supervisors who suppress the voice expressions of their employees are likely to reduce the workers' *external workplace efficacy*. Employees might learn that it is futile to express their voice to the supervisor if this supervisor either does not want to hear the negative feedback or does not act on it (Milliken et al., 2015). Suppression of voice expression thereby may result in the feeling that supervisors are not responsive to or do not care about the employees' interests (Wolak, 2017). Therefore, I hypothesize the following:

> *Individuals whose voice expression was suppressed have a lower external workplace efficacy compared to individuals whose voice expression was not suppressed (H2b).*

2.3.2. Political Efficacy

I argue that workplace efficacy is being generalized to other spheres of life, such as people's political lives (Almond and Verba, 1963). Experiences with voice at work change people's political efficacy through the *generalization* of their workplace efficacy (see: Mutz, 2009). Suppression will reduce workplace efficacy, which is generalized to lower political efficacy. Alternatively, being supported by the supervisor is expected to induce higher political efficacy through the generalization of workplace efficacy.

For internal workplace efficacy, the confidence in having the skills necessary to have an influence in the workplace is generalized into the confidence in one's ability to influence political processes. I expect that the workplace voice skills and confidence in it are skills that are transferable to the political environment and represent those skills that are necessary to participate politically (e.g., understanding politics and pursuing political interests) (Verba et al., 1995). Experiences in the workplace are expected to be generalized to the political sphere, because the formal authority structure in the workplace is similar to that of the political authority structures, especially compared to authority structures

in others spheres (e.g., the family). Therefore, the workplace is crucial for the formation of political competence (Almond and Verba, 1963; Greenberg et al., 1996). Therefore, I hypothesize the following:

Individuals with a higher internal workplace efficacy have a higher internal political efficacy (H3).

The generalization of external workplace efficacy operates through the individual's generalization of the confidence and ideas about the responsiveness of the supervisor in the workplace and extends to ideas about the responsiveness of political actors. I expect this generalization because the supervisor in the workplace is an authority figure who has the power to make decisions that affect the workplace situation. For workers to voice issues effectively (i.e., impose change), they are dependent on the responsiveness of the supervisor. In the political realm, citizens are dependent on the political actors' responsiveness to influence political decision-making. The similarity between the supervisor and political actors with regard to power and authority is likely to evoke a generalization of responsiveness. Therefore, I expect the following:

Individuals with a higher external workplace efficacy have a higher external political efficacy (H4).

2.3.3. Political Participation

The relationship between political efficacy and political participation is well established (Campbell et al. 1954; Guyton 1988; Paulsen 1991; Cohen et al. 2001; Valentino et al. 2009). An individual with a stronger feeling that political action does have or can have an impact on the political process is more likely to participate politically (Campbell et al., 1954; Campbell, 1960; Craig and Maggiotto, 1982). In other words, those who have a lower political efficacy are less likely to participate politically (e.g., vote, write letters to local politicians, or participate in political campaigns). Internal political efficacy is especially expected to positively affect individuals' political participation (Valentino et al., 2009; Gastil and Xenos, 2010), while the results for external political efficacy are less decisive (Shaffer, 1981; Abramson and Aldrich, 1982; Finkel, 1985; Rosenstone and Hansen, 1993). In addition to differences in the empirical findings, the theoretical mechanisms are also different for the impacts of both types of political efficacy on participation.

For internal political efficacy, it is expected that people with a lower political efficacy have the feeling that they are not qualified to take part in politics or have the feeling that others with more political competence will perform better

(Wolak, 2017). Therefore, those with a lower internal political efficacy will be less likely to participate in politics. I hypothesize the following:

> *Individuals with a higher internal political efficacy are likely to participate more in politics (H5).*

External political efficacy embraces the belief that if a government is highly responsive, the subjective utility gained from voting, as well as from other types of participation, is larger (Abramson and Aldrich, 1982). Political participation is expected to involve some sense that the cause is not hopeless (Rosenstone and Hansen, 1993). If a person thinks that engaging in a political activity would make no difference, getting involved in political participation seems to be a waste of time. Compared to people with lower external political efficacy, individuals with a higher external political efficacy have the feeling that political actors are more responsive. Therefore, the expectation is that people with higher external political efficacy will participate more in politics:

> *Individuals with a higher external political efficacy are likely to participate more in politics (H6).*

2.3.4. From Workplace Voice to Political Participation

The above-presented hypotheses represent a spillover mechanism that links experiences with participation in the workplace to political participation, via workplace efficacy and political efficacy. Figure 2.1. illustrates the expected pathway that I propose in this chapter.

2.4. Methodology

2.4.1. Data

In order to investigate the relationship between experiences with voice at work and political participation, I use data from the Work and Politics Panel Survey 2017 (Akkerman et al, 2017). This dataset is an original, unique and rich source of data about individual behavior at work and in politics. The data consist of 7,599 respondents from the Dutch labor force. The data were collected using the TNS NIPObase[6], consisting of about 235,000 respondents from the Netherlands, from which the respondents were randomly selected. Respondents received a small reimbursement for completing the online survey. The data were collected

6 http://www.tns-nipo.com/over-tns-nipo/log-in

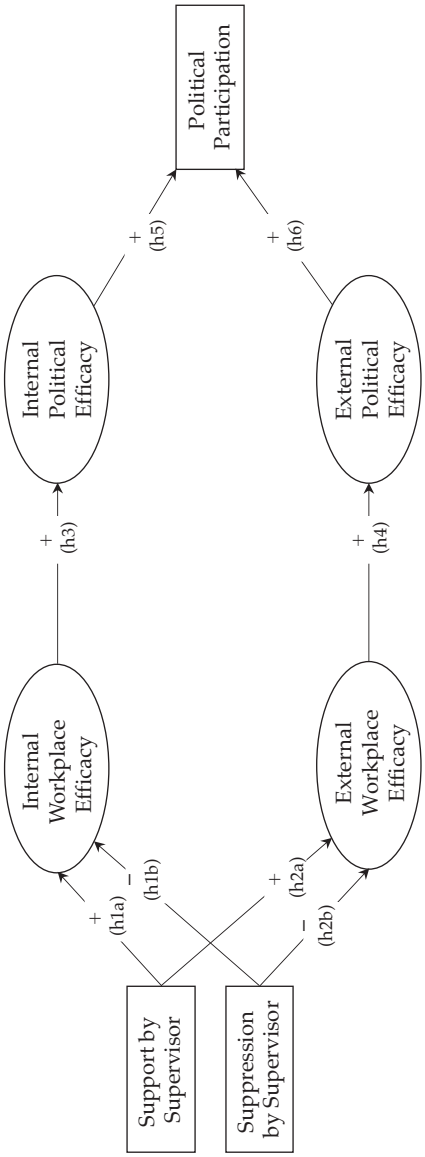

Figure 2.1. Spillover mechanism from responses of supervisors to workplace voice to political participation.

between July and September 2017, with a response rate of 64%. The sample is representative for the Dutch labor force in 2017, with regard to gender, age, education and work situation. For the analyses presented in this chapter, I selected those respondents who (1) work currently or had a job in the past three years (N=6,889), (2) had an issue at work in the previous three years (N=4,242) and (3) had either voiced their issue to their supervisor or whose supervisor was aware of the employee having voiced the issue. The final models include 3,129 respondents.[7]

2.4.2. Measurements

The dependent variable in this chapter is political participation. Verba and Nie defined political participation as "*those activities by private citizens that are more or less directly aimed at influencing the selection of governmental personnel and/or the actions they take*" (1972, 2). Relying on this definition, political participation is a broad concept that includes a wide variety of behavior by individuals, such as voting, contacting a politician, and protest. I asked respondents the question, "Which of the following did you do during the last twelve months," followed by providing them with a list of thirteen possible types of political participation. In line with Teorell et al. (2007), I operationalize political participation as a multi-dimensional concept. I differentiate between four modes of political participation, with, for each mode, a higher value indicating more of a given mode of participation. I differentiate between *voting*, *party activities*, *contacting*, and *protest activities* modes of political participation (see: Adman 2008).[8]

For the experiences with voice at work, I asked respondents the following question: "After you voiced an issue, did that result in one of the following responses by your supervisor?". Respondents could select more than one responses and were able to add responses to the list.[9] I categorized each of the supervisor's responses into four categories: punishing, silencing, supportive, and passive responses.[10] I recoded the categories into three dummy variables,

7 The conclusions with regard to my hypotheses do not change when all respondents who work or have worked are included in the analysis.

8 See Appendix 2.1. for an overview of all possible types of participation, the percentage of respondents who participated in the different types of political participation and the respective modes of participation they belong to.

9 Supervisor responses are reported by workers. Thereby, I measure perceived supervisor responses, instead of actual supervisor responses. I aimed to stimulate respondents to focus on actual responses by presenting them a list of concrete examples of supervisor responses. Nevertheless, it is possible that a perceived suppressive supervisor response is an indication of a broader suppressive work environment.

10 If applicable, responses from the other category were recoded into the corresponding category. The list of possible responses of supervisors and the corresponding category are presented in Appendix 2.2.

with '1' indicating 'punished by supervisor' and '0' indicating 'not punished by the supervisor for the *punishment by supervisor* variable, '1' indicating 'silenced by the supervisor' and '0' indicating 'not silenced by the supervisor' for the *silencing by supervisor* variable, and '1' indicating 'supported by the supervisor' and '0' indicating 'not supported by the supervisor' for the *support by supervisor* variable. I consider both punishment and silencing by supervisor as suppressive responses. Respondents with both a suppressive and supportive response by the supervisor were excluded from further analyses.[11] Since I do not have expectations about the effect of passive responses, I do not include a dummy for that category.

To measure workplace efficacy and political efficacy, a range of items regarding confidence in skills and confidence in the responsiveness of authority for both the workplace and the political sphere were presented. For each of the items, respondents were asked to indicate the extent to which they agreed with it on a five-point scale ranging from '1' (strongly disagree) to '5' (strongly agree). If needed, scores were reversed so that a score on the item corresponds with a higher efficacy score.

For the political efficacy scales, I combined items from Craig and Maggiotto (1982) and Craig et al. (1990). Some items were slightly adjusted to be applicable to the Dutch context. For internal political efficacy, we relied on the following items:

> Politics is so complicated that I cannot really understand what is going on[12] (*COMPL*).
>
> I consider myself well qualified to participate in politics (*QUALIFY).*
>
> I am at least as able to understand complicated issues as others are (*ABLE*).

The external political efficacy scale consists of two items:

> Politicians do not care about what people like me think[10] (*CARE).*
>
> Politicians are only interested in people's votes but not in their opinions[10] (*VOTE*).

11 Note that this did not substantially affect the results for the hypothesized effects.

12 Scores were reversed so that higher scores indicate higher efficacy.

For both of the workplace efficacy measures, I adapted political efficacy measures for the workplace environment. The measurement of internal workplace efficacy consists of four items:

> I will immediately recognize a violation of my labor contract (*VIOLATE*).
>
> Employees like me are very capable of pursuing their interests as workers (*INTEREST*).
>
> Employees like me are very capable of contributing to important organizational decisions (*DECIDE*).
>
> It is worth listening to the opinion of employees like me about labor conditions (*OPINION*).

Two items were used to measure the external workplace efficacy score of individuals:[13]

> Generally speaking, my supervisor does not really care about my interests[10] (*NOCARE*).
>
> Generally speaking, my supervisor listens to the problems of employees like me (*LISTEN*).

I control the analyses for political interest (do you keep yourself informed about what happens in politics?) (yes = 1), gender (male = 1), age (15 years = 0), age squared, education (middle or higher educated, compared to lower educated), ethnic background (western or non-western migrants, compared to Dutch natives), contract type (temporary with prospect, temporary without prospect, or solo self-employed[14] compared to permanent), having flexible arrangement in the contract (having a payroll contract, work as agency worker, work on call / secondment, or having a zero-hours contract compared to having a contract without such arrangements), and being a supervisor (supervisor = 1).[15]

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13 Based on a low internal reliability, I did not include the following question, "Employees like me do not have an influence on decisions in the organization" in the external workplace efficacy measurement.

14 I only included those solo self-employed individuals who worked within an organization and asked them to refer to their contractor when answering question about their supervisor. Additional analyses excluding these solo self-employed individuals did not affect the conclusions regarding my hypotheses.

15 Descriptive statistics of the variables used in this chapter are presented in Appendix 2.3. A correlation matrix can be found in Appendix 2.4.

2.4.3. Method

To address the question of how experiences with voice expression at work affect political participation via workplace efficacy and political efficacy, I use structural equation modeling (SEM). This allows us to test the entire spill-over mechanism instead of separate effects of parts of the spillover mechanism (Kline, 2011). I start by applying confirmatory factor analysis, using maximum likelihood estimation, to show whether the items I use to measure workplace efficacy and political efficacy result in four different factors and have sufficient convergent and discriminant validity. Second, I include these factors in a structural regression model. This structural regression model allows us to simultaneously estimate regression equations in order to test my hypotheses and the entire spillover mechanism. I use WLSMV estimation (weighted least squares means and variance adjusted), which uses diagonally weighted least squares to estimate model parameters and a probit link function. All of the analyses are estimated with R (version 4.0.1.) using the *Lavaan* package (Rosseel, 2012).

2.5. Analyses

2.5.1. Measurement Model

In order to assess the validity of the measurement of the constructs, I used confirmatory factor analysis to determine the loading of indicators on the constructs and the relation between the constructs. This process resulted in one refinement to the original model. I added a residual correlation between VIOLATE and DECIDE. Although I did not expect any residual correlations *a priori,* this negative correlation intuitively makes sense. The first item refers to the tendency of being suspicious at work, while the latter taps into the ability to contribute constructively to the firm: two tendencies that may be negatively related. The chi-square difference test and the comparison of the AIC and BIC indicate that this adjustment improved the model substantially (compare Model 1 and Model 2 in Table 2.1).

The standardized loadings of each item in the full model as presented in Table 2.2 are well above 0.4 (ranging from 0.542 to 0.964), showing that the items are good indicators for the constructs (Saris et al. 2009). The McDonald's Omega (McDonald, 1999), used to identify factor reliability, indicates sufficient internal consistency within the factors, with all reliabilities exceeding 0.7 (IWVE = 0.802; EWVE = 0.745; IPE = 0.775; EPE = 0.880).[16] Furthermore, the discriminant validity

16 The Cronbach's alphas are 0.772; 0.686; 0.770; and 0.878, respectively. However, these scores are expected to underestimate the true reliability values since the assumption of tau-equivalence is unlikely to hold in my analyses (Trizano-Hermosilla and Alvarado, 2016).

Table 2.1. Values of selected fit statistics for two-step testing of a structural regression model.

Model	χ^2	*df*	RMSEA (90% CI)	CFI	SRMR	AIC	BIC
Measurement models							
Model 1	616.195[a]	38	0.070[a] (0.065 – 0.075)	0.947	0.043	84765	84935
Model 2	446.131[a]	37	0.059[a] (0.055 – 0.064)	0.962	0.041	84598	84773
Structural regression model							
Model 3	631.515[a]	187	0.028[b] (0.025 – 0.030)	0.952	0.039		

Note: CI = confidence interval; N=3,129; [a]$p < 0.05$; [b]p=1.000.

(i.e., the determination of whether the factors are different constructs) is sufficient with factor intercorrelations ranging between 0.063 and 0.326.[17]

I assessed the fit of Model 2 using several fit statistics (see Table 2.1). The chi-square measures the discrepancy between the covariance matrices of the model and the data. The ratio between the chi-square statistic and the degrees of freedom of the model indicates how well the data fit the model. However, since this chi-square statistic is largely dependent on the sample size (Bentler and Bonett, 1980; Barrett, 2007; Hoe, 2008; Kline, 2011) and the sample is very large (N=3,129), the chi-square test is not suitable for the models (Mueller, 1997; Raykov and Marcoulides, 2012).[18] The RMSEA, a fit statistic that does control for sample size, indicates adequate fit. Other fit statistics also indicate that the measurement model fits the data well (CFI>0.95; SRMR<0.08) (Hu and Bentler, 1999). I thus conclude that both internal and external workplace efficacy are coherent constructs that are different from both political efficacy constructs.

2.5.2. Structural Regression Model Fit

After establishing the validity of the measurement model, I analyze the structural regression model. This allows us to simultaneously test theoretical pathways and to include latent variables in the analysis. The fit statistics of the full model are presented in Table 2.1 (model 3). The CFI is unreliable to evaluate

17 See Appendix 2.5.

18 I nevertheless present the chi-square statistics because it is the basis for other fit indices.

Table 2.2. Maximum likelihood estimates of factor loadings for the measurement model.

	Factor Loadings		
Indicator	**Unst.E.**	***Std.Error***	**Std. estimates**
IWE			
VIOLATE	1.000[a]		0.656
INTEREST	1.048	0.041	0.681
DECIDE	1.282	0.045	0.852
OPINION	0.826	0.033	0.636
EWE			
NOCARE	1.000[a]		0.542
LISTEN	1.672	0.191	0.964
IPE			
COMPL	1.000[a]		0.643
QUALIFY	1.217	0.040	0.763
ABLE	1.215	0.040	0.783
EPE			
CARE	1.000[a]		0.918
VOTE	0.950	0.057	0.853

Note: [a]Not tested for statistical significance. For all other unstandardized estimates, $p<0.05$; N=3,129.

DWLS models (Nye and Drasgow, 2011) but the RMSEA (<0.06) and the SRMR (<0.08), the most robust fit index to evaluate model fit (Shi and Maydeu-Olivares 2020), show that the structural regression model provides a good fit. In conclusion, the measurement models and the structural regression model provide an indication that the data fit the theoretical model well.

2.5.3 Test of the Hypotheses

Estimates for the structural regression model are presented in Table 2.3. Figure 2.2 is a graphical presentation of the structural regression model with standardized effects.[19] Hypothesis 1a predicts a positive effect of the support by supervisor on internal workplace efficacy (IWE). Table 2.3 shows that this effect

19 See Appendix 2.6 for a table containing all standardized effects.

Table 2.3. Coefficients and the explained variance of the structural regression model.

Parameters	**IWE**	**EWE**	**IPE**
Support by Supervisor	0.08* (0.02)	0.40* (0.03)	0.00 (0.03)
Silencing by Supervisor	0.03 (0.03)	-0.44* (0.04)	0.11* (0.04)
Punishment by Supervisor	-0.01 (0.03)	-0.37* (0.04)	0.01 (0.04)
IWE			0.26* (0.03)
EWE			
IPE			
EPE			
Education (lower = ref)			
- Middle	0.08* (0.04)	0.06 (0.05)	0.28* (0.05)
- Higher	0.18* (0.04)	0.17* (0.05)	0.70* (0.05)
Age (0=15 year)	0.01 (0.00)	0.00 (0.00)	0.01 (0.01)
Age squared[a]	0.00 (0.01)	-0.01 (0.01)	-0.01 (0.01)
Gender (female = ref)	0.05* (0.02)	-0.02 (0.03)	0.27* (0.03)
Ethnic Background (native = ref)			
- Western migrants	-0.06 (0.05)	-0.06 (0.06)	-0.04 (0.06)
- Non-western migrants	-0.21* (0.05)	-0.08 (0.06)	0.01 (0.06)
Contract Type (permanent = ref)			
- Temporary w prospect	0.08* (0.03)	0.21* (0.04)	0.03 (0.04)
- Temporary w/o prospect	-0.01 (0.04)	-0.03 (0.06)	0.11 (0.06)
- Solo Self-employed	0.14* (0.07)	-0.01 (0.08)	0.08 (0.07)
Flexible Arrangement	-0.07* (0.03)	-0.03 (0.04)	-0.02 (0.04)
Supervisor	0.17* (0.02)	0.03 (0.03)	0.06* (0.03)
Political Interest	0.19* (0.02)	0.09* (0.03)	0.57* (0.03)
Explained variance	0.12	0.35	0.44

Note: Entries are unstandardized coefficients with standard errors in parentheses; *p<0.05; N=3,129, [a]effect multiplied by 100 for interpretation purposes; [b]Explained variance in the latent variable underlying the ordinal scale.

is indeed positive (0.08) and significant. This suggests that hypothesis 1a is corroborated: individuals whose voice expression is supported by their supervisor have a higher IWE compared to individuals whose voice expression was not supported. Next, I see that the effects of both silencing and punishment by supervisor on IWE are insignificant. I thus reject hypothesis 1b, which predicted a negative relationship between the supervisor's suppression and IWE.

EPE	Voting	Party Activities	Contacting	Protest Activities
-0.01 (0.04)	0.03 (0.05)	0.12 (0.09)	0.06 (0.13)	0.06 (0.06)
-0.08 (0.05)	-0.02 (0.06)	0.24* (0.11)	-0.20 (0.17)	0.03 (0.07)
-0.03 (0.05)	0.11 (0.06)	-0.05 (0.11)	0.56* (0.15)	0.15* (0.07)
0.22* (0.04)				
	0.24* (0.05)	0.59* (0.07)	0.80* (0.09)	0.40* (0.05)
	-0.01 (0.03)	0.20* (0.04)	0.17* (0.05)	-0.05 (0.03)
0.15* (0.07)	0.15 (0.08)	0.09 (0.21)	0.37 (0.45)	0.16 (0.12)
0.45* (0.07)	0.15 (0.09)	0.22 (0.21)	0.33 (0.45)	0.25* (0.12)
0.01 (0.02)	0.01 (0.01)	-0.02 (0.01)	-0.02 (0.02)	0.00 (0.01)
-0.03* (0.01)	-0.01 (0.02)	0.04 (0.03)	0.04 (0.04)	0.01 (0.02)
-0.08* (0.03)	-0.11* (0.05)	0.23* (0.08)	0.36* (0.14)	-0.14* (0.05)
-0.06 (0.08)	0.08 (0.10)	0.20 (0.14)	0.47* (0.17)	0.05 (0.10)
-0.01 (0.08)	-0.06 (0.12)	0.15 (0.18)	0.06 (0.26)	0.08 (0.13)
-0.04 (0.05)	0.02 (0.07)	0.03 (0.12)	-0.05 (0.19)	-0.09 (0.09)
0.11 (0.08)	-0.09 (0.09)	0.24 (0.15)	-0.06 (0.25)	0.03 (0.11)
-0.10 (0.10)	0.02 (0.13)	-0.27 (0.26)	-0.10 (0.28)	0.18 (0.13)
-0.13* (0.05)	-0.05 (0.06)	0.07 (0.11)	0.21 (0.14)	0.10 (0.07)
0.01 (0.04)	0.08 (0.05)	-0.03 (0.08)	-0.13 (0.12)	0.02 (0.05)
0.18* (0.04)	0.52* (0.06)	0.16 (0.11)	0.15 (0.19)	0.46* (0.07)
0.11	0.14[b]	0.32[b]	0.45[b]	0.20[b]

The effect of support by supervisor on external workplace efficacy (EWE) is positive and significant (0.40); individuals whose voice expression was supported have a higher external workplace efficacy compared to individuals whose voice expression was not supported (hypothesis 2a). The expected negative relationship between the supervisor's suppression and EWE (hypothesis 2b) also turns out to be significant for both silencing (-0.44) and punishment by supervisor (-0.37).

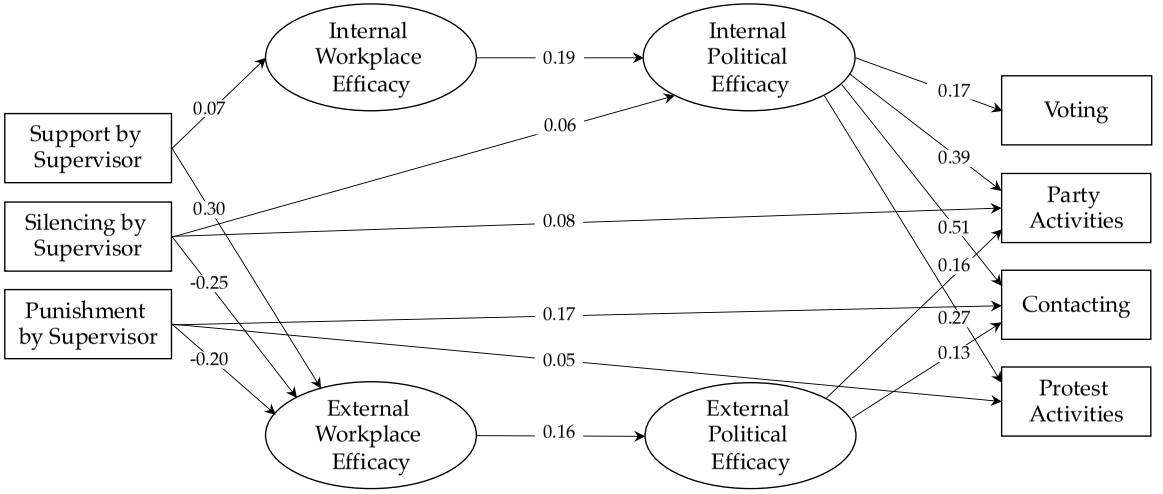

Figure 2.2. Structural equation model of the spill-over mechanism between supervisor's responses to workplace voice and political participation.

Note: N=3,129; only significant standardized coefficients are presented ($p<0.05$); endogenous variables are controlled for education, age, age squared, gender, ethnic background, contract type, flexible arrangement in contract, being a supervisor and political interest; items for latent variables are not presented; covariances were modelled between the voice efficacy constructs, between the political efficacy constructs, and between the modes of political participation.

This indicates that individuals whose voice was suppressed have a lower external workplace efficacy compared to individuals whose voice was not suppressed. Thus, I find support for both hypothesis 2a and hypothesis 2b. The effect of IWE on internal political efficacy (IPE) is positive and significant. Thereby, I corroborate hypothesis 3. For the spillover of EWE to external political efficacy (EPE), I hypothesized a positive relationship (hypothesis 4). The result in Table 2.3 shows a positive relationship (0.22), by which I also corroborate hypothesis 4. Thus, there is a positive relationship between workplace efficacy and political efficacy.

The link between IPE and political participation is significant and positive for all modes of political participation with standardized effects ranging from 0.17 (for voting) to 0.51 (for contacting). These findings corroborate hypothesis 5. The expected positive relationship between EPE and political participation (hypothesis 6) also turns out to be significant, but the effect is not significant on all modes of political participation. The link between EPE is positive and significant for party activities and contacting, with standardized effects of respectively 0.16 and 0.13. However, no significant relations are observed for voting and protest activities. So, I do not find that individuals with higher levels of EPE are more likely to vote or to protest. Protest activities therefore attract both individuals with stronger and weaker levels of political efficacy and voting is a common mode of participation; individuals apparently vote regardless of their feeling of responsiveness of political elites.

In my model, I also added effects between the supervisor responses and internal and external political efficacy. I added these direct effects between experiences with voice at work and political efficacy because these effects have been often hypothesized and tested in previous studies (e.g., Pateman, 1970; Carter, 2006; Jian and Jeffres, 2008). The model indicates that for IPE, the effect of support by supervisor is mediated by IWE, while the effect of a silencing by supervisor does indeed directly affect IPE, but, counterintuitive, the effect is positive. This finding indicates that people whose voice expression was silenced by their supervisor have a higher IPE than people whose voice was not silenced. A possible explanation for this positive relationship is that being silenced at work teaches employees how *not* to voice effectively, which fosters their IWE. This suggests that individuals can learn from both positive and negative responses. For EPE, the model shows that the effects of responses of supervisors to voice expression are fully mediated by EWE. Thus, after including EWE, there is no direct significant effect of the responses of supervisors on EPE. These empirical findings suggest that the theoretical model offers an important contribution to a better understanding of the relationship between experiences with voice at work and different modes of political participation.[20]

20 Additional analysis shows that controlling for labor union membership does not affect the results with regard to the hypothesized effects.

Furthermore, I tested the direct relationship between supervisor's responses and different modes of political participation. I find positive significant effects between supervisor's suppression and three modes of political participation. Individuals who experienced silencing by their supervisor are more active in party activities and those who are punished by their supervisor are more active in contacting and in protest activities. Especially the effect of punishment by the supervisor on contacting is substantial, outperforming the effect of external political efficacy in terms of size of the effect. This observation maybe explained by a similar observation in strike research: restrictions to the right to strike are followed by an increase in alternative protests (Hebdon, 2005). This suggests that when the roads to successful workplace voice are closed, workers may seek alternative outlets for their discontent (e.g., political action). So, the effect of punishment by supervisor on contacting is negative via one of the hypothesized efficacy effects (i.e., via external workplace efficacy), but, at the same time, there is a positive *direct* effect of punishment by supervisor on contacting. This finding indicates that the effects of punishment by supervisor on political participation are not fully captured by the efficacy mechanism and that an additional 'compensation' effect applies. Alternatively, since I use cross-sectional data, I cannot exclude the possibility that individuals who a more likely to participate in politics are more likely to induce suppressive responses by their supervisors. Either way, more research is needed to address this positive relationship.

With regard to the control variables, I find that higher educated individuals have higher levels of workplace efficacy, political efficacy and are more likely to participate in protest activities compared to lower educated individuals. Furthermore, I find a curvilinear relationship between age and external political efficacy, with employees having increasingly higher levels of external political efficacy until they are 34, after which it drops. With regard to gender, I find that men have higher levels of internal workplace and internal political efficacy, but lower levels of external political efficacy compared to women. Additionally, women are more likely to vote and to protest, but less likely to participate in party activities and contacting. Non-western migrants have lower levels of internal workplace efficacy compared to natives, while western migrants are more likely to participate in contacting types of political participation than natives. The results show that, compared to permanent employees, individuals with a temporary contract with prospect of a permanent contract have higher levels of workplace efficacy and those who are solo self-employed have higher levels of internal workplace efficacy. Furthermore, individuals with a flexible arrangement in their contract have lower levels of internal workplace efficacy and external political efficacy and individuals who are themselves supervisors have higher levels of internal workplace and political efficacy. Lastly, those who

are interested in politics have higher levels of all types of efficacy and are more likely to vote and protest.

Overall, the findings indicate a substantial effect of experiences with voice expression at work on political participation, via workplace efficacy and political efficacy. Supervisor's suppression has an effect on both IPE and EPE, and for the latter, this effect is fully mediated by EWE. The findings for the effect of supervisor's support show that the effects on both IPE and EPE are mediated by their WE counterparts. In line with previous research, both IPE and EPE turn out to have a significant positive effect on political participation. Though, EPE is not related to voting and protest activities. Furthermore, there turns out to be a direct positive relationship between supervisor's suppression and some modes of political participation, suggesting a compensation effect *in addition* to our hypothesized spill-over mechanism.

2.6. Conclusion

The recent deterioration of traditional labor market institutions, such as the declining power of trade unions and the increasing popularity of temporary work, has made employees more vulnerable to retaliation and silencing when attempting to address issues they have at work. Given that the workplace is expected to be an important agent for political socialization into political participation (Jian and Jeffres, 2008; Greenberg et al., 1996), changes in workplace relations are likely to affect political participation. In this chapter I find a clear connection between workplace voice and political voice, and adds an explanation to changes in political participation (Blais et al., 2004; Dalton, 2008; Bovens and Wille, 2017). Previous research shows that especially individuals in atypical work arrangements (e.g., temporary contracts) and those with high levels of job insecurity, are less likely to be supported and more likely to be suppressed by their supervisor (Sluiter et al., 2022). Given that individuals who are already less likely to participate politically more often work in such atypical forms of employment and have lower job security (e.g., lower educated) (Macmillan and Azzollini, 2020; Van Gaalen et al., 2013), linking experiences in the workplace to political participation offers new insights in increasing political inequalities (see: Bovens and Wille, 2017).

I contribute to the existing research on the impact of experiences with participation at work on political participation in three ways. First, most studies focus on experiences at the workplace within rare workplace structures, such as worker cooperatives (e.g., Pateman, 1970), or do not directly test the effects of more common interactions in the workplace on political participation. In this

chapter, I address more common experiences at work by focusing on responses of supervisors to employee voice. Second, existing research commonly theorizes positive effects of workplace experiences on political participation but mostly neglects the effects of negative experiences (cf. Greenberg et al., 1996; Milliken et al., 2015). I build upon these studies by also theorizing a negative spillover between work and politics. Specifically, I address how both positive and negative responses to voice in the workplace affect political participation. Thereby, I relax the implicit idea in previous studies that the workplace mimics an ideal liberal democracy per se (Brady et al., 1995). Third, I build on existing research suggesting that the relationship between workplace experiences and political efficacy is indirect rather than direct. I propose a mechanism in which workplace efficacy mediates the effect of experiences in the workplace and political efficacy introducing and separating workplace efficacy's internal and external dimension, following established measurements of political efficacy. In short, I show how experiences with voice expression at work affect political efficacy and political participation. Hence, the explanation adds to the existing theory by connecting people's working lives and their political lives.

The measurements of workplace efficacy appear coherent constructs that partly mediate the effect of supervisor's responses to voice at work on political efficacy. Furthermore, I find that positive experiences with participation at work—as suggested by previous work—positively affect both internal and external workplace efficacy. The results indicate that supervisor's suppression indirectly affects political participation via external workplace efficacy and external political efficacy. I did not find an effect of supervisor's suppression on internal workplace efficacy. These findings imply that negative experiences with voice at work only affect people's view of how responsive workplace authority is and do not affect the confidence in their own voice capabilities. This suggests that people gain political self-confidence from negative experiences at work. So, at work, they learn how *not* to voice effectively. These findings indicate that positive and negative experiences with voice at work trigger different mechanisms. In addition, I find a positive direct effect between supervisor suppression and political participation: silencing responses increase the likelihood of engaging in party activities and punishing response increase contacting political actors and protest participation. Suppression lowers efficacy but seems to stimulate people to look for alternative outlets, i.e., political action, suggesting a combined effect of the hypothesized spill-over mechanism and a compensation effect. Lastly, I find that individuals with stronger feelings of political efficacy are more likely to be active in all modes of political participation, with the exception of external political efficacy for which I did not find an effect on voting and protest activities.

In this chapter I focus on how supervisor's responses to workplace voice affect political participation in the Netherlands. Although I do not expect that the mechanisms I propose are different for other countries (see: Budd et al., 2018), further research may find interesting cross-country differences in the effects of workplace voice on political participation. The measurements that I developed facilitate such comparative research which would test the generalizability of my findings to other countries. Second, in this chapter I focus on political socialization experiences in the workplace. However, political socialization experiences in other environment (e.g., civic associations) may also affect levels of political participation. I welcome further research to apply the mechanisms as proposed in this chapter in other environments and, even more interesting, compare the relative impact of experiences on political participation between different environments. Finally, I base my findings on cross-sectional data. Therefore, the causal effects that I assume are supported by theory only. Previous work suggests that the effect of political efficacy on political participation is stronger than the other way around (e.g., Finkel, 1985) or that political participation may also influence workplace participation (e.g., Cohen and Vigoda, 1999). Further research could identify the reciprocal links between efficacy and participation and between participation in the workplace and participation in politics to get a better understanding of the direction of the effects, using panel data.

3

Democratic Spillover and Spillback. The Reciprocal Relations between Participation at Work and in Politics.

This chapter contributes to the understanding of the relation between workplace participation and political participation. Through workplace participation, individuals develop a sense of efficacy in the workplace, which fosters political participation. Conversely, participation in politics also affects workplace participation through a similar mechanism, suggesting a positive relationship. In addition, a negative relationship is expected between workplace participation and political participation due to competing resources. Using a unique panel survey of over 5,000 individuals from the Netherlands, I study these mechanisms using structural equation modeling. Additionally, I argue and show that the evaluation of participation is also important for understanding the bidirectional relationship between workplace and political participation.

A slightly different version of this chapter is currently under review with an international journal. I analysed and interpreted the data under the supervision of Agnes Akkerman and Roderick Sluiter. I drafted the chapter, and Agnes Akkerman and Roderick Sluiter provided critical revisions. All authors approved the final version of the manuscript. The study on which the chapter is based was presented at ISPP Annual Meeting in Montreal, Canada, 2021, July 11-13.

3.1. Introduction

In this chapter, I investigate how workplace participation and political participation influence each other. There is a long-lasting assumption that experiences at work shape political participation. Through workplace participation, individuals develop democratic skills in the workplace, which fosters political participation (Pateman, 1970; Greenberg et al., 1996). Conversely, participation in politics also stimulates workplace participation through a similar mechanism (Cohen and Vigoda, 1999). However, others suggest a negative relationship between workplace participation and political participation due to competing resources and compensating behavior (e.g., Staines, 1980; Hebdon, 2005). The empirical evidence for the relationship between workplace participation and political participation is mixed. Some works find positive effects for one of these relationships (e.g., Cohen and Vigoda 1999; Geurkink et al. 2022; Budd et al. 2018), others find negative effects (e.g., Schweizer, 1995; Staines, 1980; Hebdon and Stern, 2003), and others find no effect (Adman, 2008). I build on these studies to contribute to a better understanding of the relationship between workplace participation and political participation.

The increase in flexible, precarious work involving part-time, unstable contracts and limited abilities to influence employment organizations draws renewed attention to the relation between participation at work and in politics. Traditional vehicles for the collective expression of workplace discontent, such as union representation or works councils, are less suitable for flexible workers, and individual opportunities to voice discontent in the workplace are more costly and often restricted (Sluiter et al., 2022). Given these changes in labor relations, reinvigorating the study of the relationship between participation at work and in politics is relevant for two reasons. First, it is important to understand the deeper societal impacts of the abovementioned developments in labor relations. Restrictions to workers' voice may spill over to, and reduce, participation in politics. Second, given that changes in labor relations make workers more reliant on individual voice strategies, experiences with participation in politics may equip workers to express their interests in the workplace. This makes the question of how workplace participation and political participation influence each other an urgent one.

Scientific research on how workplace participation and political participation influence each other proposes several mechanisms (Staines, 1980). The spillover mechanism argues that by participating in one sphere (e.g., in politics), individuals gain the feeling that participation can or does have an impact (i.e., efficacy (see: Balch, 1974)), which fosters participation in the other sphere (e.g., at work) (Pateman, 1970; Verba et al., 1995; Cohen and Vigoda, 1999). Efficacy in one

sphere 'spills over' into the other sphere, and hence, more participation in one sphere results in more participation in the other. Therefore, the spillover mechanism suggests a positive relationship between workplace participation and political participation.

The competition mechanism suggests a negative relationship between workplace participation and political participation. The competition mechanism argues that participation in different spheres of life (i.e., at work and in politics) competes over scarce resources, such as over individuals' time, energy, and money. If individuals devote time and energy to participation in one sphere, there is less time and energy left to participate in the other (Schlozman et al. 1999; Greenhaus and Beutell, 1985). Consequently, more participation in one sphere results in less participation in the other.

Previous research has studied these mechanisms to identify the linkages between workplace participation and political participation, but the results are mixed. I identify four aspects that remain understudied and that might shed light on these mixed findings. First, both mechanisms may be at play simultaneously, but it is still unclear how the mechanisms presented above work in combination (see: Godard, 2007). Previous research has often tested the mechanisms in isolation (e.g., Budd et al., 2018) or proclaimed that the mechanisms are mutually exclusive (e.g., Staines, 1980). Second, some studies that address these mechanisms do not fully capture the theoretical mechanisms needed to distinguish between them (e.g., missing measurements of efficacy) (e.g., Sobel, 1993; Adman, 2008), which limits our understanding of the unique explanatory power of these mechanisms (especially if negative and positive effects operate at the same time). Third, since often only a one-directional relationship between the workplace and political sphere is theorized and modeled, previous research does not take into account potential bidirectional effects between workplace participation and political participation (e.g., Adman, 2008; Cohen and Vigoda, 2006). Fourth, we do not yet fully understand how evaluations of participation matter. While previous research argues that the evaluation of participation is important for understanding the effect of participation (e.g., Greenberg et al., 1996; Geurkink et al., 2022; Van der Meer and Steenvoorden, 2018; Hebdon, 2005), this is understudied for the above presented mechanisms. In this chapter, I address the following research question: *To what extent do the spillover and competition mechanism explain the two-way relationship between workplace participation and political participation, and to what extent do evaluations of participation affect this relationship?*

To answer this research question, I theorize and model the mechanisms specified above and study the effects of evaluations of participation. I collected unique panel data containing information on individuals' experiences with

participation at work and in politics and on individuals' efficacy in the workplace and in politics (N=5,088). As such, I am the first to bring together the essential data needed to study the research question presented above.

3.2. Theoretical Framework

I first discuss the hypotheses derived from the spillover mechanism. I theorize the bidirectional link between efficacy and participation and the spillover of workplace efficacy to political efficacy and vice versa. Second, I discuss the hypothesis derived from the competition mechanism by addressing the effect between participation in one sphere and participation in the other. Last, in addition to the effects of participation itself, I theorize the effect of evaluations of participation.

3.2.1. The Spillover Mechanism: A Positive Relationship Between Work and Politics

The expectation from the spillover mechanism is that when people participate more in one sphere (e.g., attending a political meeting), they gain certain skills, such as organizational and social skills, and feelings of self-confidence, which facilitate participation in another sphere (Meissner, 1971; Verba et al., 1995; Cohen and Vigoda, 1999). Based on the existing literature, I model the spillover mechanism as depicted in Figure 3.1. Starting from the top, individuals learn from workplace participation, which fosters workplace efficacy. Workplace efficacy spills over into political efficacy, and in turn, political efficacy fosters political participation. From political participation, individuals gain specific political skills and form attitudes towards political authority (i.e., political efficacy), political efficacy spills over to workplace efficacy, and an increase in workplace efficacy results in more workplace participation. Below, I discuss each of these steps in detail.

From Participation to Efficacy

In this section, I discuss the participation-to-efficacy effects. Often, two dimensions of efficacy are distinguished: internal efficacy and external efficacy (Balch, 1974; Craig et al., 1990; Wolak, 2017). Internal efficacy refers to the extent to which individuals feel competent to express themselves, while external efficacy refers to the extent to which individuals feel that authorities are responsive to their demands and that they have an influence. I discuss how participation affects both internal and external efficacy and deduce a general hypothesis for the relationship between participation and efficacy.

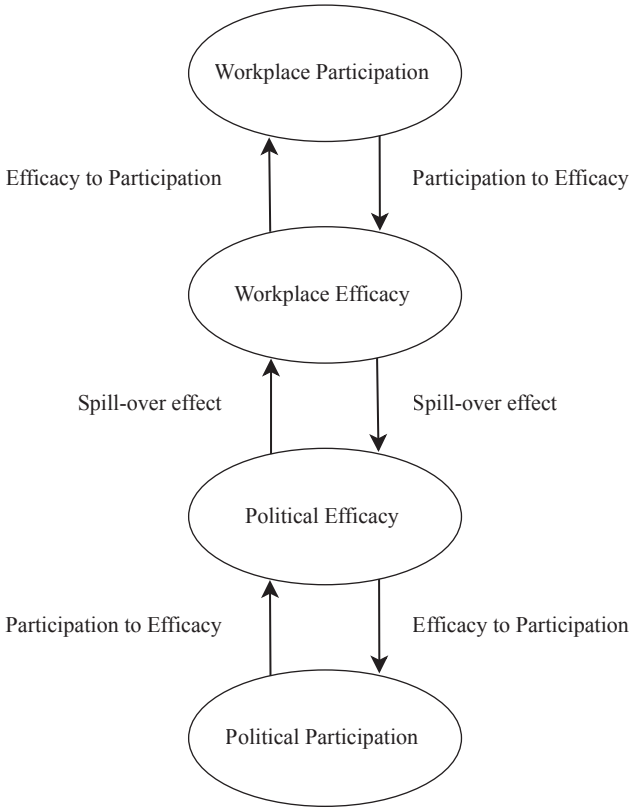

Figure 3.1. Proposed spillover mechanism.

There is a long-standing assumption that by practicing certain activities, individuals gain a sense of internal efficacy in that activity (Finkel, 1985; Stenner-Day and Fischle, 1992). Through participation in (workplace) politics, individuals gain certain skills, inducing confidence in their ability to achieve desired results (i.e., efficacy) (Thompson, 1970). This is found for workplace participation (e.g., participating in codetermination bodies) as well as for political participation. For example, Greenberg et al. (1996) and Peterson (1992) describe a positive relationship between workplace participation and internal efficacy. Stenner-Day and Fischle (1992) and Quintelier and Van Deth (2014) demonstrate a positive effect of political participation on internal efficacy. Pateman, following Roussseau, even argues that the most important justification for advocating a participatory system lies in this educative feature (1970, 24-25).

Participation also affects external efficacy. Through participation, individuals learn that authorities (e.g., supervisors in the workplace or politicians in politics) are responsive to their needs and wishes. The mere act of participation itself, regardless of the outcome, may induce a sense among individuals that they have control over authority and decision-making and that those authorities are willing to listen to individuals' attempted influence (i.e., external efficacy) (Finkel, 1985; Van der Meer and Steenvoorden, 2018; Ginsberg and Weissberg, 1978; Clark and Acock, 1989). Empirical evidence shows that political participation indeed fosters external political efficacy (Finkel, 1985; Ginsberg and Weissberg, 1978; Bowler and Donovan, 2002) and that workplace participation fosters perceptions of workplace authorities' responsiveness (e.g., Bryson, 2004; Bryson et al., 2006). Following the discussion of the effect of participation on internal and external efficacy, I expect to find the following:

Participation induces efficacy (H1).

I expect hypothesis 1 to apply for the effect of workplace participation on workplace efficacy and for the effect of political participation on political efficacy.

The Spillover Effect

For the spillover effect, the expectation is that efficacy in workplace participation spills over to political efficacy and vice versa. The generalization of skills and experiences from one sphere of life to the other is conditioned on (1) closeness with regard to time (i.e., they happen at the same time in life), (2) similarities in the degree of formality (i.e., the authority structure), and (3) the similarities of the skills needed (Mason, 1982, p. 71; Sobel, 1993; Maddux, 1995). Participation at work and participation in politics happen at the same time (i.e., throughout adulthood), are both formally structured (as opposed to voluntary organizations, which are more horizontally and informally structured), and the skills needed for participation are similar (e.g., writing letters, presenting ideas, and formulating arguments) (Almond and Verba, 1963; Sobel, 1993; Cohen and Vigoda, 1999). Milliken et al. (2015) argue that when employees learn at work that it is futile to raise their concerns to workplace authorities, this experience is generalized to interactions outside of work (e.g., in politics) (see also Geurkink et al., 2022). Cohen and Vigoda (2006) argue that political participation develops certain skills and competencies that spill over to participation in the workplace. Peterson (1992) shows that political efficacy is positively related to individuals' feelings that they can change matters at work. I argue that participation in the workplace and participation in politics have crucial similarities that allow for the generalization of efficacy. The expectation is thus as follows:

Efficacy at work increases efficacy in politics and vice versa (H2).

From Efficacy to Participation

Participation involves certain costs (e.g., time and money) and risks, especially if individuals' interests counter the status quo (Klaas et al., 2012). For example, in politics, participation can reveal one's political preferences, which can have (negative) effects for the individual, such as surveillance or arrest (Earl, 2011), or social consequences. In the workplace, participation can affect or upset coworkers or supervisors, which may also have (negative) consequences for social relations and one's job status (Cortina and Magley, 2003; Sluiter et al., 2022). Given these costs and risks, individuals are expected to be unlikely to participate if they have low levels of efficacy (Klandermans, 1984; Pollock, 1983; Wang et al., 2015; Finkel, 1985); if individuals do not sense that their participation can or will have an impact, they are unlikely to participate. Alternatively, I expect individuals with higher levels of efficacy to be more likely to participate. If individuals believe that they have the skills to participate effectively, that they have an influence over processes or that their participation can have an effect, they are more likely to participate, both at work and in politics (Caprara et al., 2009; Reichert, 2016; Vroom, 1964; Rasler, 1996; Casal and Bogui, 2008). Empirically, Janssen and Gao (2010), Landau (2009), Vakola and Bouradas (2005), and Saunders (1992) show positive relationships between efficacy at work and workplace participation. Finkel (1985; 1987) and Gastil and Xenos (2010) find positive relationships between efficacy and political participation. I thus expect the following:

Efficacy induces participation (H3).

These hypotheses apply both to the spillover effect of workplace participation on political participation and to the spillover effect of political participation on workplace participation. Since I expect, following the logic of the spillover mechanism, that the entire mechanism applies (instead of the isolated hypotheses only), I hypothesize the following:

Participation at work induces participation in politics via efficacy and vice versa (H4).

3.2.2. The Competition Mechanism: A Negative Relationship Between Work and Politics

There might also be a negative relationship between participation at work and participation in politics. The time, energy or money spent participating in one sphere are not available for participation in the other sphere (Staines, 1980;

Greenhaus and Beutell, 1985). Workplace and political participation compete for these scarce resources (Staines 1980). Individuals who spend time and energy gaining information, preparing for participation and actually participating will have less time left to do the same for participation in the other sphere. Additionally, individuals have a certain need for involvement or fulfillment. Different types of involvement (i.e., participation) compete for this need. If individuals participate in one sphere, the need for this involvement is satisfied, which lowers the likelihood that they will participate in the other sphere (Godard, 2007): "*What people get from their experiences at work, they do not need to seek outside of work, and vice versa*" (Staines 1980, p. 115). Stated differently, if individuals do not have the opportunity to participate in one sphere of life, they may become *more* active in another sphere of life because they want to fulfill their need for involvement and activity (Staines, 1980). This results in a negative relationship between participation in one sphere and participation in the other, a relationship that does not run via efficacy. The expectation is thus as follows:

Participation at work reduces participation in politics and vice versa (H5).

3.2.3. Evaluation of Participation and Efficacy

Several studies suggest that the effect of participation is (partly) dependent on the evaluation of participation (e.g., Carter, 2006; Craig et al., 2006). Greenberg et al. (1996) argue that the effect of workplace participation on political participation is dependent on whether experiences with participation are positive or negative. Additionally, Bowler and Donovan (2002) argue that while political participation itself fosters efficacy, this effect is weaker when losing an election compared to when winning an election.

I argue that the evaluation of participation is negative when participation itself is unsuccessful (i.e., one did not achieve the desired result) or when there are negative consequences of participation.[21] For example, in the workplace, the act of speaking up might be ignored or retaliated against, which could, in addition to not achieving the desired result, also reduce career opportunities. In politics, voting for a party can result in one's preferred party losing seats in parliament or failing to get into office, or political protests might be stifled by authorities. Positive evaluations of participation include being successful (i.e., achieving the desired results) or experiencing positive consequences of participation, such as social support.

21 Although being unsuccessful and experiencing negative consequences of participation are different experiences, I expect their effects to be similar and to both be part of a negative evaluation of participation.

If I apply the effect of evaluations to the spillover mechanism, I expect that while positive evaluations foster confidence in one's own ability to effectively express oneself and foster positive views of the responsiveness of authorities, it is less clear what the effect of negative evaluations of participation might be. For internal efficacy, individuals might still learn from negative evaluations (e.g., how *not* to participate effectively), but levels of efficacy are higher following positive evaluations compared to after negative evaluations, since individuals also attribute negative experiences to a lack of personal skills and abilities (Almond and Verba, 1963). Geurkink et al.'s findings suggest such a mechanism since the authors find positive effects of positive evaluations but no effect of negative evaluations on internal workplace efficacy (2022). For external efficacy, positive evaluations result in the above presented positive effects of participation, but negative evaluations may induce a sense that authorities do not want to listen or do not act on individuals' demands (Milliken et al., 2015; Wolak, 2018; Geurkink et al., 2022). Either way, the result for both internal and external efficacy is that positive evaluations translate into more efficacy than negative evaluations of participation. Therefore, I expect to find the following:

Positive evaluations of participation result in more efficacy than negative evaluations of participation (H6).

For the competition mechanism, the evaluation of participation mainly affects individuals' involvement needs. The competition mechanism states that individuals have a certain need to be involved and to have an influence, which can be satisfied in one sphere, reducing the need to participate in another sphere. I expect positive evaluations to indeed be likely to satisfy one's involvement needs, but when evaluations are negative, this need is less likely to be satisfied or is satisfied to a lesser extent. Negative evaluations might result in the need to find an alternative outlet for one's discontent: a substitution effect. Such a substitution effect is already observed in strike research: a lack of opportunities to strike results in an increase in alternative protests (Hebdon, 2005; Hebdon and Stern, 2003). Therefore, positive evaluations of participation will result in less participation than negative evaluations of participation since the former is likely to satisfy one's involvement need, while the latter does not satisfy this need (or at least to a lesser extent) and might result in a substitution effect. Therefore, I expect to find the following:

Positive evaluations of participation result in less participation in the other sphere than negative evaluations of participation (H7).

3.3. Data and Measures

3.3.1. Data

To test my hypotheses, I have collected the Work and Politics Panel Study, which is a two-wave study of over 6000 respondents from the Dutch labor force. The fieldwork was carried out by Kantar Public using the TNS NIPObase, a panel containing over 235,000 individuals from the Netherlands. The first wave of the Work and Politics Panel Study was conducted in 2017 and involved 7599 respondents (response rate of 64%), and the second wave was held in 2018 and involved 6,008 respondents (response rate of 83%). The data are representative of the Dutch labor force with regard to gender, age and education.

The use of panel data offers several advantages over the use of cross-sectional information for testing my hypotheses. First, the temporal order of the variables of interest is in line with that which I theoretically expect. Since the period for which I ask respondents to recall their participation both at work and in politics is equal to or shorter than the interval between the waves of the panel, I fully overcome temporal issues by using panel data. Second, using panel data, I am able to control for an important predictor that cross-sectional data cannot control for: previous levels of participation and efficacy (i.e., lagged variables). Including these lagged variables in my models ensures that the actual effects that I find are not (partly) based on the effects of previous levels of the explained variables. However, this is only the case if the relationship between previous levels of participation and efficacy and current levels is causal. If other variables (e.g., personal characteristics) not included in the models do continuously affect levels of participation and efficacy, this overestimates the effect of lagged variables and underestimates the effects of the other predictors in the model. Following from this, the actual impact of the variables of interest on the outcome variables is to be found somewhere between those found in panel models and those without controlling for lagged dependent variables (see: Adman, 2008). Since I do make use of these lagged dependent variables, the estimates of the models can be interpreted as lower bounds (i.e., conservative estimates) of the actual effect I am interested in (see: Bäck et al., 2004).

3.3.2. Measures

Political Participation

For the measurement of political participation, I asked individuals whether they had participated in thirteen different types of political participation in the last 12 months. The types of political participation were selected to include different kinds of participation ranging from more standard electoral and representative forms of participation (e.g., voting in referenda and contacting politicians) to

more confrontational types of participation (e.g., protests). I combine the types of participation into three modes: voting, party activity and contacting, and protesting.[22] It has been argued that the spillover effect from workplace participation to political participation is stronger for certain types of political participation. In particular, party activities and contacting, acts that demand skills similar to those developed in the workplace, are expected to be affected by workplace participation (Verba et al., 1995; Adman, 2008). Additionally, the spillover and competition hypotheses assume part of the reciprocal relationship between workplace and political participation because they require certain skills and time and energy costs. I expect this to be less the case for voting than for other types of political participation. The three modes of political participation represent binary variables with a value of '1' indicating participation in this mode of political participation.

Workplace Participation

For workplace participation, I asked individuals whether they had experienced discontent about a work-related issue in the period between this wave and the former wave or over the last 3 years before the first wave. If they had experienced an issue at work, I asked them whether they acted on this by voicing their discontent, either to their supervisor or another channel (e.g., coworkers or works council). If they did so, they received a '1' for the variable *workplace voice*. If not, they received a '0' for this variable.

Evaluation of Participation

For the evaluation of political participation, I use three different measures. For the first wave, I have information on how individuals voted during the most recent national election; additionally, I know which parties gained seats and which parties lost seats. Therefore, I created the variable *preferred party performance* indicating the percentage of votes a party gained or lost during the election relative to the previous national election.[23] Losing votes constitutes a negative evaluation of participation, while gaining votes is seen as a positive evaluation.

Since the government was formed several months after the collection of wave 1 data, I used this information again at wave 2. I use the *preferred party in government,* indicating whether ('1') or not ('0') individuals' party of choice was in government at the time, with the preferred party in government constituting

22 Although party activity and contacting are sometimes regarded as separate modes of political participation (e.g., Adman, 2008), I combine them into one mode to improve the model estimation.

23 Individuals indicating that they cast an invalid vote, did not remember how they voted or did not vote received a score of '0' on this variable.

the positive evaluation of participation. Additionally, between waves 1 and 2, a (nonbinding) national referendum on the Dutch Intelligence and Security Services Act was held. For the wave 2, I asked individuals about their *satisfaction with government response* based on the result of the referendum with responses ranging from very dissatisfied ('1') to very satisfied ('5').

For experience with workplace participation, I asked individuals who expressed their workplace voice directly to their supervisor or whose supervisor was aware of this voice expression how the supervisor responded. If applicable, I categorized these responses as support or suppression.[24] I then created exclusionary dummy variables indicating *support by supervisor, suppression by supervisor, both support and suppression, no support or suppression,* and *no voice*. Support by supervisor can be seen as a positive evaluation of workplace participation, while suppression by supervisor can be seen as a negative evaluation of workplace participation. Since I am interested in the effect of positive evaluations relative to negative evaluations (hypotheses 6 and 7), I use *suppression by supervisor* as the reference category and present the effect of *support by supervisor* in the main figures. I include the other response categories but do not present their effects in the main text. Therefore, the effect of support by supervisor can be interpreted as the effect of a positive evaluation of workplace participation compared to a negative evaluation of workplace participation (i.e., suppression by supervisor).

Efficacy

As discussed in the theoretical framework, I distinguish between internal and external efficacy. To measure these concepts, I asked individuals to what extent they agreed with several items on a scale ranging from '1' (strongly disagree) to '5' (strongly agree). To fully grasp the extent to which individuals feel competent to express themselves and feel that authorities are responsive, I used, following recommendations made by Morell (2005), specific items to measure efficacy at work and in politics, resulting in *internal workplace efficacy* (e.g., Employees like me are very capable of pursuing their interests as workers), *external workplace efficacy* (e.g., Generally, my supervisor listens to the problems of employees like me), *internal political efficacy* (e.g., Politics is so complicated that I cannot really understand what is going on), and *external political efficacy* (e.g., Politicians do not care about what people like me think).[25] Previous research shows that these measures are coherent constructs with sufficient discriminant validity (see Geurkink et al. 2022).

24 See Appendix 3.1. for a full list of possible responses of supervisors and my categorization.

25 See Appendix 3.2 for an overview of all items used.

Control Variables

I control for *education* (middle or higher educated compared to lower educated), *age* (18 years = 0), *age squared,* and binary variables for *gender* (male = 0), *migrant* status (native = 0), and whether the individual is a *supervisor (*1 = yes), which were measured in wave 1. For the inclusion of the control variables in the structural equation models, I follow Little's recommendation of a full partial inclusion of the control variables (2013). Control variables predict both endogenous and exogenous variables of interest, and nonsignificant covariates are pruned to reduce overcontrol with only "*marginally significant effects*" (p<.10) left in the model (Little 2013, p. 195).

3.3.3. Missing Data

The structure of the data presents some problems with regard to missing data. First, some of the respondents did not work (or not in an organization) in one or both of the waves under study. Since many of the questions of interest are premised on working within an organization, these questions were not posed to individuals who were not working (in an organization) in either of the waves. Second, some individuals did not complete the survey in the second wave. For these two groups, it is not possible to study the reciprocal relationship between workplace and political participation; therefore, I decided to remove these respondents from the sample (2,511 respondents).

Imputation

The remaining sample still has missing data. The remaining sample (10,176 observations over two waves; 5,088 respondents) features missing data mostly due to missing observations on workplace voice (39.8%), evaluations of workplace voice (39.8%), and evaluations of political participation items (15.8% - 16.2%). Additionally, the data have some missing observations for two of the control variables: native (0.2%) and supervisor (4.4%). Since these missing data are distributed across the respondents[26], I have only 1,602 participants (3,204 observations) with complete data on all variables of interest.[27] Since I find that individuals with and without missing data systematically differ on background variables,[28] restricting the analyses to complete case analyses could bias my results.[29] To address the missing data for the remainder of the sample, I performed

26 See Appendix 3.3. for an overview of the missing data patterns of the dataset.

27 However, note that using listwise deletion results in a larger number of observations since I do not include all of the variables in a single model.

28 See Appendix 3.4. for an overview of the background characteristics (gender, age, and education level) of individuals with and without missing data.

29 Nevertheless, I recalculated all subsequent statistical models using listwise exclusion of missing data. See Appendix 3.5. for a presentation of these results and a discussion of the observed differences.

multiple imputation using a chained equations method to use partially observed data from incomplete cases. Using multiple imputation, I created multiple datasets where for each dataset, the missing values were replaced with different imputations that reflect uncertainty levels (King et al. 1998). Following recommendations made by Nguyen et al. (2017), I computed 70 datasets of imputed values on which I ran the analyses. The results of these analyses are combined in a way that takes into account the variance within and between these datasets. To take into account the multilevel structure of the data, I add a cluster dummy for the two waves, as suggested by Graham (2009). I use both the incomplete variables and the variables on which I have complete information to impute variables with missing values and add six auxiliary variables: job satisfaction, job security, work hours, experiencing an issue in the workplace, trust in government, and political interest. Comparisons between the observed and imputed data show that the means and percentages are fairly similar.[30] The largest differences can be found from the evaluation of workplace participation, with higher percentages of support by supervisor found in the imputed datasets and lower percentages of suppression by supervisor in the imputed datasets. However, these differences are not extreme, and some difference could be expected.

3.3.4. Methods

Before I test my hypotheses over time, I first establish the measurement invariance of the latent constructs introduced above (i.e., different forms of efficacy), showing that comparisons over time are possible (see Appendix 3.7). For the test of my hypotheses over time, I use cross-lagged structural equation models (CLSEMs). Such models use the time-ordered nature of panel data to address questions of causal ordering (Berrington et al., 2006). CLSEMs include both autoregressive terms, indicating the stability of the same variable over time within individuals, and cross-lagged terms, indicating the extent to which a variable is able to predict changes in another variable between waves 1 and 2. I use the weighted least squares mean and variance-adjusted (WLSMV) estimator because some variables used are categorical with fewer than five response categories. I estimate separate models for the three different modes of political participation and, for the overlapping paths, present their average estimates in the figures below. Since the CFI is unreliable in evaluating DWLS models (Nye and Drasgow, 2011), I rely on the RMSEA and SRMR for the model fit (with the latter being the most robust index for evaluating model fit) (see Shi and Maydeu-Olivares 2020). I find that all of the models presented below have acceptable fit indices (i.e., RMSEA <.06, SRMR <.08 (Hu and Bentler, 1999)).

30 See Appendix 3.6.

3.4. Analyses and Discussion

3.4.1. Efficacy and Participation

To test our hypotheses, I ran the analyses using cross-lagged structural equation models. The results presented in the figures below represent over-time effects while controlling for the previous level of the explained variable. For example, the effect of internal workplace efficacy on internal political efficacy (0.21) represents the effect of internal workplace efficacy in wave 1 on internal political efficacy in wave 2, controlling for internal political efficacy in wave 1 (in addition to the inclusion of control variables). Figure 3.2. summarizes the most important findings concerning the first five hypotheses regarding the reciprocal relationship between workplace participation and political participation.[31] Hypothesis 1 states that participation induces efficacy. My findings largely support this hypothesis. First, I find that workplace voice induces internal workplace efficacy (0.11). Second, both voting and protest foster internal political efficacy (0.04 and 0.05). Third, all modes of political participation foster external political efficacy, ranging from a standardized effect of 0.03 (for voting) to one of 0.15 (for party activities and contacting). However, I do not find support for hypothesis 1 with regard to the effect of workplace voice on external workplace efficacy.

Hypothesis 2 states that efficacy in one sphere induces efficacy in the other. Specifically, I expect internal workplace efficacy to foster internal political efficacy and vice versa and external workplace efficacy to foster external political efficacy and vice versa. I find consistent support for this hypothesis; efficacy in one sphere fosters efficacy in the other sphere. I find the strongest effects for the relationship between internal workplace efficacy and internal political efficacy (0.21) and vice versa (0.27) with these effects being 0.14 and 0.16 for the external efficacy counterparts, respectively.

Hypothesis 3 states that efficacy induces participation. I find mixed results with regard to the effect of efficacy on participation. For the workplace, I find that external workplace efficacy makes workers more likely to express their voice (0.08), but I find no effect of internal workplace efficacy. In politics, I find that internal political efficacy has a consistently positive effect on all modes of political participation, ranging from 0.30 for protest to 0.35 for party activities and contacting. However, I find *negative* effects of external political efficacy on political participation. Higher levels of political efficacy reduce voting (-0.09) and protest (-0.14).

31 Note that I do not present the autoregressive effect or the effect of control variables. Model estimates can be found in Appendix 3.4. Autoregressive effects are on average 0.133 for workplace voice, 0.448 for internal workplace efficacy, 0.560 for external workplace efficacy, 0.904 for internal political efficacy, 0.671 for external political efficacy, 0.239 for voting, 0.400 for party activities and contact, and 0.373 for protest.

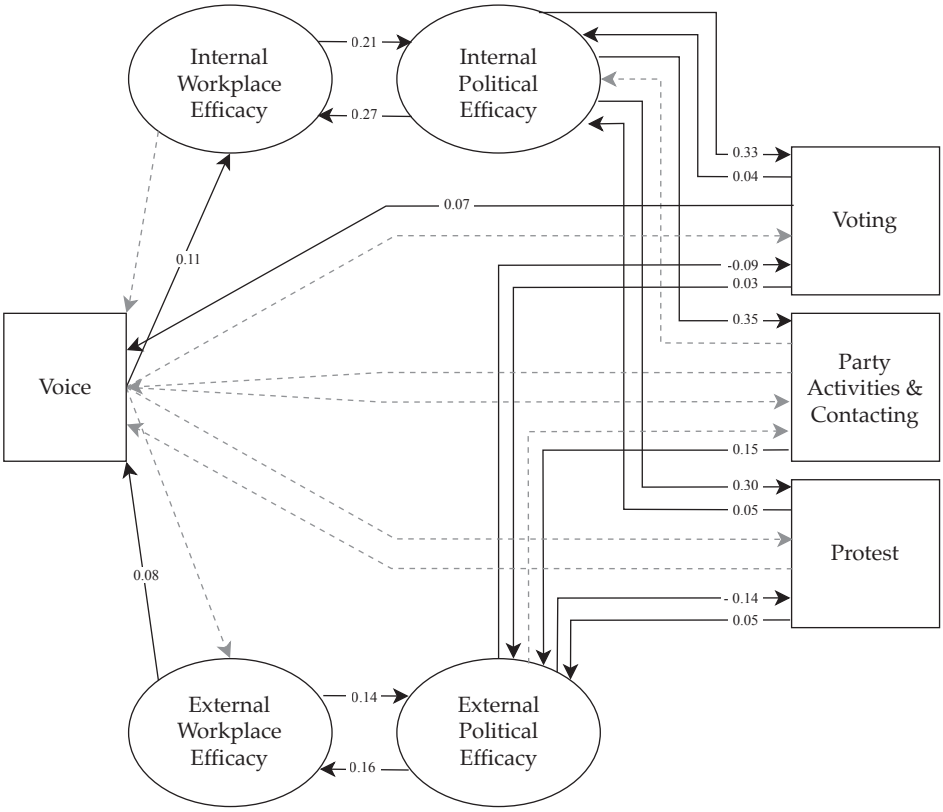

Figure 3.2. Reciprocal effects between voice at work and political participation.

Note: N = 5,088. Estimates are based on 70 imputed datasets. Estimates represent significant (p<.05) standardized effects. The model includes autoregressive effects and is controlled for by education level, age, age squared, migrant, and supervisor. Dashed lines represent hypothesized but insignificant effects.

From these findings I can also provide a provisional answer to the spillover hypothesis (hypothesis 4) and competition hypothesis (hypothesis 5). When I only address the effect of participation itself (and not its evaluation, as I do below), I find some support for hypothesis 4 and no support for hypothesis 5. Hypothesis 4 states that participation in one sphere positively affects participation in the other via efficacy. I find this to apply for workplace participation to political participation via internal efficacy. Workplace voice fosters internal workplace efficacy, internal workplace efficacy fosters internal political efficacy, and the latter fosters all modes of political participation. Additionally, I find that political participation fosters workplace participation via external efficacy. All

modes of political participation foster external political efficacy, and external political efficacy induces external workplace efficacy, which fosters workplace voice. However, no consistent effect is found for the effect of workplace participation on political participation via the external efficacy pathway or for the reverse effect via the internal efficacy pathway. For the competition hypothesis, which posits a negative direct relationship between participation in one sphere and the other, I find no support. The only direct effect that I find is a *positive* effect between voting and workplace voice; thus, voting fosters workplace voice.

3.4.2. Effects of the Evaluation of Participation

For effects of the evaluation of participation, I present two figures. Figure 3.3 shows the effects of the evaluation of participation in the workplace.[32] The results for the evaluation of political participation are presented in Figure 3.4. For Figure 3.3, I present the effect of support by supervisor and use suppression by supervisor as the reference category. I also include the other evaluation of workplace voice categories (i.e., no voice, no support or suppression, and both support and suppression) but do not present these categories in Figure 3 because I have no hypotheses with regard to their effects. Full model estimates can be found in Appendix 3.4. For the effect of the evaluation of political participation (Figure 3.4), I estimated the direct effect of preferred party performance on workplace voice, while I estimated the effect of having one's preferred party in government and satisfaction with government response on internal and external political efficacy.

Hypothesis 6 posits that a positive evaluation of participation would result in more efficacy than negative evaluations of participation. I find effects of the evaluation of workplace participation (i.e., support by supervisor) on both internal and external workplace efficacy. Compared to suppression by supervisor, support by supervisor results in more internal workplace efficacy (0.09) and especially external workplace efficacy (0.64). For the effect of the evaluation of political participation, the results show that having one's preferred party in government induces external political efficacy (0.14), while this effect is 0.29 for satisfaction with the government's response. I find no significant effects between the evaluation of political participation and internal political efficacy. These findings provide support for hypothesis 6. Positive evaluations of participation result in more efficacy than negative evaluations of participation, but I find that this is mostly the case for external efficacy.

32 Note that I estimate the entire model, including many already discussed relationships. Although the model specification is different, I find only very marginal differences with regard to the overlapping relationships.

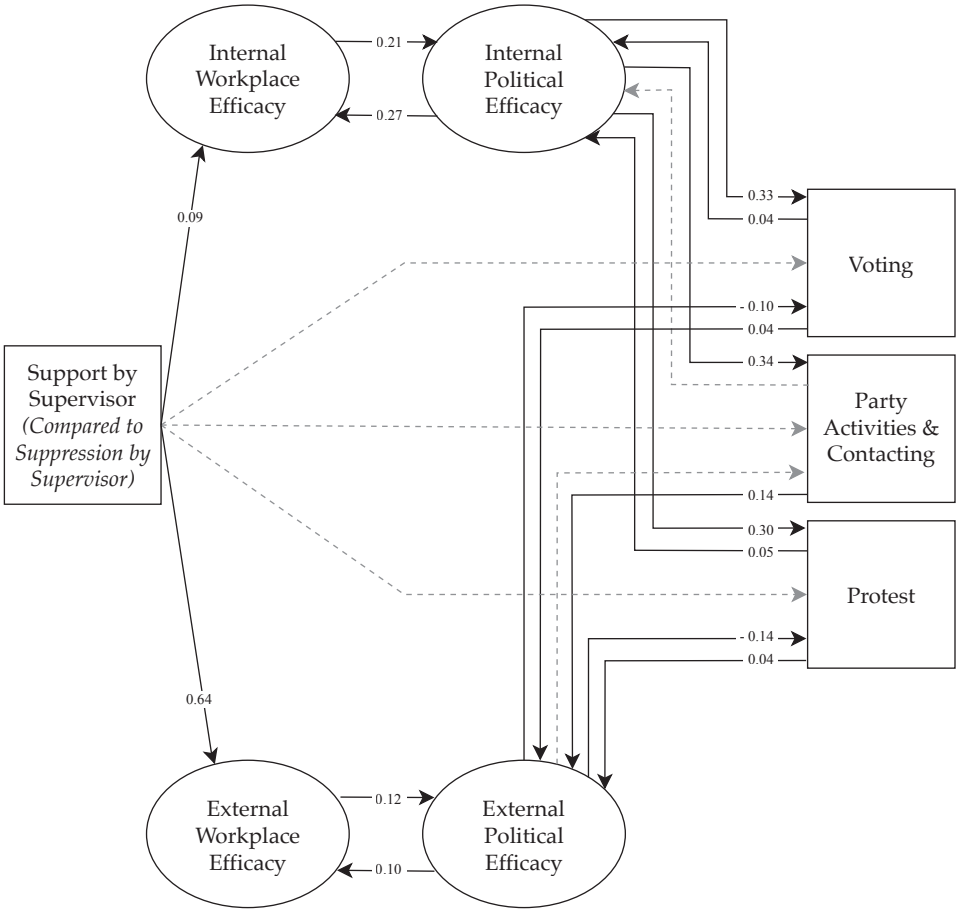

Figure 3.3. Reciprocal effects between experiences with voice at work and political participation.

Note: N = 5,088. Estimates are based on 70 imputed datasets. Estimates represent significant ($p<.05$) standardized effects. The model includes autoregressive effects and is controlled for by education level, age, age squared, migrant, and supervisor. Dashed lines represent hypothesized but insignificant effects. Additional categories of evaluation with workplace participation were included in the model (i.e., no voice, no support or suppression by supervisor, and both support and suppression by supervisor), but only the effects of interest (support compared to suppression) are presented in the figure.

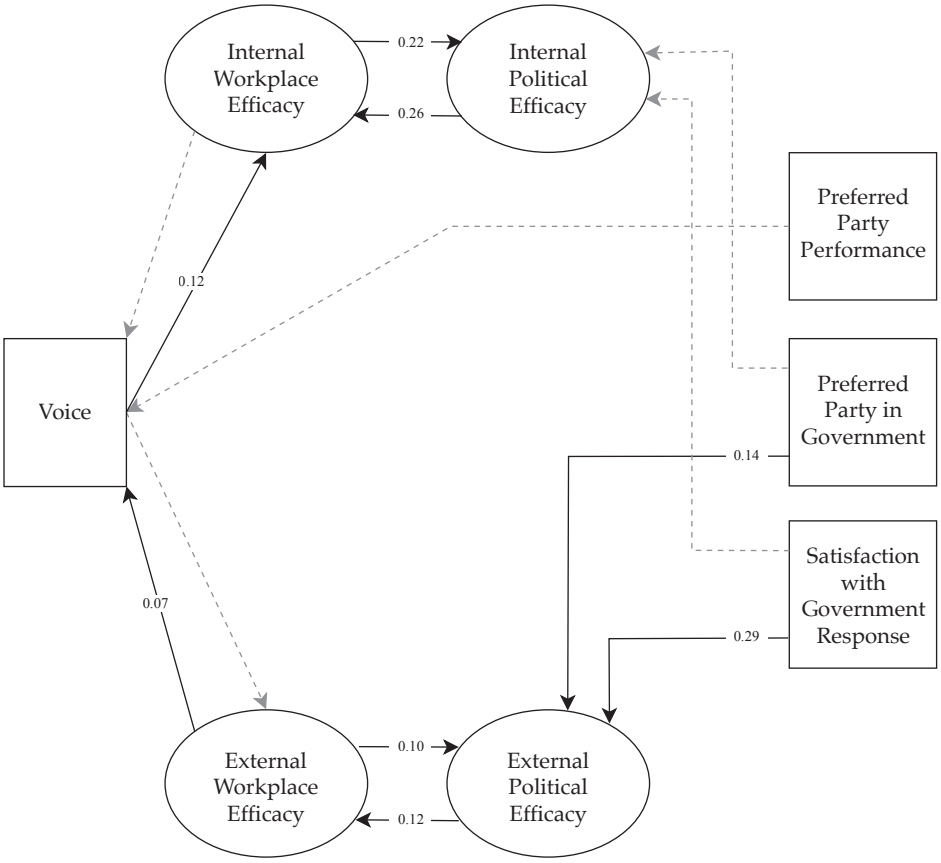

Figure 3.4. Reciprocal effects voice at work and political experiences.

Note: N = 5,088. Estimates are based on 70 imputed datasets. Estimates represent significant ($p<.05$) standardized effects. The model includes autoregressive effects and is controlled for by education level, age, age squared, migrant, and supervisor. Dashed lines represent hypothesized but insignificant effects.

Hypothesis 7 posits that positive evaluations of participation result in less participation than negative evaluations of participation. With regard to the effect of the evaluation of workplace participation (i.e., support by supervisor), I find no direct effect on political participation. For the evaluation of political participation (i.e., preferred party performance), I also find no significant effect on workplace participation. Therefore, these results do not provide support for hypothesis 7.

3.4.3. Spillover and Competition Mechanism

In conclusion, the main aim of this chapter is to understand the explanatory power of the spillover and competition mechanism in the two-way relationship between workplace and political participation and the role of the evaluation of participation in this relationship. I find no support for the competition mechanisms (hypothesis 5): the idea that participation in one sphere directly reduces participation in the other sphere. The only direct effect that I find is a positive one whereby voting induces workplace participation.

For the spillover mechanism, I find support for the hypothesis that participation in one sphere induces participation in the other via efficacy. First, I find consistently strong support for the spillover of efficacy from the workplace to politics and vice versa. This shows that confidence gained in one's own ability to participate and perceptions of authorities' responsiveness transfer over time between the political and work spheres. Second, I find that participation and evaluations of participation affect efficacy. Workplace participation fosters internal workplace efficacy, and (positive) evaluations of workplace participation affect both internal and external workplace efficacy. Political participation fosters both internal and external political efficacy, and (positive) evaluations of political participation induce external political efficacy. Third, I find mixed results for the effects of efficacy on political participation. External workplace efficacy fosters workplace participation, but I find no effect of internal workplace efficacy. Political participation is fostered by internal political efficacy, but I also find that external political efficacy lessens, instead of increases, voting and protesting (i.e., political participation). Therefore, with regard to hypothesis 4, the results indicate that participation in the workplace can induce participation in politics and vice versa via efficacy (e.g., workplace voice fostering internal efficacy, inducing political participation) but that this effect does not apply to all two-way pathways linking political and workplace participation. Moreover, the inducing effect of positively evaluated participation in the workplace on external efficacy might even *reduce* political participation, since I find negative effects of external political efficacy on political participation. Last, I find that the evaluation of participation matters for the spillover mechanism. I find that positive evaluations of participation result in more efficacy than negative evaluations, both at work and in politics.

An overview of the tested relationships for the different hypotheses and of the findings is presented in Table 3.1. Empty cells represent no hypothesized expectations, bolded effects and hypotheses indicate support for expected effects, and crossed-out cells signify expected but unsupported effects.

Table 3.1. Hypotheses and findings.

W1 \ W2	Workplace Participation	Internal Workplace Efficacy	External Workplace Efficacy	Internal Political Efficacy	External Political Efficacy	Political Participation
Workplace Participation		**+ (H1)**	+ (H1)			- (H5)
Internal Workplace Efficacy	+ (H3)			**+ (H2)**		
External Workplace Efficacy	**+ (H3)**				**+ (H2)**	
Internal Political Efficacy		**+ (H2)**				**+ (H3)**
External Political Efficacy			**+ (H2)**			+ (H3)
Political Participation	- (H5)			**+ (H1)**	**+ (H1)**	
Positive Evaluations of Workplace Participation		**+ (H6)**	**+ (H6)**			- (H7)
Positive Evaluations of Political Participation	- (H7)			+ (H6)	**+ (H6)**	

Note: Hypothesis 4 is not presented in the table because it reflects a combination of the expected effects of hypotheses 1, 2, and 3. Empty cells denote no hypothesized expectations, bolded effects and hypotheses indicate support for expected effects, and crossed-out cells signify expected but unsupported effects.

3.5. Conclusion

In this chapter, I contribute to understanding of the relationship between workplace participation and political participation. Some previous studies find support for a positive relationship, while others find a negative or even no relationship. However, as I discuss in this chapter, different mechanisms underlie potential positive and negative effects between participation in one sphere and participation in the other, which may statistically cancel each other out. If some mechanisms lead to negative effects of participation while others lead to positive effects, the overall effect may be zero. Therefore, rather than merely focusing on whether the total effect is positive or negative, I study which mechanisms are at play in the relationship between workplace participation and political participation.

This chapter builds on the existing literature on the bidirectional link between workplace participation and political participation in four ways. First, I test the potential mechanisms that link workplace and political participation simultaneously and find support for the spillover mechanism. Second, I use data to distinguish between the effects of the different mechanisms by including measurements of efficacy. I show that these intermediary steps of the spillover mechanisms matter for understanding the relationship between workplace participation and political participation and vice versa. Third, I test bidirectional effects between workplace participation and political participation and show that the effects indeed go both ways but not through all theorized pathways. Additionally, I find that participation in the workplace also reduces political participation through the spillover mechanism. Therefore, I show positive and negative pathways for the effect of workplace participation on political participation. Last, I show that evaluations of participation matter both in politics and in the workplace: A positive evaluation of participation results in more efficacy than negative evaluations of participation. By addressing these four aspects, I answer my research question: *To what extent do the spillover and competition mechanism explain the two-way relationship between workplace participation and political participation and to what extent do evaluations of participation affect this relationship?* I find support for a two-way relationship following the spillover mechanism but not for the competition mechanism and find that evaluations of participation contribute to our understanding of these relationships.

This chapter contributes to understanding of the bidirectional relationship between workplace participation and political participation, but some aspects remain unclear. I capture (evaluations of) workplace participation by relying on a very specific measurement of expressing workplace voice. This allows us to pinpoint the effect of a specific participation experience in the workplace on efficacy and political participation. However, focusing on this type of workplace participation might underestimate the actual role of the competition mechanism in the relationship between workplace participation and political participation. I do not differentiate between different levels of resources (e.g., time) used for workplace participation. In general, workplace voice is not a time or money intensive form of workplace participation, especially when compared to, for example, works council membership. Therefore, workplace voice might play a relatively modest role in competition over people's time and money, underestimating the actual effect of the competition mechanism. I therefore call for further research that takes into account forms of workplace participation that require more time, money and energy and that operationalizes the amount of such resources invested when testing the competition mechanism.

Since I only test the effects of one form of workplace participation (i.e., workplace voice), I am unable to test the effects of forms of workplace participation with different levels of formality. One of the assumptions behind the spillover of workplace experiences to political behavior (and back) is proximity in the level of formality (see Sobel, 1993). This may result in different formally structured types of participation having different effects. Further research could address these linkages. For example, it might be that formally structured workplace participation (e.g., voting in work council elections) affects formally structured political participation (e.g., voting in parliamentary elections) more than less formally structured political participation (e.g., protesting).

This chapter calls for more research on the reciprocal link between workplace participation and political participation. Especially in times in which labor market regulations are subject to change and affect individuals' opportunity to participate at work, focusing on the link between workplace participation and political participation is important. After all, if workplace participation is suppressed, this has the potential to affect not only workplace affairs but also broader societal affairs, including political efficacy and participation. Furthermore, if participation in the workplace becomes more costly and focused on individual participation, spillover effects from political participation might foster individuals' confidence in their ability to do participate.

4

Linking Education and Political Participation: The Role of Workplace Socialization

There are large educational inequalities in political participation, with higher educated individuals participating more. I argue that these differences in political participation are partly caused by political socialization in the workplace. I scrutinize the effects of workplace participation, political discussion, and social capital acquisition in the workplace. Using data of 3,037 Dutch workers, I find that higher educated have more access to workplace political socialization than lower educated. In turn, political socialization in the workplace relates positively to political participation. My findings suggest that political inequalities arising from educational differences are reinforced by peoples' workplace experiences.

A slightly different version of this chapter is currently under review with an international journal. I analysed and interpreted the data under the supervision of Agnes Akkerman and Roderick Sluiter. I drafted the chapter, and Agnes Akkerman and Roderick Sluiter provided critical revisions. All authors approved the final version of the manuscript. The study on which the chapter is based was presented at the Politicologenetmaal 2019 in Antwerp, Belgium, 2019, June 13-14, Dag van de Sociologie in Amsterdam, The Netherlands, 2019, June 27, European Sociological Association in Manchester, United Kingdom, 2019, August 20-23 and Dutch Labor Market Day in Utrecht, The Netherlands, 2019, October 10.

4.1. Introduction

Education is often found as an important explanation for political participation. *"There is probably no single variable in the survey repertoire that generates as substantial correlations […] as level of formal education […] and the relationship is always in the same direction. The higher the education, the greater the 'good' values of the variable"* (Converse, 1972: 324), and this includes levels of political participation; individuals with higher levels of education are more likely to participate in politics compared to those with lower levels of education (Persson, 2015; Verba et al., 1995). For example, in the Netherlands, those with a university degree more often vote during elections (89.3% vs. 64.9%), contact politicians (19.6% vs. 2.1%), and participate in political protests (7.8% vs. 1.7%) compared to individuals who only completed primary education (Schmeets, 2017).

In the scientific debate on understanding the educational differences in political participation, three explanations dominate. The first explanation emphasizes socialization and skills acquisition in school; schooling develops individuals' knowledge, skills, and norms, which foster political participation (Kingston et al., 2003; Pallas, 2000; Persson, 2015; Verba et al., 1995). The second explanation presents education as a sorting mechanism: individuals with higher levels of education obtain different positions in society, which induces their political participation (Müller and Shavit, 1998; Nie et al., 1996; Pallas, 2000; Shavit and Müller, 2000). Those with higher levels of education are exposed to networks that encourage participation and are more likely to be recruited to political participation (Persson, 2015). These two explanations proclaim that education has a causal effect on political participation. A third explanation questions this causal effect and claims that education mainly serves as a proxy for family political socialization: pre-adulthood experiences and dispositions affect both attained or pursued education levels and political participation (Berinsky and Lenz, 2010; Kam and Palmer, 2008).[33] Regardless of whether education is a cause of political participation, above presented differences in political participation undoubtedly exist.

I build on the debate on educational differences in political participation and start from the idea that socialization and the acquisition of political skills not only takes place during childhood and adolescence, but continues during adulthood, and specifically, at the workplace (Peterson, 1992; Brady et al., 1995). I build upon the first two explanations presented above and argue that differently educated individuals have different experiences and social interactions in the

33 But note that these explanations are contested and still topic of scientific debate (see for example: Henderson and Chatfield, 2011; Mayer, 2011; Persson, 2015; Gidengil et al., 2019)

workplace, resulting in different access to political socialization. This inequality in political socialization at work contributes to the already existing differences in political participation.

Work prepares for political participation in three ways. First, the workplace constitutes a small-scale political arena, and participation in it enhances important political skills (Greenberg et al., 1996; Wasburn and Adkins Covert, 2017), especially if the experiences with workplace participation are positive (Carter, 2006; Geurkink et al., 2022). Second, political discussion at work - involving cross-cutting discourse more often than in any other context (Brundidge, 2010; McCall and Manza, 2011; Mutz, 2002; Mutz and Mondak, 2006; Wasburn and Adkins Covert, 2017) - fosters individuals' interest in and understanding of politics, resulting in higher levels of political participation (La Due Lake and Huckfeldt, 1998; Zhang et al., 2010). Third, non-political social interactions also foster political participation, through the development of social capital (Estlund, 2003).

Compared to lower educated individuals, the tasks, roles, and context for higher educated individuals exposes them to more experiences with workplace participation (Oreopoulos and Salvanes, 2011; Pallas 2000), political discussion (Cramer, 2004; Hibbing et al., 2011), and social capital (Behtoui and Neergaard, 2012; Estlund, 2003; Handel, 2016). This different exposure to political socialization at work in turn can help us understand educational differences in political participation.

I extent beyond the effect of institutional participation at work on political participation and consider the effects of broader political and non-political interactions between workers and their colleagues and supervisors. I study 3,037 individuals from the Dutch labor force using a unique dataset containing information about individuals' experiences in the workplace and their political participation to answer the research question: *How and to what extent do workplace participation, political discussion, and social capital explain educational differences in political participation?*

4.2. Theories and Hypotheses

I present three types of political socialization in the workplace which foster political participation. First, I argue that experiences with workplace participation foster important skills which promote political participation. Second, I argue that political discussion with co-workers, fosters political participation. Third, I address non-political social interactions' effect on political participation, by addressing the effect of social capital. For each of these types, I discuss why they

foster political participation and why I expect higher educated individuals to be more often exposed to these types of political socialization at work.

4.2.1. Workplace Participation

The workplace functions as a political arena on a small scale in which workers participate in organizational decision-making and pursue their interest and attempt to improve and defend working conditions (Ferris et al., 2000; Jian and Jeffres, 2008). By participating at work, workers can develop and learn political skills such as debating, negotiating, and mobilizing, which affect political behavior, since the authority patterns in the workplace resemble those in politics: "*The workplace provides an education in the management of collective affairs that is difficult to parallel elsewhere*" (Pateman, 1970, p. 43; Kriesi and Westholm, 2007). Therefore, workplace participation has the potential to increases political participation (Carter, 2006; Greenberg et al., 1996; Milliken et al., 2015; Verba et al., 1995; Budd et al., 2018; Wu and Paluck, 2020).

I expect higher educated individuals to participate more in the workplace compared to lower educated individuals. For one, the extent to which workers can express their opinion and interest is positively related to their hierarchical position (Kriesi and Westholm, 2007; Verba et al., 1995). Furthermore, because higher educated work more in managerial position, in which they exercise power and influence (Almond and Verba, 1963; Ferris et al., 2000; Marsden, 2013), higher educated participate in the workplace as inherent part of their roles and tasks. Akkerman et al. (2015) even show that in organizations with more higher educated individuals, extensive employee participation is more prevalent. Moreover, higher educated individuals are found to be more confident in their verbal skills, increasing their engagement in participatory behavior in the workplace (Pitesa and Pillutla, 2019). Therefore, I expect the following:

> *Higher educated individuals are more likely to participate in the workplace than lower educated individuals (H1a), and participation in the workplace is positively related to political participation (H1b).*

Additionally, Greenberg et al. (1996) suggest that workplace participation is more stimulating when this experience is positive. It is therefore important to account for the evaluation of the experience. For this evaluation, the outcomes of the participation process are important. When the process resulted in desired outcomes and individuals are satisfied with this outcome, the outcome is regarded as positive which stimulates future participation. On the other hand, if individuals are not satisfied with the result of their participation, the experience maybe regarded as a disappointing one, discouraging future participation

(Carter, 2006). In addition to the result of workplace participation, the responses of peers (i.e., co-workers or supervisors) to workplace participation are important for the evaluation of this experience (Geurkink et al., 2022). Supportive responses of others towards workplace participation are likely to be evaluated positively, inducing the feeling that one can rely on others when workers pursue their interests. Instead, nonsupportive responses to workplace participation give the idea that collective action is difficult to establish, reducing political participation (Tucker et al., 2008).

I expect that higher educated individuals have more positive experiences with workplace participation. First, the jobs that higher educated individuals work in provide them with more ties to others and bargaining power than the jobs that lower educated individuals hold (Marsden, 2013). As a result, higher educated workers are more likely to have someone on which they can rely for advice, encouragement, or support or are more likely to attain a desired outcome (Oreopoulos and Salvanes, 2011; Pallas, 2000). Furthermore, since workplace participation is more often an important part of their job and they have more experiences with workplace participation, I expect that higher educated individuals have more opportunities to learn and apply strategies to convince others to support their cause. Lower educated individuals, however, are more likely to have weaker positions, have fewer ties to others and have fewer experiences with how to successfully participate in the workplace, which make them less likely to have a positive experience with workplace participation. Thus, I expect the following:

> *Higher educated individuals are more likely to have a positive experience with workplace participation than lower educated individuals (H2a), and positive experiences with workplace participation are positively related to political participation (H2b).*

4.2.2. Political Discussion

Next to the experiences with workplace participation, other experiences and interactions in the workplace can also prepare for political participation. Discussing politics fosters interest in politics, raise political awareness, help to crystallize political opinions, and provide a better understanding of and information on politics, which fosters political participation (La Due Lake and Huckfeldt, 1998; Leighley, 1990; McLeod et al., 1999; Schmitt-Beck and Lup, 2013). The effect of political discussion on political participation is especially strong if

they involve some degree of disagreement (Kwak et al., 2005).[34] That way, individuals learn about alternative perspectives, reflect more carefully on their own, and gain more knowledge about politics (Scheufele et al., 2006). Therefore, more political discussion is expected to foster political participation (Klofstad, 2010; McLeod et al., 1999; Pattie and Johnston, 2009; Searing et al., 2007; Wyatt et al., 2000).

Work is an important opportunity to engage in (cross-cutting) political discussion (Brundidge, 2010; Estlund, 2003; Jones, 2013; Mutz and Mondak, 2006; Putnam, 2000; Wasburn and Adkins Covert, 2017). Unlike most other social contexts (e.g., friends or political groups), people are less able to select with whom to interact and discuss issues (Djupe and Sokhey, 2014; Fischer, 1982; Warren, 1993). Although, for most people, the workplace is an important source of political discussion (Cramer, 2004; Mutz and Mondak, 2006; Wyatt et al., 2000; Conover et al., 2002; Scheufele et al., 2006), higher educated individuals are more likely to discuss politics in the workplace compared to lower educated individuals (Hibbing et al., 2011; Nir, 2012). The roles that higher educated individuals are more likely to have at work, generally involve more political discussion simply because of the higher frequency of workplace social interactions associated with these roles (Burt, 1990; Verba et al., 1995). Furthermore, the tasks of higher educated individuals involve more interactions with external actors, such as governmental actors (Ferris et al., 2000), interactions that are more of a political nature than the interactions in the roles of lower educated individuals. Therefore, I expect the following:

Higher educated individuals have more political discussions at work than lower educated individuals (H3a), and more political discussion at work is positively related to political participation (H3b).

4.2.3. Social Capital

Next to the political interaction of discussing politics, other, non-political, social interactions in the workplace can also affect political participation: social capital. Social capital consists of the connections among individuals that facilitates certain actions or outcomes (Coleman, 1988; Putnam, 1995). Social capital is an important driver of collective action, such as political action, for three reasons (Putnam, 2000; Rothstein and Stolle, 2002). First, norms of reciprocity between people allow individuals to overcome collective action problems, which

34 Note that there is some debate on the actual effects of cross-cutting political discussion on political participation (Mutz, 2002; Matthes et al., 2019). However, even those that find negative effects of disagreement, find that the positive effects of being involved in political discussion are way stronger than the negative effects of disagreement (e.g., Pattie and Johnston, 2009).

contributes to the success of collective action. Second, trustworthiness, tolerance, and empathy induce the likelihood that individuals put the well-being of the collective over self-interest. Third, connections between individuals foster the skills needed for cooperation, negation, and persuasion, which are relevant for political action (Estlund, 2003).

The workplace is an important agent of social capital formation. Individuals communicate, apart from their family members, most often with their coworkers (McCall and Manza, 2011). Via interactions with others in the workplace, individuals learn to work together and build trust, tolerance, and empathy (Putnam, 2000). Behtoui and Neergaard (2012) show that educational credentials are positively correlated to individuals' access to social capital in the workplace. For higher educated individuals, on average, social capital building activities are more often important elements of workers' tasks and work roles compared to lower educated individuals. Their tasks more often involve interactions with others, which enables the building of trust and norms of reciprocity. Furthermore, managerial roles, in which higher educated individuals are more prevalent, train them in the skills needed for cooperation, collaboration, negation and persuasion, fostering social capital (Putnam, 2000; Oksanen et al., 2013). Moreover, since higher educated individuals already have higher levels of social capital when they leave school (Fischer, 1982; Huang et al., 2009; Lin, 2002; Putnam, 1995) and more frequently interact with other higher educated individuals (Kilduff and Brass, 2010), the social capital that is generated during education is reinforced in the workplace (McPherson et al., 2001). Therefore, I expect the following:

> *Higher educated individuals have more social capital at work than lower educated individuals (H4a), and more social capital at work is positively related to political participation (H4b).*

To summarize my expectations briefly, I expect that the educational differences in political participation can be partly understood by looking at individuals' political socialization in the workplace (i.e., workplace participation, political discussion in the workplace, and workplace social capital). I expect that, compared to lower educated individuals, higher educated individuals have more workplace political socialization, which, in turn, induces their level of political participation.

4.3. Data and Measures

4.3.1. Data

I test my expectations using the Work and Politics Survey, which is a survey among Dutch individuals. This dataset consists of a representative sample of the Dutch labor force regarding gender, age, education, and work situation. The data were collected using the TNS NIPObase, which consists of approximately 235,000 individuals from the Netherlands from which a representative sample is drawn.[35] All the independent variables were collected between July and September 2017, and information on the dependent variable (political participation) was collected between October and November 2018[36], with a response rate of 64% and 83%, respectively. Dropouts do not differ significantly regarding my main variables of interest: education, political participation, workplace participation, political discussion, and social capital.[37] The final sample includes all those respondents on whom I have observations on the variables of interest, resulting in a sample of 3,037 individuals across all the analyses in this chapter.

4.3.2. Measures

Political Participation

To measure *political participation*, I asked respondents: "Which of the following did you do during the last twelve months?", followed by a list of twelve different types of political participation (see Appendix 4.2.). Additionally, I asked individuals whether they voted during the most recent municipal elections. In line with previous studies on political participation (e.g., La Due Lake and Huckfeldt, 1998; Verba et al., 1995; Kam and Palmer, 2008), I added these types of political participation and scaled the resulting variable so that it runs from "0" indicating no participation to "100" indicating participation in all possible ways, so that results can be interpreted as more percent types of participation. Therefore, a higher score on the political participation variable indicates taking part in more types of political participation.

35 Data was collected via internet (CAWI).

36 Since some individuals changed organization or started a different job between the collection of the collection of the independent and the dependent variables, I re-ran analyses, concerning political participation, excluding those individuals. Conclusions with regard to the hypotheses remain the same.

37 Appendix 4.1. provides an overview of the differences between the survey dropouts and non-dropouts.

Education

For the *level of education*, I asked for the highest level of education respondents attained. I created three dummy variables for which "1" indicated lower education ("no or primary education" or "lower secondary vocational training"), medium education ("middle-level secondary education", "middle-level vocational training" or "higher level secondary education or secondary scientific training"), and higher education ("higher level vocational training" or "university").[38]

Workplace Participation

To measure workplace participation, I use three indicators. I asked individuals whether they were a member of the *works council*.[39] Membership in the works council is a type of workplace participation in which employees have several power resources, such as rights of information, consultation, and codetermination, on a broad range of matters (Gumbrell-McCormick and Hyman, 2010).[40] Additionally, I whether asked individuals are or were a member of a *labour union*. Although labour union membership itself does not necessarily imply active workplace participation, studies show that being a member of a labour union does foster political participation (e.g., D'art and Turner, 2007). To address informal, more day-to-day expressions of interests and negotiation, I use as a third indicator for workplace participation: *workplace voice* (see: Sluiter et al., 2022). I asked individuals whether they had an issue in the workplace (e.g., insufficient career opportunities, dissatisfaction with wages, dissatisfaction with working hours, or feeling discriminated against) and, if so, whether they had voiced it either to their supervisor, coworkers, or via another channel within or outside the workplace. This measurement of workplace participation is close to 'lower level' workplace participation (1970: 73-74) and organizational voice (Milliken et al., 2015). I created a binary variable, with '1' indicating that individuals did express their voice.

To address whether workplace participation is evaluated positively, I assess three different aspects related to their workplace voice. First, I asked individuals to what extent they are satisfied with the way the problem they voiced is solved.

38 This categorization is in line with the one used by the Dutch Central Bureau of Statistics.

39 One might argue that participation is broader than works council membership only. Therefore, I re-ran the analyses including work council involvement (i.e., can you name a person who is member of the works council or can you name a topic that is discussed in the work council). This did not affect the conclusion with regard to the effect of the work council.

40 Establishments employing 50 employees or more are legally obliged to have a Works Council (WC). About 70% of the establishments complies to this obligation. Workers in the Netherlands are eligible for candidacy as soon as they work in the organization for 12 months. The work council can deviate from this rule if this promotes the working of the WC. Although the law limits WC membership to employees, the employer and WC jointly are allowed to extent these entitlements to others not formally employed, but working in the organization.

The variable *problem solved* is a five-point scale, which I recoded to range from 0 to 1 for comparability with the other types of political socialization in the workplace, with 1 indicated 'very satisfied'. For the variables *supervisor support* and *coworker support*, I asked respondents the following question: "After you voiced an issue, did that result in one of the following responses by *your supervisor/(some of) your coworkers?*" I categorized each of the supervisors' and coworkers' responses, and if individuals received support from their supervisors or coworkers, they received a '1'. Individuals who either did not voice or did not receive a supportive response were coded as '0'.

Political Discussion

For the workplace *political discussion*, I asked individuals whether they had one or more colleagues with whom they could discuss politics. This variable is a binary variable with '1' indicating that an individual does have one or more coworkers with whom they can discuss politics.

Social Capital

To measure individuals' workplace *social capital*, I used items as presented by Van der Gaag and Snijders (2005). The data allows us to measure different types of social resources to which individuals have access in the workplace (e.g., do you know anyone at work who can do your shopping when you are ill?) (see Appendix 4.3), which constitutes a valid measurement of social capital compared to measuring network size or intensity (Finsveen and Van Oorschot, 2008). I summed the number of social resources and scaled the variable so that it runs from "0" (no resources) to "1" (all possible resources).[41]

Control Variables

Next, I added several control variables to my analyses. For *contract type*, I created three categories, indicating whether an individual had (1) a permanent contract, (2) a temporary contract, or (3) another type (e.g., solo self-employed). I expect contract type to be related to education and workplace political socialization. In order to distinguish the effects of social capital and political discussion in the workplace and outside of the workplace, I also add *outside political discussion* and *outside social capital* to my analyses, measured in the same way as these variables at work, only specifically referring connection outside of the workplace. Furthermore, I controlled for whether individuals were *female* or not and for individuals' *age* (16 years = 0) and their squared age (*age squared*) to take into

41 Factor analysis shows that all items measure a similar construct. The Cronbach's alpha indicates high internal consistency (0.945).

account potential nonlinear effects of age. Table 4.1. provides descriptive statistics for the variables used in this chapter for all respondents included in the analyses.

Table 4.1. Descriptive Statistics variables for respondents in all analyses.

	Mean/%	**Std. dev**	**Min**	**Max**
Political Participation	13.11	9.95	0	100
Level of education				
Low	7.7%		0	1
Middle	44.6%		0	1
High	47.7%		0	1
EGP Class				
Service class	55.8%		0	1
Intermediate class	27.5%		0	1
Working class	16.7%		0	1
Social Capital	0.66	0.324	0	1
Political Discussion	77.3%		0	1
Works Council	16.0%		0	1
Workplace Voice	87.9%		0	1
Problem Solved	0.41	0.359	0	1
Supervisor Support	35.2%		0	1
Coworker Support	56.0%		0	1
Contract type				
Permanent	76.6%		0	1
Temporary	17.0%		0	1
Other	6.4%		0	1
Outside Social Capital	0.859	0.300	0	1
Outside Political Discussion	84.3%		0	1
Female	47.8%		0	1
Age *(16 years = 0)*	25.30	12.008	0	50
Age squared	794.02	632.589	0	2500

Note: N=3,037

4.4. Analyses

4.4.1. The Relationship Between Education and Political Socialization in the Workplace

For the first step of the analyses, I address the relationship between level of education and workplace political socialization. Table 4.2. displays the mean of each type of workplace political socialization by education level. This table show a clear pattern: the higher the education level, the more access to political socialization in the workplace. An exception is labor union membership. Lower educated individuals are more often a member of a labor union. In order to determine whether these differences between educational groups are significant, I estimate the effect of education level on each type of political socialization, as presented in Table 4.3. The results show that, compared to lower educated individuals, higher educated individuals have significantly more of each type of socialization, except for labor union membership, for which I find no significant difference between groups. Additionally, I find that middle educated individuals have more political discussion in the workplace.[42] For the differences between middle educated individuals and higher educated individuals, additional analyses (not shown here) show that higher educated individuals have significantly more workplace political socialization, except for problem solved and labor union membership. For labor unions, higher educated individuals are even significantly less likely to be a member compared to middle educated individuals. In conclusion, these findings support hypotheses 2a, 3a, and 4a: *Higher educated individuals have more social capital, political discussion, and positive experiences with workplace participation compared to lower educated individuals*.[43] For hypothesis 1a, regarding the differences in workplace participation, I find mixed results. Higher educated individuals are more likely to voice and to be a member of the works council, but I find no significant differences for labor union

42 Although I am interested in the educational differences in access to workplace political socialization, it might be argued that other factors correlate to both education level and political socialization and are partly responsible for the correlation that I find. Therefore, I have included several control variables to the models (see Appendix 4.4.). When controlling for contract type, gender, age and age squared, I find that the differences for problem solved, supervisor support, and coworker support become insignificant, not supporting the idea that these educational differences are caused by education level. Nevertheless, the results from Table 4.3 show that there are significant educational inequalities in the access to political socialization in the workplace.

43 Part of the theoretical mechanism linking education level and workplace political socialization assumes higher educated individuals to have different types of occupations compared to lower educated individuals. Mediation analyses show that, on average, about 59.6% of the relationship between education level and workplace political socialization can be explained by occupational differences (operationalized as either service class, working class, or intermediate class), see Appendix 4.5.

Table 4.2. Mean workplace political socialization by education level.

	Education Level		
	Low	**Middle**	**High**
Works Council	0.12	0.14	0.18
Labour Union	0.27	0.25	0.22
Workplace Voice	0.82	0.87	0.90
Problem Solved	0.37	0.40	0.42
Supervisor Support	0.31	0.33	0.38
Co-workers Support	0.50	0.54	0.59
Political Discussion	0.66	0.74	0.82
Social Capital	0.61	0.65	0.68

Note: N=3,037.

membership compared to lower educated individuals. If any, I find that higher educated individuals are less likely to be member of a labor union compared to middle educated individuals.

4.4.2. The Relationship Between Workplace Political Socialization and Political Participation

The above-presented analyses show that education relates to most types of political socialization in the workplace. I argue, furthermore, that this socialization affects individuals' level of political participation.[44] Table 4.4. shows the results of the analysis testing the relationship between workplace political socialization and political participation.[45] The findings show that, when controlling for the other characteristics, works council membership, labour union membership, coworker support, and political discussion are positively related to individuals' political participation. I find that work council members are 16.8% more likely to participate in an additional type of political participation compared to individuals who are not a member of a work council. These predicted effects are 13.0% for labor union membership, 7.3% for those who have their voice supported by coworkers, and 12.8% for individuals who can discuss politics in the workplace. Combined, compared to those without all

44 The bivariate effects between workplace political socialization and political participation are presented in Appendix 4.6.

45 Since the dependent variables could be considered a count variable, I also tested our expectation using a negative binomial regression analysis. The below-discussed findings show robust effects (see Appendix 4.7).

Table 4.3. OLS regression estimates of the relation between education and workplace political socialization.

	Works Council	Labour Union	Workplace Voice	Problem Solved	Supervisor Support	Coworker Support	Political Discussion	Social Capital
Education Level								
(low = ref)- *Middle*	0.02	-0.02	0.04	0.03	0.02	0.05	0.08*	0.04
	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)	(0.03)	(0.03)
- *High*	0.06*	-0.06	0.08*	0.05*	0.07*	0.09*	0.17*	0.08*
	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)	(0.03)	(0.03)
Constant	0.12*	0.27*	0.82*	0.37*	0.31*	0.50*	0.66*	0.82*
	(0.02)	(0.03)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)

Note: N=3,037; *p<0.05; I applied linear probability models with robust standard errors for models for works council, labour union, workplace voice, supervisor support, coworker support, and political discussion; standard errors in parentheses.

Table 4.4. OLS regression estimates of workplace political socialization on political participation

Works Council	2.18*
	(0.48)
Labour Union	1.69*
	(0.42)
Workplace Voice	0.20
	(0.63)
Problem Solved	0.38
	(0.61)
Supervisor Support	0.36
	(0.43)
Coworker Support	0.95*
	(0.39)
Political Discussion	1.66*
	(0.51)
Social Capital	-1.07
	(0.64)
Education Level (Low = ref)	
- *Middle*	2.47*
	(0.68)
- *High*	6.00*
	(0.69)
Contract type (permanent = ref)	
- *Temporary*	1.89*
	(0.50)
- *Other*	1.44*
	(0.72)
Outside Political Discussion	2.45*
	(0.70)
Outside Social Capital	0.15
	(0.83)
Female	-1.59*
	(0.35)
Age *(16 years = 0)*	-0.11
	(0.06)
Age squared[a]	0.38*
	(0.12)
Constant	4.61*
	(1.14)
Adj. R-squared	0.108

Note: N=3,037; *p<0.05; standard errors in parentheses. [a]For interpretation purposes, we presented the actual effect multiplied by 100.

of these types of political socialization, those with are 49.8% more likely to participate in an additional type of political participation. Thus, I find support for hypotheses H1b, H2b, and H3b. These results do not show a significant relationship between social capital in the workplace and political participation (H4b) and that neither workplace voice, the extent to which the problem is solved, nor supervisor support is related to political participation. Mediation analyses show that about 6.7% of the total differences in political participation between lower and higher educated individuals can be explained by workplace political socialization (see appendix 4.5). Next to the hypothesized effects, I find positive effects of education level and political discussion outside of the workplace, I find that individuals with a temporary contract are more likely to participate politically compared to individuals with a permanent contract, that woman are less likely to participate, and that age has a nonlinear effect, with the lowest level of political participation when individuals are 30.

Additionally, I address the relationship between workplace political socialization and different modes of political participation (Table 4.5.). I do this to see whether the relationships that I find for political participation are driven by several types of workplace political socialization, or whether, although not specifically hypothesized, some types of political socialization in the workplace are only related to certain modes of political participation or relate even differently to different modes of political participation (see also: Godard, 2007). I distinguish between *party activity*, *contacting*, *consumer participation*, *protest*, casting a *vote* in municipal elections, and voting in a *referendum* (See: Teorell et al., 2007).[46] For these different types of participation, I find slightly different relationships. I find that membership of works councils is positively related to party activity and contacting and that trade union membership has positive effects on consumer participation, protest, and voting in a referendum. Furthermore, I find that positive experiences with voice relate to four types of political participation. Specifically, I find that the extent to which the problem is solved is positively related to party activity, while coworker support is positively related to consumer participation, protest, and referendum voting. Political discussion is positively related to voting both in municipal elections and during a referendum. Additionally, I find a negative relationship between social capital and referendum voting.

46 See Appendix 4.2. for an overview of the types of political participation and the respective mode of participation they belong to.

Table 4.5. Log-odds for different types of political participation.

	Party Activity	Contacting	Consumer Participation	Protest	Vote	Referendum
Works Council	0.63*	0.91*	0.09	0.17	0.10	0.14
	(0.17)	(0.24)	(0.13)	(0.12)	(0.17)	(0.11)
Labour Union	0.27	0.25	0.28*	0.40*	0.13	0.20*
	(0.17)	(0.25)	(0.11)	(0.11)	(0.14)	(0.09)
Workplace Voice	0.13	0.50	-0.12	0.01	0.07	-0.09
	(0.30)	(0.52)	(0.18)	(0.17)	(0.18)	(0.14)
Problem Solved	0.54*	0.49	-0.00	-0.03	0.19	-0.18
	(0.26)	(0.37)	(0.17)	(0.16)	(0.19)	(0.14)
Supervisor Support	-0.09	-0.18	0.04	0.03	0.15	0.09
	(0.18)	(0.26)	(0.12)	(0.11)	(0.14)	(0.10)
Coworker Support	-0.20	0.28	0.27*	0.24*	0.10	0.24*
	(0.16)	(0.25)	(0.11)	(0.11)	(0.12)	(0.09)
Political Discussion	0.17	-0.19	0.21	0.25	0.31*	0.46*
	(0.24)	(0.33)	(0.14)	(0.14)	(0.15)	(0.12)
Social Capital	-0.08	0.03	-0.26	-0.19	0.03	-0.32*
	(0.28)	(0.42)	(0.18)	(0.17)	(0.20)	(0.15)
Education Level (Low = ref) - *Middle*	1.08*	0.95	0.38	0.27	0.36*	0.64*
	(0.53)	(0.75)	(0.23)	(0.21)	(0.18)	(0.17)
- *High*	2.02*	1.75*	1.02*	0.90*	0.94*	1.28*
	(0.52)	(0.74)	(0.22)	(0.21)	(0.19)	(0.17)
Contract type (permanent = ref) - *Temporary*	0.32	0.90*	0.32*	0.34*	0.16	0.38*
	(0.22)	(0.30)	(0.13)	(0.13)	(0.15)	(0.11)
- *Other*	-0.16	0.83*	0.23	0.33	0.01	0.10
	(0.33)	(0.39)	(0.19)	(0.18)	(0.21)	(0.16)

Outside Political Discussion	0.77	1.38*	0.14	0.19	0.69*	0.40*
	(0.42)	(0.67)	(0.21)	(0.20)	(0.19)	(0.16)
Outside Social Capital	0.11	-0.65	0.33	0.29	-0.38	0.15
	(0.46)	(0.67)	(0.25)	(0.24)	(0.23)	(0.19)
Female	-1.11*	-0.76*	-0.10	-0.06	-0.09	-0.24*
	(0.17)	(0.24)	(0.10)	(0.09)	(0.11)	(0.08)
Age *(16 years = 0)*	-0.03	-0.00	-0.02	-0.03	-0.01	-0.01
	(0.03)	(0.04)	(0.02)	(0.02)	(0.02)	(0.01)
Age squared[a]	0.06	0.04	0.07*	0.07*	0.08*	0.06*
	(0.05)	(0.08)	(0.03)	(0.03)	(0.04)	(0.03)
Constant	-4.93*	-6.69*	-2.59*	-2.61*	0.21	-2.17*
	(0.70)	(1.06)	(0.34)	(0.33)	(0.31)	(0.27)
Pseudo R2	0.098	0.092	0.033	0.037	0.053	0.063

Note: N=3,037; *p<0.05; standard errors in parentheses; [a]For interpretation purposes, we presented the actual effect multiplied by 100.

4.5. Conclusion

This chapter addresses the role of political socialization in the workplace in educational differences in political participation. I show that education level is strongly related to most types of workplace political socialization: higher educated individuals have more access to most types of political socialization in the workplace compared to lower educated individuals. I find evidence that works council membership, labor union membership, positive experiences with workplace participation (i.e., coworker support), and political discussion relate positively to political participation. Mediation analyses show that 6,7% of the educational differences in political participation are explained by workplace political socialization. Thereby, I show that political socialization in the workplace can help us to understand differences in political participation.

This chapter contributes to the literature on inequalities in political participation in three ways. First, previous research shows that education is related to political participation (e.g., Persson, 2015; Verba et al., 1995). I add that political skills and norms acquired at work moderate the effect of education and political participation, offering an explanation for the educational differences in political participation, in addition to parental socialization, and socialization at school. Furthermore, the findings that different types of political socialization in the workplace affect different modes of political participation, offers interesting venues for future research on the effect of workplace socialization on political participation.

Second, this chapter contributes to the discussion on political spillover theory, which argues that the workplace functions as an important training ground for political participation (Pateman, 1970). I add important new agents for political socialization beyond the commonly studied repertoire of formal workplace characteristics and workplace participation (e.g., Adman 2008; Budd et al. 2018; Godard, 2007; D'art and Turner, 2017); I include more common day-to-day experiences and social interactions with coworkers and supervisors. I find that coworker support is related positively to forms of collective political participation, such as voting and consumer participation. This supports the idea that social support of workplace participation is important for developing trust in collective political action. Additionally, I show that political discussion in the workplace is positively related to political participation. This indicates that in line with political preference formation, political participation is "to a substantial extent *a process of abstraction and generalization from an actor's own everyday-life occupational experiences*" (italics in original) (Kitschelt, 2012). Additionally, the inclusion of the evaluation of workplace participation, and social responses towards it, advances our understanding of why previous studies provide mixed

support for the political spillover hypothesis that workplace participation fosters political participation.

Third, I find that individuals with higher levels of education - compared to lower educated individuals - have more access to resources and experiences that are important for political participation. This implies that the workplace reinforces political participation inequalities that are established during adolescence through education. This finding underlines the suggestions of studies addressing the so-called "diploma democracy", which argued that the educational differences in political participation and representation are on the rise (see: Bovens and Wille, 2017; Schakel, 2021), if any, the workplace only reinforces these inequalities.

This chapter's message that socialization in the workplace has substantial consequences for political participation has practical implications as well. The large inequalities I find in the access to workplace participation, political discussion, and social capital also have implications for other aspects of peoples' work and lives, such as, health and satisfaction (e.g., Andrews, 2010; Helliwell and Huang, 2010; Kim et al., 2008), organizational performance (e.g., Baruch-Feldman et al., 2002; Bashshur and Oc, 2015) and societal outcomes beyond political participation, such as political tolerance and other political attitudes (e.g., Mutz and Mondak, 2006; Stanojevic et al. 2020). My findings therefore support the rationale initiatives that encourage workers to socialize and bond in the workplace, to provide environments in which employees feel save to discuss controversial and political topics and voice workplace issues, and to make membership in works councils and trade unions more attractive to a wider range of employees. Or, put differently, the chapter sparks concern over workplace practices and policies, such as flexibilization of work, which may threaten social capital formation, solidarity (Akkerman et al., 2013), participation, and voice at work (Sluiter et al., 2022).

My findings are a new stimulus to the study of the role of the workplace in understanding political inequalities. However, the data available in the chapter refrains me to make strong arguments about causality of the effects found. One might argue that pre-adulthood socialization affects both individuals' workplace socialization and individuals' political participation or that political socialization in the workplace is affected by political participation. I think that given the relative inability of individuals to choose their work environment, this is unlikely to be the whole explanation for the effects I find. Additionally, experimental evidence shows that involvement in workplace decision making does foster political participation (Wu and Paluck, 2020). Nevertheless, further research could address changes in these workplace contexts and political participation over longer periods of time to derive more decisive conclusions on this matter.

5

Developing Political Trust at Work: How Socialization Experiences in the Workplace Reduce Inequalities in Political Trust

Political trust is considered important for the stability of democratic political systems. However, there are large inequalities in political trust between groups in society, especially along educational lines. I focus on how these political inequalities develop in adult life. Specifically, I link political socialization in the workplace to political trust. I test how political socialization in the workplace fosters political trust and whether it compensates for or reinforces inequalities in political trust between educational groups. I use self-collected unique survey data (N=2,799) and show that political socialization in the workplace relates to political trust: political discussions, an open workplace climate, influencing organizational policies, and having positive experiences with workplace voice are positively related to political trust. Furthermore, I find no support that political socialization in the workplace increases the inequalities in political trust between educational levels but rather that there is a compensatory effect of political socialization in the workplace.

A slightly different version of this chapter is currently under review with an international journal. I analysed and interpreted the data under the supervision of Agnes Akkerman and Roderick Sluiter. I drafted the chapter, and Agnes Akkerman and Roderick Sluiter provided critical revisions. All authors approved the final version of the manuscript. The study on which the chapter is based was presented at IMR Research Day in Nijmegen, The Netherlands, 2020, January 7 and IPSA World Congress in Portugal, Lisbon, 2021, July 10-15.

5.1. Introduction

I study how political socialization at work affects political trust. I test whether discussion at work, a safe work climate, coworker solidarity, and experiences with authorities at work either compensates for or accelerates inequalities in political trust between educational groups. Political trust is considered important for the stability of democratic political systems (Almond and Verba, 1963; Hetherington 2005; Van der Meer and Zmerli, 2017). Individuals with lower levels of political trust are less willing to participate politically and to comply with political decisions, which reduces the governability of contemporary societies (Catterberg and Moreno, 2006; Hooghe and Marien, 2013; Marien and Hooghe, 2011; Marien and Werner, 2019). In Western democracies, there are large gaps in political trust between individuals with different education levels: less-educated individuals typically have less trust in political institutions (Bovens and Wille, 2017; Christensen and Lægreid, 2005; Mayne and Hakhverdian, 2017; Van Elsas, 2015). These inequalities have important consequences for political representation. Less-educated individuals are underrepresented in regard to political participants and politicians, which makes the political agenda biased towards higher educated priorities and preferences and ultimately undermines representative democracy (Bovens and Wille 2017).

An explanation for the gap in political trust is that higher educated individuals receive more political socialization at school, which, in turn, builds political trust (Hoskins, 2017; Mayne and Hakhverdian, 2017). There has been relatively little attention to what happens to these inequalities among adults, presuming that the political socialization of trust ends as soon as people leave formal education. In this chapter, I argue that political socialization continues throughout life and focus on political socialization in the workplace. The workplace is an environment par excellence where political socialization takes place in adult life and is key for the operation of the socialization mechanisms that build political trust among adults. I address the question of how and to what extent political socialization in the workplace affects political trust. Previous studies show that political socialization in one environment can either compensate for or accumulate inequalities resulting from political socialization in another environment (Campbell, 2008; Finkel and Ernst, 2005; Langton and Jennings, 1968). If political socialization indeed continues at work, the workplace can be an environment for either the compensation or accumulation of differences between educational groups. My second research question, therefore, addresses to what extent political socialization in the workplace reduces or increases the political inequalities between educational groups.

The development of political trust at school is attributed to interactions among students with different (political) views and the small-scale political

arena that classrooms and schools constitute (Kranendonk et al., 2019). Political discussions sparked by different opinions, an open and safe discussion climate and participation in school politics foster political trust (Claes and Hooghe, 2017; Mayne and Hakhverdian, 2017). Parallel experiences take place in the workplace. Adults spend a large part of their waking hours at work (Kitchelt and Rehm, 2014), and social interactions at work are likely to be among individuals with diverse political views because individuals have less freedom to choose with whom to interact at work than they do in interactions outside work (Djupe and Sokhey, 2014; Thommes and Akkerman, 2018; Warren, 1993). Furthermore, the workplace is also a political arena on a small scale and offers a training ground to build or damage political trust (Almond and Verba, 1963; Pateman, 1970; Sobel 1993). Timming and Summers (2020) even demonstrate a positive effect of participation in workplace decision-making on a political trust-related concept, 'pro-democratic affect'.

I advance the research on the antecedents of differences in political trust in two ways. First, I theorize and study the relationship between political socialization at work and political trust. Thereby, I expand the political socialization thesis, beyond experience during childhood and adolescence, to adulthood. Second, I investigate whether experiences in the workplace compensate for inequalities in political socialization in schools or accumulate these inequalities. I test whether individuals with higher levels of education benefit more from workplace political socialization because they are already more accustomed to and more receptive of political socialization or whether workers with lower levels of education benefit more because they lag behind and have more to gain. I do so using a unique survey of 2,799 individuals from the Dutch labor force.

5.2. Explaining Political Trust

Political trust is citizens' evaluation of the extent to which political institutions are competent, caring, accountable, and predictable (Van der Meer, 2010). Individuals' political trust has a wide range of antecedents, including psychological, cultural, and (macro-)institutional explanations (e.g., Inglehart, 1997; Mondak et al., 2017; Van der Meer, 2010), as well as explanations based on corruption (Hakhverdian and Mayne, 2012; Mishler and Rose, 2001), economic performance (Van Erkel and Van der Meer, 2016), electoral outcomes (Anderson and LoTempio, 2002; Keele, 2005), and mass media (Bowler and Karp, 2004; Mutz and Reeves, 2005).

Political trust may also find it roots in education (e.g., Christensen and Lægreid, 2005; Claes and Hooghe, 2017; Mayne and Hakhverdian, 2017). One important aspect of the literature addressing the effect of education on political trust addresses the role of political socialization at school.[47] The expectation is that schools provide individuals with a particular curriculum and experiences with authority and social relations. The classroom is a site of political socialization in which students are exposed to experiences and contexts that affect political trust. Students gain experiences with bureaucratic rules at school, which are expected to provide information about the functioning of political institutions (Mayne and Hakhverdian, 2017). Therefore, the evaluation of political institutions also comes from experiences with authorities in other spheres (i.e., schools) (Claes et al., 2012); experiences with authorities in schools are generalized to the evaluation of the political system at large (Dawson et al., 1977; Mortimer and Simmons, 1978; Rothstein and Eek, 2009; Tyler and Smith, 1999). Differences in political socialization at school between education levels (Hoskins et al., 2017; Kahne and Middaugh, 2008), in turn, explain differences in political trust (Claes et al., 2012). From these studies, three aspects at school are especially important for political trust: political discussions, an open classroom climate, and participation in school politics (Claes and Hooghe, 2017; Mayne and Hakhverdian, 2017).

5.3. Developing Political Trust in the Workplace

I argue that political socialization is not limited to schools or adolescence. Adults are also socialized politically, and political trust changes after individuals leave school (Dawson et al., 1977; Jennings and Niemi, 1978; Mortimer and Simmons, 1978; Niemi and Sobieszek, 1977). Some even suggest that adults' political attitudes are more affected by later experiences (i.e., during adulthood) than by early political socialization experiences (Almond and Verba, 1963). I depart from the insights of the literature on political socialization at school and parallel the mechanisms offered. These mechanisms can also be relevant for interactions and experiences in the workplace. Specifically, I discuss three aspects of the workplace which are important for developing political trust in the workplace: political discussion at work, an open workplace climate, and participation in workplace politics.

47 Alternatively, higher educated individuals may have higher levels of political trust because of their better socioeconomic position in society and their higher sense of political efficacy, or because they are better able to process information about the actual performance of political institutions. See Hakhverdian and Mayne (2012), for an elaborate discussion of these other aspects of an educational effect on political trust.

5.3.1. Political Discussion at Work

Discussing politics fosters individuals' knowledge of civic affairs and political processes (Bennett et al., 2000; Cambell, 2006; Hively and Eveland, 2009; Morduchowicz et al., 1996; Niemi and Junn, 1996). This increased knowledge fosters political trust since it induces appreciation of the difficulties and complexities of politics (Cook et al., 2010; Denver and Hands, 1990; Galston, 2004).[48] Furthermore, discussion of political issues builds understanding of different views of political problems, which increases political trust (Mutz, 2002). After all, obtaining a better understanding of a diversity of political views makes individuals more likely to understand that the public interest is more diverse than one's own views (Jacobs et al., 2009; Mutz and Mondak, 2006). Even if outcomes of the political process are not in line with one's views, the process may still be conceived as acting in line with the public interest (Manin, 1987; Mutz, 2002). Mutz (2002) argues that without political discussion, the perceived legitimacy of outcomes (and consequently political trust) is hindered when policies are enacted that are not in line with one's own preference, because of a lack of awareness of the reasons for different views. Political discussions are especially effective if they are among individuals with opposing views (Mutz, 2002). The workplace is an environment in which individuals are relatively unable to choose their coworkers or with whom to interact (Djupe and Sokhey, 2014; Thommes and Akkerman, 2018; Warren, 1993). Consequently, political discussions at work are likely to transmit novel information, insights, and opinions and are important for understanding and appreciating the perspectives of others (Gibson, 2001; Mutz, 2002; Rohrschneider and Schmitt-Beck, 2002). Therefore, I expect political discussions in the workplace to increase political trust since they are likely to be among individuals with different political views (Mutz and Mondak, 2006). Therefore, I expect the following:

> *Political discussion in the workplace is positively associated with political trust (hypothesis 1).*

5.3.2. Open Workplace Climate

The second aspect of political socialization in the workplace is an open workplace climate. In an open workplace climate, employees are encouraged to discuss issues, articulate their opinions, and explore diverse perspectives.[49] Operating in such an environment increase the feeling that individuals are trusted and respected by the authority and, therefore, adds legitimacy to the democratic

48 In democracies with high levels of corruption, a different effect of increased knowledge is expected (see Mayne and Hakhverdian (2017) for a discussion).

49 This concept is closely related to an open classroom climate, see Claes et al. (2012).

procedures (Ehman, 1980, Flanagan and Stout, 2010). This increased legitimacy in generalized to the functioning of political institutions (Cleas et al., 2012; Torney-Purta et al., 2004). The expectation here is that individuals "*link actions within 'small democracy' (that is, the authorities they meet in everyday life) to those within 'large-scale democracy' (that is, representative institutions)*" (Abdelzadeh et al., 2015, p. 270). Thereby, the way the workplace functions is generalized towards the assessment of the trustworthiness of the political system as a whole. This mechanism finds empirical support when applied to an open classroom climate (e.g., Barber et al., 2015; Cambell, 2006; Claes et al., 2012; Dassonneville et al., 2012; Hahn, 1998; Hooghe et al., 2015; Kokkonen et al., 2010; Torney-Purta and Amadeo, 2004). I argue that the interactions within the *'small democracy'* of the workplace develops expectations regarding persons in positions of authority, which are consequently directed to political authorities (Dawson et al., 1977). Therefore, I expect the following:

A more open workplace climate is positively associated with political trust (H2).

5.3.3. Participation in Workplace Politics

Participation in workplace politics is a well theorized aspect of the workplace that affects political behavior and attitudes. Almond and Verba (1963) argue that political attitudes are dependent on the opportunities to participate in decisions at work. Others show that involvement in a firm's decision-making process affects behavior outside of the workplace (Budd et al., 2018; Greenberg et al., 1996; Pateman, 1970). Through involvement and participation, individuals learn about procedures for collective decision making, the role of different parts of government, and the role of checks and balances, and think about the relation between government and public opinion (Niemi and Junn, 1996). Empirical studies show that participation experiences in non-political spheres are positively related to political trust. In the school context, participation is found to affect political trust (Cambell, 2006; Claes and Hooghe, 2017; Dassonville et al., 2012, Diemel et al., 2019; Gould et al., 2011; Torney-Purta and Lopez, 2006). Furthermore, in the workplace context, Timming and Summers (2020) show that participation in decision-making at work (e.g., autonomy over daily work and influence on organizational policy decisions) induces 'pro-democratic affect': a combination of political trust and support for democracy. Experiences are especially likely to affect political attitudes when they occur at the same time (chronologically) and are similar in their degree of formality (the structure of authority relations) (Sobel, 1993). Since workplace authority experiences are close to political authority experiences in time and in level of formality (Almond and Verba, 1963; Greenberg et al., 1996), I expect:

Participation in workplace politics is positively associated with political trust (H3).

The effect of participation in workplace politics is likely to be dependent on the evaluation of such experiences (Dawson, 1977; Greenberg et al., 1996; Geurkink et al., 2022). The literature on the development of trust argues that fair treatment by authorities induces political trust (Abdelzadeh et al., 2015; Resh and Sabbagh, 2017). If experiences with participation in workplace politics are positive, for example, when workers feel supported, heard, or helped, they feel treated fairly. The feeling of being treated fairly by proximate authorities induces political trust because it signals that authorities are caring, accountable, and competent, and can therefore be trusted (Abdelzadeh et al., 2015; Marien and Werner, 2019).

In addition to having positive experiences with authorities, coworkers can affect the evaluation of political experiences at work, e.g., by giving advice, providing input, or supporting workers. These responses by coworkers can foster feelings of solidarity among workers and shapes expectations about and trust in others (Estlund, 2000; Flanagan and Stout, 2010). This generalized social trust is, in turn, expected to foster political trust; trust in people who individuals know, makes them more likely to trust those they do not know (Newton et al., 2018; Abramson and Inglehart, 1970; Keele, 2007; Brehm and Rahn, 1997; Schyns and Knoop, 2010). Zmerli and Newton claim and show that this social trust fosters a cooperative social climate, facilitates collective behavior and thereby reinforces conditions in which political trust can flourish (2008). Glanville and Paxton (2007) show that ongoing experiences shape levels of political trust. Therefore, the positive experiences with coworkers during workplace participation are expected to induce individuals' trust in political institutions (Mitzal, 1995; Mangum, 2011). Thus, positive experiences with participation in workplace politics are generalized to more political trust (Rothstein and Eek, 2009; Tyler and Smith, 1999). Therefore, I expect the following:

Positive experiences with participation in workplace politics are positively associated with political trust (H4).

5.3.4. Compensation or Acceleration?

There are large differences in the level of political trust between individuals with different levels of education, with less-educated individuals having less trust in political institutions (Bovens and Wille, 2017; Claes et al., 2012). These inequalities are linked to differences in political socialization at schools (Hoskins et al., 2017; Kahne and Middaugh, 2008). Previous research argues that a lack of political socialization in one environment can be compensated by political socialization in another environment (e.g., Campbell, 2008; Finkel and Ernst,

2005; Langton and Jennings, 1968). However, the empirical results are mixed (see: Campbell, 2006; Neundorf et al., 2016) and not specifically focused on political trust or on political socialization in the workplace.

Education and political socialization in the workplace may interact in two ways. First, political socialization at work may have more influence on those with lower education levels (*compensation hypothesis).* Second, those with higher education levels may benefit more from socialization at work (*acceleration hypothesis).*

According to the compensation hypothesis, those who have higher levels of education are already likely to have adopted democratic norms and to envision themselves as participants in the political process (Neundorf et al., 2016). Their evaluations of trust in political institutions are more likely to be crystallized. Since, compared to higher educated individuals, less-educated individuals have received fewer political 'messages' at school (Hoskins et al., 2017; Kahne and Middaugh, 2008), their experiences at work are more likely to have an effect on their political trust. After all, political socialization experiences at work are less likely to be redundant, whereby the potential effects on political trust are larger (i.e., the marginal effect of such an experience is larger) (Campbell, 2008). In this way, political socialization at work partly levels out inequalities between education levels. Therefore, my compensation hypothesis is as follows:

> *The higher one's education level is, the weaker the association between experiences in the workplace and political trust (H5).*

Alternatively, political socialization in the workplace might deepen the inequalities between educational levels. This alternative expectation is that workers with higher levels of education gain more from political socialization at work since they already have a foundation of familiarity with politics (Campbell, 2008). Enhanced political knowledge and understanding, gained via political socialization at school, makes it easier for individuals to develop further in the workplace (see: Neundorf et al., 2016). Therefore, the acceleration hypothesis is:

> *The higher one's education level is, the stronger the association between experiences in the workplace and political trust (H6).*

5.4. Data and Measures

5.4.1. Data

I test my expectations using the Work and Politics Survey, which is a survey among Dutch individuals. This dataset consists of a representative sample of the Dutch labor force with regard to gender, age, education, and work situation. The data were collected using the TNS NIPObase, which consists of approximately 235,000 members from the Netherlands. The data was collected via internet (CAWI), and individuals were invited via email to participate in the survey. The first wave (T1) of the survey (N=7,599) was collected between July and September 2017, and the second wave (T2) was collected between October and November 2018 (N=6,008)[50], with response rates of 64% and 83%, respectively.[51] The final models include 2,799 respondents.[52] Although I have a survey with two waves, due to the structure of the data, most analyses presented in this chapter should be interpreted as cross-sectional. All the variables are collected in wave 2, but only the dependent variable refers to individuals' current attitude, while the independent variables regard previous experiences and states. I use the first wave of the survey for information about individuals' previous level of trust.

5.4.2. Measures

Dependent Variable

The main variable of interest is *political trust,* which is operationalized as a factor score from respondents' scores on four items addressing the amount of trust (0 "no trust at all" – 10 "complete trust") in "the government", "the lower house", "politicians" and "political parties" (Cronbach's α: 0.965).

50 I collected data on respondents at two time points (i.e., T1 and T2), but do not have information on changes in most of the variables of interest between these time points (except for political trust, see below). Therefore, the results should be interpreted as correlational.

51 With regard to attrition effects for the second wave, I find small differences in work situation and age. Survey dropouts are significantly more likely to be self-employed (11.7% vs. 9.6%) or to be students (10.6% vs. 9.1%) and less likely to work for the government (9.1% vs. 10.5%). Additionally, those who did not participate in the second wave are younger (38.4 years) than those who did participate (41.6 years). Dropouts do not differ significantly with regard to the main variables of interest.

52 This number of observations is mainly reduced because of the (responses to) workplace voice variables, which require individuals to have a job and to have a problem in the workplace. Additional analyses, excluding variables with regard to voice experiences, result in a higher number of observations (i.e., 4,831) and provide the same conclusions with regard to the hypotheses (see Appendix 5.1.)

Independent Variables

For the measurement of *political discussion,* I use a binary variable with "1" indicating that individuals have one or more colleagues with whom they can discuss politics. *Open workplace climate* is a factor score from the responses on three items indicating the extent ("1" *Totally disagree* – "5" *Totally agree*) to which workers feel free to express their opinion at work (e.g., "At work, I feel free to express my opinion") (Cronbach's α: 0.767).[53] For participation in workplace politics, I use three distinct measurements. I asked whether individuals are or have been ("1") members of a *works council* or not ("0") and asked the same question for *trade union* membership. Last, I measured *workplace voice* by asking individuals whether they had had an issue in the workplace (e.g., insufficient career opportunities, dissatisfaction with wages, dissatisfaction with working hours, or feeling discriminated against)[54] and, if so, whether they had voiced it either to a supervisor, coworker, or via another channel within or outside the workplace. If so, they received a "1" on this binary variable; if they had not voiced the issue, they received a "0". For positive experiences with participation in workplace politics, I also use four measurements. *Coworker support* is a binary variable indicating whether individuals' workplace voice was supported by their coworkers ("1") or not supported by their coworkers ("0"). For *supervisor support,* I asked about the response by the supervisor ("1" is support; "0" is no support), and *outcome satisfaction* indicates whether individuals were satisfied with the extent to which the problem was solved ("1" *very dissatisfied* – "5" *very satisfied)*. Those who did not voice the issue received a "0" for coworker support, supervisor support, and outcome satisfaction.[55] Furthermore, I use an item indicating the extent ("1" *Totally disagree* – "5" *Totally agree*) to which workers feel they *influence organizational policy*. The variable *education level* has three categories, indicating lower ("no or primary education" or "lower secondary vocational training"), middle ("middle-level secondary education", "middle-level vocational training" or "higher-level secondary education or secondary scientific training"), and higher ("higher-level vocational training" or "university") education.

I control for individuals' *age* and *gender* in the analyses. Furthermore, the literature explaining political trust has indicated that the evaluation of political

53 Although openness of the workplace climate is not an individual characteristic, the perception of this openness is. Furthermore, previous research has indicated that individual climate perceptions are better predictors than aggregated perceptions (Barber et al., 2015).

54 One might argue that individuals who experiences dissatisfaction are also distrustful. However, previous studies on workplace voice show that a certain level of trust is an important antecedent of the decision to voice issues in the workplace (see: Hatipoglu and Inelmen, 2018; Holland et al., 2017).

55 Since I also include "workplace voice" in all models, the effect of support can be interpreted as the effect compared to no support.

outcomes affects individuals' political trust (Abdelzadeh et al., 2015; Anderson and LoTempio, 2002). Therefore, I include *political outcome satisfaction* by asking individuals, "How satisfied are you with how the government acted regarding the outcome of the referendum?", after a non-binding referendum on a law on intelligence and security services ("1" *very dissatisfied* – "5" *very satisfied*). Additionally, I control for individuals' *political interest*, using a binary variable indicating whether they stay updated about what happens in politics. Last, I also control for individuals' previous *political trust*. This variable was measured in the same way as the dependent variable but using individuals' scores in 2017 (Cronbach's α: 0.962).[56]

5.5. Results

5.5.1. Explaining Political Trust

In Table 5.1.[57], I present the effects of the independent variables on political trust.[58] The OLS regression results show that political discussion in the workplace is positively related to political trust (in line with hypothesis 1).[59] Individuals with opportunities for political discussion at work have a 0.14 higher level of political trust than those without. For an open workplace climate, I find that individuals with a more open workplace climate display higher levels of trust (in line with hypothesis 2), with every 1-unit increase in the open workplace climate variables resulting in 0.11 higher political trust. I find no significant relationships between works council membership, trade union membership, and workplace voice with political trust. So, contrary to hypothesis 3, I do not find that participation in workplace politics is positively associated with political trust. With regard to the expectation that positive experiences with participation in workplace politics are positively associated with political trust (hypothesis 4), I find that individuals who received coworker support after they voiced their issue have 0.09 more political trust than those who did not have their voice supported by coworkers. Furthermore, individuals who have more influence on organizational policies have more political trust than individuals with less influence. A 1-unit increase in influence results in a 0.06 increase in political

56 The appendix contains a descriptive table of all variables used in the analyses (Appendix 5.2.1.) and a correlation matrix of all variables used in the analyses (Appendix 5.2.2.).

57 I multiplied the coefficient of age by 100 for interpretation purposes. The other effects are not affected by this.

58 See Appendix 5.3. for separate analyses of each mechanism (political discussion, open workplace climate, workplace participation, and experiences with workplace participation).

59 Additional analyses show that this effect remains significant even if I control for political discussion outside of work (see Appendix 5.4.).

Table 5.1. Explaining political trust.

	Model 1
Political Discussion	0.14*
	(0.04)
Open Workplace Climate	0.11*
	(0.03)
Works Council	-0.04
	(0.05)
Trade Union	-0.04
	(0.04)
Workplace Voice	-0.09
	(0.06)
Coworker Support	0.09*
	(0.04)
Supervisor Support	0.04
	(0.04)
Outcome Satisfaction	0.04
	(0.06)
Influence Organizational Policies	0.06*
	(0.02)
Education Level *(ref = high)*	
- Middle Education Level	-0.30*
	(0.04)
- Low Education Level	-0.58*
	(0.07)
Age *(0 = 15 years)*[a]	-0.07
	(0.15)
Gender *(1 = male)*	0.01
	(0.03)
Political Outcome Satisfaction	0.36*
	(0.02)
Political Interest	0.21*
	(0.03)
Constant	-0.77*
	(0.08)
Explained Variance	0.233

Note: N=2799; *p<0.05; standard errors in parentheses. [a] For interpretation purposes, I presented the actual effect multiplied by 100.

trust. However, for supervisor support and outcome satisfaction I find no significant relationship with political trust. If I add up the effects of the different types of political socialization in the workplace, workers who have discussion opportunities in the workplace, an open workplace climate, coworker support, and influence on organizational policies have approximately 0.85 more political trust than those who do not, which represents an 18.8% higher level of political trust.

These results support some of my expectations regarding the difference between workers with and without these political socialization experiences in the workplace. Therefore, I already contribute to the understanding of how workplace political socialization relates to levels of political trust and how it creates inequalities *between* individuals. However, political socialization in the workplace might also affect the level of political trust *within* individuals. The structure of the data allows us to test some of my expectations (i.e., those with regard to workplace voice) controlling for initial levels of political trust to reduce unobserved between-individual heterogeneity.[60] I am able to test my hypotheses on workplace participation (hypothesis 3) and experiences with workplace participation (hypothesis 4) controlling for previous levels of trust. The results of this analysis are presented in Table 5.2.

First, I find that the effect of workplace voice on political trust is also nonsignificant here. Therefore, I find no support for the expectation about the relationship between participation in workplace politics and political trust (hypothesis 3). For experiences with participation in workplace politics (hypothesis 4), I find a positive significant effect for coworker support, controlling for previous levels of political trust. Furthermore, although political trust is correlated with previous levels of trust at similar levels as in previous studies with similar time intervals (e.g., Abdelzadeh et al., 2015), it also shows that there is room for change in political trust over time. In conclusion, these results provide additional evidence for hypothesis 4. Positive experiences with participation in workplace politics (i.e., coworker support) are positively related to political trust, even when controlling for previous levels of political trust.

5.5.2. Compensation or Acceleration

The analyses show that political socialization in the workplace is positively related to political trust. Specifically, political discussion in the workplace, having an open workplace climate, receiving supportive responses of coworkers towards workplace voice, and having influence on organizational policy are positively related to political trust. This section takes these findings a step

60 For the (experiences with) workplace voice, we are certain that these variables measure an experience that took place between wave 1 and wave 2 of the survey.

Table 5.2. Explaining political trust controlling for the previous level of trust.

	Model 2
Political Discussion	0.07*
	(0.03)
Open Workplace Climate	0.00
	(0.02)
Works Council	-0.01
	(0.03)
Trade Union	0.00
	(0.03)
Workplace Voice	-0.01
	(0.04)
Coworker Support	0.05*
	(0.03)
Supervisor Support	0.03
	(0.03)
Outcome Satisfaction	-0.02
	(0.04)
Influence Organizational Policies	0.02
	(0.01)
Education level *(ref = high)*	
- Middle Education Level	-0.09*
	(0.03)
- Low Education Level	-0.17*
	(0.05)
Age *(0 = 15 years)*[a]	-0.14
	(0.11)
Gender *(1 = male)*	0.02
	(0.02)
Political Outcome Satisfaction	0.17*
	(0.01)
Political Interest	0.06*
	(0.03)
Political Trust (2017)	0.65*
	(0.01)
Constant	-0.35*
	(0.06)
Explained variance	0.567

Note: N=2799; *p<0.05; standard errors in parentheses. [a]For interpretation purposes, we presented the actual effect multiplied by 100.

further by addressing whether these effects are different for people in different educational groups. In my theoretical framework, I propose two contrasting hypotheses, suggesting that more education either increases or reduces the effect of political socialization in the workplace on political trust. In Figure 5.1.[61], I present the findings for the types of political socialization in the workplace that interact with education.[62]

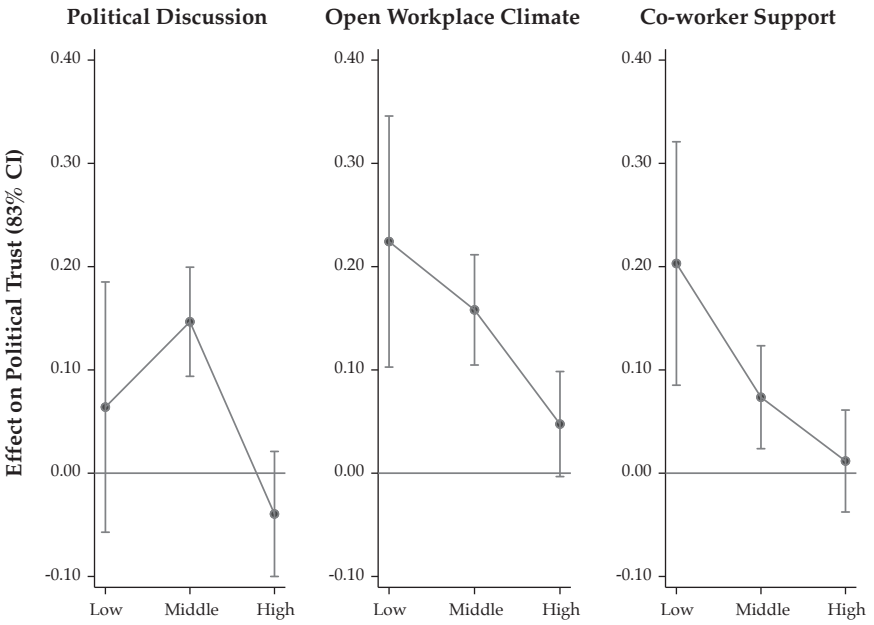

Figure 5.1. Predicted effect of political discussion, open workplace climate, and coworker support on political trust by education level (with 83% confidence intervals).

Note: N = 2799 (Low = 210, Middle = 1272, High = 1317).

61 Following recommendations when comparing two effects, I use 83% confidence intervals in Figure 1 (see: Austin and Hux, 2002).

62 I added interaction effects for all variables of interest and only show those with significant interactions between political socialization in the workplace and education. I include previous levels of trust for all variables. However, for open workplace climate, only interactions were found without the inclusion of the previous level of trust. This might very well be because this climate is a more structural aspect of the workplace, instead of an immediate experience, however, this should be taken into account when interpreting the results (note that the base effect in Table 5.2 is also not significant for this variable).

In Panel 1 of Figure 5.1[63], I present the difference between the effect of having political discussion and not having political discussion for each level of education. The figure shows that middle-educated individuals are significantly more affected by political discussion than higher educated individuals, with less-educated individuals in between. Panel 2 of Figure 5.1 represents the interaction effect between education and an open workplace climate. I find that the effect of an open workplace climate decreases with education, with a significant difference between higher and middle-educated individuals. Panel 3 shows a similar effect, with a negative relationship between education and coworker support and significant differences between higher and less-educated individuals.

Because none of these panels show stronger effects for higher educated individuals, they do not support the acceleration hypothesis, expecting that higher educated individuals are more affected by political socialization (hypothesis 4). With regard to the compensation hypothesis (hypothesis 5), I do find support, but I only find significant differences between educational groups for political discussion, open workplace climate, and coworker support, and not for other types of political socialization in the workplace. Furthermore, while the effects for open workplace climate and coworker support seem linear, this is not the case for political discussion, with the strongest predict effects for middle-educated individuals.

5.6. Conclusion

I address how political socialization experiences in the workplace affect political trust. Specifically, I find that political discussion at work, an open workplace climate, influence on organizational policies, and supportive responses to workplace voice are positively related to political trust. Additionally, I studied whether political socialization in the workplace has the potential to either increase or decrease existing inequalities in political trust resulting from education. I find support for the latter: individuals with less education benefit more from political socialization in the workplace.

I find that less-educated individuals are more strongly affected by coworker support than higher educated individuals and middle-educated individuals are more strongly affected by political discussion and an open workplace climate than higher educated individuals; supporting the compensation hypothesis. Additionally, I do not find any support for the acceleration hypotheses. Showing

63 See Appendix 5.5. for the full results of the interaction models.

the potential of the workplace as an equalizer of political trust, is an important new insight to our understanding of how political socialization influences political trust. Both this finding and the finding that this compensation effect is achieved through different forms of political involvement at work, opens up new and interesting alleys for future research.

What is more, in contrast to existing idea that in particular traditional forms of workplace participation and interactions with authority affect political attitudes (e.g., Almond and Verba, 1963; Pateman, 1970; Timming and Summers, 2020), I find no effects of works council, trade union membership, or supervisor support on political trust. This chapter shows that social relations and interactions (i.e., political discussion, workplace climate, and coworker support) are important for developing political trust. Thus, a broader range of experiences in the workplace has the potential to affect political attitudes than previously assumed. As I expected, workers evaluations of participation in workplace politics are important for political trust. This suggests that future research should not only account for the mere participation only, but also include the evaluation of workplace politics in studying the effects on political trust and broader political attitudes.

Assessing the impact of workplace political socialization, it is good to realize that already a relatively brief period of political socialization in the workplace (i.e., one year) affects political trust. Given that most individuals work over 40 years, the effects of workplace socialization might be much larger than my analyses show. Longer intervals between more waves can shed light on the long-term effects of workplace political socialization on political trust and on whether multiple experiences accumulate over time.

This chapter is a first step in uncovering the relationship between workplace socialization and political trust. Due to data restrictions, I was unable to make causal claims about the relationship between workplace socialization and political trust. Although I expect that workplace socialization affects political trust, I cannot exclude a reverse relationship or potential cofounding variables. For example, highly trusting individuals may be more involved in political discussions in the workplace. Alternatively, highly trusting individuals may perceive responses of supervisors and coworkers as more supportive, for instance, because they have a more favorable outlook on other people in general. An interesting next step would be taking into account changes in political socialization at work and measures of generalized trust or even bi-directional relationships between workplace experiences and political trust.

This chapter addresses the role of political socialization in the workplace in explaining levels of political trust in the Netherlands. Although the theoretical mechanisms I apply are expected to work across countries, I cannot test this

assumption or the magnitude of their effect under different cultural and institutional context. with the data at hand. Future research, applying cross country designs should test these mechanisms in differing cultural and institutional contexts to unravel whether different work cultures, labor market characteristics, or political institutional contexts affect the relationships found in this research.

Political trust has important consequences for democracy and society. It induces (informed) voting, conventional political participation, volunteering, and willingness to comply with political decisions (Marien and Hooghe, 2011; Torney-Purta et al., 2004). Although studies have addressed political socialization in other spheres of adult life, such as neighborhoods (e.g., Cho et al. 2006) and voluntary associations (e.g., Cigler and Joslyn, 2002; Stolle, 1998; Theorell, 2003), workplaces as agents of political socialization have received less attention even though they are an important part of adults' life. With showing the importance of political socialization at work for political trust, this chapter reinvigorates the attention for this life sphere.

Finally, the findings warrant stimulating political socialization at work, especially that of lower educated workers, since it offers the possibility to develop political trust more equally across societal groups, which will have an important effect on reducing the political inequalities between these groups. This is relevant for employers who take their corporate social responsibility seriously: the ongoing trend in flexible working contracts, in particular for lower educated workers, reduces the opportunities for engaging in workplace politics and worker solidarity (Sanders and Van Emmerik, 2004; Morgan and Puligano, 2020). Knowing that solidarity (i.e., coworker support) is a driver for compensating educational inequalities in political trust, prompts more attention to the spill over of labour market developments to political inequalities between groups in society.

6

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7

Appendix

Appendix 2.1. Types, frequency and modes of political participation.

Type of political participation	Percentage of respondents	Mode of political participation
Vote during the national elections	93.9%	Voting
Being a member of a political party	4.3%	Party Activities
Contact a local or national politician for a political reason	2.5%	Contacting
Attend a political meeting	3.5%	Party Activities
Donate money to a political party or political organization	2.2%	Party Activities
Do voluntary work for a political party or other organization with a political aim	1.6%	Party Activities
Sign a petition	22.7%	Protest Activities
Vote during a referendum	32.8%	Voting
Buy or boycott certain products for a political reason	6.1%	Protest Activities
Contact or appear in the media for a political reason	1.0%	Contacting
Mobilize others for a political reason (e.g., mobilization of others via the internet)	1.4%	Protest Activities
Take part in a demonstration	1.9%	Protest Activities
Participate in illegal activity for a political reason (e.g., create a public nuisance, damage public or private property or participate in violence)	0.1%	Protest Activities

Note: N=3,129.

Appendix 2.2. Supervisors' responses to voice.

Response	Response category
My supervisor helped me by solving the problem	Support
My supervisor gave me a compliment	Support
My supervisor gave a good explanation	Passive
My supervisor ignored the issue	Silencing
My supervisor criticized me	Punishing
My supervisor did not want me to talk about it	Silencing
My supervisor told me that (s)he could not solve the problem	Passive
My supervisor obstructed my career possibilities (e.g., by denying a promotion or training/education possibilities).	Punishing
I was dismissed or my contract was not renewed	Punishing
My supervisor gave me a bad evaluation during the yearly appraisal	Punishing
I received an official warning	Punishing
My supervisor bullied, threatened or intimidated me	Punishing
My supervisor made my work less pleasant	Punishing

Appendix 2.3. Descriptives of observed variables in analyses.

Variables	Mean / %	Standard deviation	Minimum	Maximum
Voting	1.25	0.554	0.00	2.00
Party Activities	0.12	0.499	0.00	4.00
Contacting	0.03	0.209	0.00	2.00
Protest Activities	0.32	0.607		4.00
Support by Supervisor	42.3%		0.00	1.00
Silencing by Supervisor	16.6%		0.00	1.00
Punishment by Supervisor	15.0%		0.00	1.00
Internal Political Efficacy				
- COMPL	3.38	1.055	1.00	5.00
- QUALIFY	2.78	1.082	1.00	5.00
- ABLE	3.18	1.053	1.00	5.00
External Political Efficacy				
- CARE	2.85	1.014	1.00	5.00
- VOTE	2.68	1.038	1.00	5.00
Internal Workplace Efficacy				
- VIOLATE	3.88	0.852	1.00	5.00
- INTEREST	3.81	0.859	1.00	5.00
- DECIDE	3.87	0.840	1.00	5.00
- OPINION	4.00	0.726	1.00	5.00
External Workplace Efficacy				
- NOCARE	3.14	1.105	1.00	5.00
- LISTEN	3.37	1.040	1.00	5.00
Political Interest	62.8%		0.00	1.00
Education (lower = ref)				
- Middle	44.1%		0.00	1.00
- Higher	48.4%		0.00	1.00
Age (0=15 year)	26.37	12.276	0.00	52.00
Age squared	845.80	659.611	0.00	2704.00
Gender (female = ref)	51.0%		0.00	1.00
Ethnic Background (native = ref)				
- Western migrants	5.1%		0.00	1.00
- Non-western migrants	3.5%		0.00	1.00
Contract Type (permanent = ref)				
- Temporary w prospect	11.5%		0.00	1.00
- Temporary w/o prospect	6.3%		0.00	1.00
- Solo Self-employed	2.7%		0.00	1.00
Flexible Arrangement	17.3%		0.00	1.00
Supervisor	28.9%		0.00	1.00

Note: N=3,129

Appendix 2.4. Pearson's r correlation matrix.

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Voting															
2	Party Activities	0.11														
3	Contacting	0.06	0.39													
4	Protest Activities	0.26	0.22	0.23												
5	Support by Supervisor	0.01	0.02	-0.01	0.01											
6	Silencing by Supervisor	0.01	0.02	0.02	0.03	-0.38										
7	Punishment by Supervisor	0.04	0.00	0.08	0.05	-0.36	0.33									
8	COMPL	0.09	0.02	0.05	0.06	-0.01	0.03	0.02								
9	QUALIFY	0.06	0.03	0.04	0.01	0.12	-0.07	-0.07	0.49							
10	ABLE	0.10	0.06	0.05	0.08	0.07	0.01	-0.01	0.36	0.56						
11	CARE	0.09	0.03	0.04	0.09	0.00	0.03	0.03	0.38	0.41	0.56					
12	VOTE	0.02	0.01	-0.00	0.00	0.37	-0.31	-0.30	0.00	0.15	0.06	-0.02				
13	VIOLATE	0.04	0.03	0.02	0.00	0.34	-0.33	-0.28	0.07	0.24	0.19	0.11	0.52			
14	INTEREST	0.20	0.17	0.14	0.20	0.02	0.04	0.01	0.20	0.20	0.22	0.17	0.05	0.06		
15	DECIDE	0.16	0.24	0.19	0.22	0.00	0.04	0.03	0.12	0.17	0.23	0.17	0.03	0.06	0.47	
16	OPINION	0.17	0.16	0.15	0.22	0.01	0.04	0.04	0.15	0.13	0.19	0.18	0.02	0.06	0.50	0.61
17	NOCARE	0.04	0.13	0.09	0.04	0.08	-0.09	-0.06	-0.00	0.06	0.07	0.05	0.14	0.14	0.23	0.14
18	LISTEN	0.05	0.14	0.08	0.03	0.10	-0.11	-0.09	-0.02	0.05	0.06	0.03	0.15	0.14	0.21	0.12
19	Middle education	-0.05	-0.09	-0.05	-0.09	-0.04	-0.01	-0.01	-0.04	-0.02	-0.10	-0.08	-0.07	-0.05	-0.19	-0.18
20	Higher education	0.10	0.12	0.08	0.13	0.05	-0.02	0.02	0.05	0.04	0.15	0.11	0.09	0.08	0.28	0.25
21	Age	0.10	0.03	0.04	0.09	-0.10	0.04	0.03	0.15	0.14	0.08	0.09	-0.05	-0.07	0.15	0.07
22	Age squared	0.09	0.04	0.04	0.09	-0.10	0.04	0.03	0.15	0.13	0.07	0.08	-0.05	-0.07	0.13	0.06
23	Gender	0.02	0.10	0.09	0.02	0.00	0.04	-0.01	0.09	0.09	0.10	0.00	-0.03	-0.01	0.20	0.15
24	Western	0.02	0.02	0.05	0.02	0.01	0.03	-0.00	-0.01	-0.02	-0.00	-0.02	-0.02	-0.01	-0.01	-0.01
25	Non-western	-0.02	-0.00	0.00	0.00	-0.00	-0.01	0.01	-0.06	-0.07	-0.05	-0.05	-0.02	-0.01	-0.01	-0.01
26	Temp w pros	-0.02	-0.01	-0.00	-0.03	-0.06	0.06	0.08	-0.01	-0.02	0.01	-0.01	0.03	0.04	-0.06	0.00
27	Temp w/o pros	-0.04	0.04	0.01	0.01	-0.02	-0.01	0.02	-0.03	-0.08	-0.08	-0.03	-0.02	-0.03	-0.04	-0.01
28	Solo self	0.01	-0.01	0.02	0.03	0.02	0.02	0.02	0.05	0.04	0.05	0.02	-0.04	0.02	0.05	0.02
29	Flex	-0.04	0.01	0.03	0.01	0.04	-0.01	0.01	-0.04	-0.06	-0.07	-0.05	-0.02	0.01	-0.05	-0.01
30	Supervisor	0.06	0.03	0.02	0.04	0.06	-0.00	-0.01	0.09	0.13	0.17	0.07	0.02	0.04	0.10	0.10
31	Political interest	0.28	0.13	0.10	0.24	0.03	0.01	0.01	0.16	0.14	0.18	0.18	0.05	0.05	0.40	0.34

Appendix 2.4. Pearson's r correlation matrix (continued).

		16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	Voting															
2	Party Activities															
3	Contacting															
4	Protest Activities															
5	Support by Supervisor															
6	Silencing by Supervisor															
7	Punishment by Supervisor															
8	COMPL															
9	QUALIFY															
10	ABLE															
11	CARE															
12	VOTE															
13	VIOLATE															
14	INTEREST															
15	DECIDE															
16	OPINION															
17	NOCARE	0.07														
18	LISTEN	0.04	0.78													
19	Middle education	-0.22	-0.16	-0.13												
20	Higher education	0.29	0.21	0.19	-0.86											
21	Age	0.07	-0.06	-0.06	0.07	-0.08										
22	Age squared	0.06	-0.08	-0.07	0.08	-0.11	0.98									
23	Gender	0.14	-0.05	-0.07	0.02	-0.07	0.11	0.12								
24	Western	0.03	-0.01	-0.02	-0.02	0.04	0.00	0.01	0.00							
25	Non-western	-0.01	0.00	-0.00	-0.01	0.02	-0.07	-0.08	-0.00	-0.04						
26	Temp w pros	-0.01	-0.00	-0.02	-0.02	0.01	-0.21	-0.19	-0.02	-0.01	-0.00					
27	Temp w/o pros	-0.02	0.00	-0.01	0.02	-0.04	-0.19	-0.14	-0.05	-0.01	0.02	-0.09				
28	Solo self	0.04	-0.02	-0.02	-0.02	0.01	-0.00	-0.01	0.07	0.01	0.00	-0.06	-0.04			
29	Flex	-0.03	-0.03	-0.06	-0.00	-0.02	-0.19	-0.16	0.01	0.01	0.07	0.13	0.33	0.01		
30	Supervisor	0.07	0.01	0.02	-0.01	0.03	0.01	-0.01	0.19	-0.01	0.03	-0.02	-0.10	0.03	-0.04	
31	Political interest	0.34	0.12	0.09	-0.10	0.16	0.22	0.22	0.11	0.00	-0.02	-0.07	-0.03	0.03	-0.03	0.05

Appendix 2.5. Maximum likelihood estimates of factor variances and covariances and error covariance for the measurement model.

Indicator	Unst.E.	Std.Error	Std. estimates
	Factor variance and covariance		
IWE	0.312	0.019	1.000
EWE	0.359	0.046	1.000
IPE	0.460	0.026	1.000
EPE	0.867	0.057	1.000
IWE ←→ EWE	0.070	0.010	0.210
IWE ←→ IPE	0.123	0.009	0.326
IWE ←→ EPE	0.033	0.011	0.063
EWE ←→ IPE	0.035	0.009	0.086
EWE ←→ EPE	0.093	0.015	0.166
IPE ←→ EPE	0.117	0.014	0.186
	Error covariance		
VIOLATE ←→ DECIDE	-0.142	0.011	-0.503

Note: N=3,129.

Appendix 2.6. Standardized coefficients of the structural regression model.

Parameters	IWE	EWE	IPE	EPE	Voting	Party Activities	Contacting	Protest Activities
Support by Supervisor	0.07*	0.30*	0.00	-0.01	0.01	0.05	0.03	0.03
Silencing by Supervisor	0.02	-0.25*	0.06*	-0.03	-0.01	0.08*	-0.06	0.01
Punishment by Supervisor	0.00	-0.20*	0.01	-0.01	0.04	-0.02	0.17*	0.05*
IWE			0.19*					
EWE				0.16*				
IPE					0.17*	0.39*	0.51*	0.27*
EPE					-0.01	0.16*	0.13*	-0.04
Education (lower = ref)								
- Middle	0.07*	0.05	0.19*	0.08*	0.07	0.04	0.16	0.07
- Higher	0.17*	0.13*	0.47*	0.25*	0.07	0.10	0.14	0.11*
Age (0=15 year)	0.14	0.02	0.11	0.16	0.07	-0.19	-0.20	-0.03
Age squared	-0.02	-0.05	-0.08	-0.23*	-0.03	0.25	0.22	0.08
Gender (female = ref)	0.05*	-0.01	0.18*	-0.04*	-0.05*	0.10*	0.15*	-0.06*
Ethnic Background (native = ref)								
- Western migrants	-0.03	-0.02	-0.01	-0.01	0.02	0.04	0.09*	0.01
- Non-western migrants	-0.07*	-0.02	0.00	0.00	-0.01	0.02	0.01	0.01
Contract Type (permanent = ref)								
- Temporary w prospect	0.05*	0.10*	0.01	-0.01	0.01	0.01	-0.01	-0.03
- Temporary w/o prospect	0.00	-0.01	0.04	0.03	-0.02	0.05	-0.01	0.01
- Solo Self-employed	0.04*	0.00	0.02	-0.02	0.00	-0.04	-0.01	0.03
Flexible Arrangement	-0.05*	-0.02	-0.01	-0.06*	-0.02	0.02	0.07	0.03
Supervisor	0.14*	0.02	0.03*	0.01	0.04	-0.01	-0.05	0.01
Political Interest	0.17*	0.06*	0.37*	0.09*	0.24*	0.07	0.06	0.21*

Note: Entries are standardized coefficients with standard errors in parentheses; *p<0.05; N=3,129.

Appendix 3.1. Items used to measure efficacy constructs.

Item	Label
Internal workplace efficacy	
I will immediately recognize a violation of my labor contract.	*RECO*
Employees like me are very capable of pursuing their interests as workers.	*PURS*
Employees like me are very capable of contributing to important organizational decisions.	*CONT*
It is worth listening to the opinion of employees like me about labor conditions.	*OPIN*
External workplace efficacy	
Generally speaking, my supervisor does not really care about my interests.[a]	*INTE*
Generally speaking, my supervisor listens to the problems of employees like me.	*LIST*
My supervisor is only interested in getting the work done and not in what employees like me think.[a,b]	*WORK*
Internal political efficacy	
Politics is so complicated that I cannot really understand what is going on.[a]	*UNDE*
I consider myself well qualified to participate in politics.	*QUAL*
I am at least as able to understand complicated issues as others are.	*ABLE*
External political efficacy	
Politicians do not care about what people like me think.[a]	*CARE*
Politicians are only interested in people's votes but not in their opinions.[a]	*VOTE*
People like me don't have any say about what the government does.[a,b]	*ASAY*

Note: [a]scores were reversed so that higher scores indicate higher efficacy; [b]only measured in wave 2.

Appendix 3.2. Supervisors' responses to workplace voice.

Response categories	Support or suppression
My supervisor helped me by solving the problem	Support
My supervisor gave me a compliment	Support
My supervisor gave a good explanation	No support, no suppression
My supervisor ignored the issue	Suppression
My supervisor criticized me	Suppression
My supervisor did not want me to talk about it	Suppression
My supervisor told me that (s)he could not solve the problem	No support, no suppression
My supervisor brushed me off by saying that (s)he could not do anything about it	Suppression
My supervisor obstructed my career possibilities (e.g., by denying a promotion or training/education possibilities).	Suppression
I was dismissed or my contract was not renewed	Suppression
My supervisor gave me a bad evaluation during the yearly appraisal	Suppression
I received an official warning	Suppression
My supervisor bullied, threatened or intimidated me	Suppression
My supervisor made my work less pleasant	Suppression
Other response: namely…[64]	

Note: these response categories are partly based on responses from a pilot study.

64 If applicable, responses from the other category were recoded into the corresponding category.

Appendix 3.3. Missing data patterns for variables with missing data.

Number of observations	Percent	Workplace Voice (w1)	Workplace Voice (w2)	Satisfaction with government response	Party in government	Party performance	Native	Supervisor
1602	31.5	+	+	+	+	+	+	+
812	16.0	-	-	+	+	+	+	+
605	11.9	+	-	+	+	+	+	+
426	8.4	-	+	+	+	+	+	+
335	6.6	+	+	-	+	+	+	+
239	4.7	+	+	+	-	-	+	+
190	3.7	-	-	+	-	-	+	+
166	3.3	-	-	-	+	+	+	+
110	2.2	+	-	+	-	-	+	+
91	1.8	-	+	+	-	-	+	+
82	1.6	+	-	-	+	+	+	+
74	1.5	-	+	-	+	+	+	+
53	1.0	+	+	+	+	+	+	-
47	0.9	+	+	-	-	-	+	+
46	0.9	-	-	-	-	-	+	+
34	0.7	+	-	+	+	+	+	-
34	0.7	-	-	+	+	+	+	-
20	0.4	-	+	+	+	+	+	-
15	0.3	+	-	-	-	-	+	+
15	0.3	-	+	-	-	-	+	+
14	0.3	+	+	-	+	+	+	-
12	0.2	+	+	+	-	-	+	-
Other	1.3							

Note: All other variables are completely observed. Other patterns include missing data patterns with 10 or less observations. The missing observations for workplace voice perfectly overlap with those for the evaluations of workplace participation.

Appendix 3.4. Baseline characteristics of participants with complete and incomplete data.

Variable	Complete cases (N=1,602)	Incomplete cases (N=3,486)
Female	47.2%	47.6%
Age (0 = 18years)	23.5	22.6
Educational level		
Low	6.5%	10.7%
Middle	43.4%	48.7%
High	50.1%	40.6%

Appendix 3.5. Discussion and presentation of models using listwise deletion.

Below I present the results for each of the presented models, but instead of relying on the imputed dataset, I use listwise deletion. With listwise deletion, I only use those observations with a value on all of the variables in the model; if I do not have information on one or more variables, I do not use all the other information on that respondent. Below, I present the full models using listwise deletion. Most effects are similar, but four effects become non-significant in the models using listwise deletion.

With regard to the findings presented in Figure 3.2, I find that in the models using listwise deletion, voting and protest do not foster internal political efficacy, or external political efficacy. The question is how these differences in findings can be explained. Partly, the imputation method uses more information, which might result in less biased and more reliable, but different, results. Additionally, the number of observations used in the listwise is lower, which might reduce statistical power. This might explain why mainly the relatively weak effects of political participation on efficacy become insignificant. Although I do not find any extreme deviation in the findings for the above-mentioned effect, the results for these effects should be interpreted with more caution and deserve more attention in further research.

Appendix 3.5.1 Effect for reproduction of model presented in Figure 3.2 with listwise deletion.

		Standardized effects		
		Voting	**Party Activities and Contacting**	**Protest**
Auto-regressive effects				
Voice	W1→W2	0.21*	0.21*	0.21*
Internal Workplace Efficacy	W1→W2	0.48*	0.48*	0.48*
External Workplace Efficacy	W1→W2	0.58*	0.58*	0.58*
Internal Political Efficacy	W1→W2	0.90*	0.90*	0.90*
External Political Efficacy	W1→W2	0.72*	0.66*	0.70*
Pol.Part.	W1→W2	0.24*	0.43*	0.41*
Cross-Lagged effects				
Voice-IWE	W1→W2	0.12*	0.11*	0.12*
IWE-Voice	W1→W2	-0.02	-0.02	-0.02
Voice-EWE	W1→W2	-0.02	-0.02	-0.02
EWE-Voice	W1→W2	0.09*	0.09*	0.09*
IWE-IPE	W1→W2	0.23*	0.24*	0.24*
IPE-IWE	W1→W2	0.31*	0.31*	0.32*
EWE-EPE	W1→W2	0.17*	0.16*	0.16*
EPE-EWE	W1→W2	0.19*	0.19*	0.19*
Pol.Part-IPE	W1→W2	0.02	0.07	0.04
IPE- Pol.Part	W1→W2	0.34*	0.29*	0.27*
Pol.Part-EPE	W1→W2	0.000	0.14*	0.03
EPE-Pol.Part	W1→W2	-0.09*	-0.06	-0.10*
Voice-Pol.Part	W1→W2	-0.02	0.10	0.03
Pol.Part-Voice	W1→W2	0.09*	0.06	-0.04

Note: N = 2,223; All parameters are standardized. $^{*}p < 0.05$. All relationships were controlled for by education level, age, age squared, gender, migrant status, and by being a supervisor. The relevant fit indices for the voting model (RMSEA = .042, SRMR = .048), the party activities and contacting model (RMSEA = .043, SRMR = .050), and the protest model (RMSEA = .043, SRMR = .049), indicate acceptable fit for each of the models. Item w2v67c was excluded from the models because of high collinearity. Identical items over the waves were allowed to covary and I imposed strong measurement invariance constrains in all models. Additionally, I allowed for covariances between internal efficacy and external efficacy for both efficacy measurements.

Appendix 3.5.2 Effect for reproduction of model presented in Figure 3.3 with listwise deletion.

	Standardized effects		
	Voting	**Party Activities and Contacting**	**Protest**
Auto-regressive effects			
Internal Workplace Efficacy	0.48*	0.48*	0.48*
External Workplace Efficacy	0.40*	0.40*	0.40*
Internal Political Efficacy	0.91*	0.89*	0.89*
External Political Efficacy	0.71*	0.67*	0.70*
Pol.Part.	0.23*	0.43*	0.41*
Evaluation (suppress = ref)			
Support by supervisor - IWE	0.07*	0.07*	0.07*
Support by supervisor - EWE	0.60*	0.60*	0.60*
No support or suppression - IWE	0.00	-0.00	0.00
No support or suppression - EWE	0.43*	0.43*	0.43*
Both support and suppression - IWE	0.03	0.04	0.04
Both support and suppression - EWE	0.09*	0.09*	0.09*
No voice - IWE	-0.04	-0.04	-0.04
No voice - EWE	0.24*	0.24*	0.24*
IWE-IPE	0.24*	0.25*	0.24*
IPE-IWE	0.32*	0.31*	0.33*
EWE-EPE	0.13*	0.13*	0.13*
EPE-EWE	0.11*	0.11*	0.11*
Pol.Part-IPE	0.02	0.06	0.05
IPE- Pol.Part	0.34*	0.30*	0.25*
Pol.Part-EPE	0.00	0.13*	0.02
EPE-Pol.Part	-0.09*	-0.05	-0.09*
Evaluation (suppress = ref)			
Support by supervisor – Pol.Part	0.04	0.06	0.02
No support or suppression – Pol.Part	0.01	0.04	0.06
Both support and suppression – Pol.Part	0.01	0.04	0.06*
No voice – Pol.Part	0.03	-0.09	0.00

Note: N = 2,223; All parameters are standardized. $^{*}p < 0.05$. All relationships were controlled for by education level, age, age squared, gender, migrant status, and by being a supervisor. The relevant fit indices for the voting model (RMSEA = .054, SRMR = .066), the party activities and contacting model (RMSEA = .052, SRMR = .068), and the protest model (RMSEA = .053, SRMR = .066), indicate acceptable fit for each of the models. Identical items over the three time points were allowed to covary and I imposed strong measurement invariance constrains in all models. Item w2v67c was excluded from the models because of high collinearity. Additionally, I allowed for covariances between internal efficacy and external efficacy for both efficacy measurements.

Appendix 3.5.3 Effect for reproduction of model presented in Figure 3.4 with listwise deletion.

	Standardized effects
Auto-regressive effects	
Voice	0.24*
Internal Workplace Efficacy	0.48*
External Workplace Efficacy	0.58*
Internal Political Efficacy	0.93*
External Political Efficacy	0.62*
Cross-Lagged effects	
Voice-IWE	0.12*
IWE-Voice	-0.03
Voice-EWE	-0.02
EWE-Voice	0.12*
IWE-IPE	0.26*
IPE-IWE	0.31*
EWE-EPE	0.13*
EPE-EWE	0.16*
Satisfaction with government response -IPE	0.02
Preferred party in government -IPE	0.02
Satisfaction with government response -EPE	0.27*
Preferred party in government -EPE	0.17*
Preferred party performance - Voice	-0.06

Note: N = 1,602; All parameters are standardized. All relationships were controlled for by education level, age, age squared, gender, migrant status, and by being a supervisor. The relevant fit indices for the model (RMSEA = .042, SRMR = .048) indicate acceptable fit. Identical items over the three time points were allowed to covary and I imposed strong measurement invariance constrains in all models. Additionally, I allowed for covariances between internal efficacy and external efficacy for both efficacy measurements.

Appendix 3.6. Summary statistics of the observed and imputed data for the incomplete variables.

	Observed				Imputed			
	Mean / %	**SD**	**Min**	**Max**	**Mean / %**	**SD**	**Min**	**Max**
Workplace Voice (w1)	87.5%		0.00	1.00	87.2%		0.00	1.00
Evaluation of workplace participation (w1)								
- Support by supervisor (w1)	32.9%		0.00	1.00	35.4%		0.00	1.00
- Suppression by supervisor (w1)	17.6%		0.00	1.00	15.0%		0.00	1.00
- Both support and suppression (w1)	1.7%		0.00	1.00	1.6%		0.00	1.00
- No support or suppression (w1)	35.3%		0.00	1.00	35.3%		0.00	1.00
- No voice (w1)	12.5%		0.00	1.00	12.7%		0.00	1.00
Workplace Voice (w2)	87.8%		0.00	1.00	87.4%		0.00	1.00
Evaluation of workplace participation (w2)								
- Support by supervisor (w2)	31.3%		0.00	1.00	34.1%		0.00	1.00
- Suppression by supervisor (w2)	21.6%		0.00	1.00	18.0%		0.00	1.00
- Both support and suppression (w2)	2.0%		0.00	1.00	1.8%		0.00	1.00
- No support or suppression (w2)	33.4%		0.00	1.00	33.9%		0.00	1.00
- No voice (w2)	11.7%		0.00	1.00	12.1%		0.00	1.00
Satisfaction with government response	2.580	1.03	1.00	5.00	2.596	1.02	-1.82	7.03
Party in government	50.2%		0.00	1.00	49.0%		0.00	1.00
Party performance	-0.086	6.06	-19.10	6.80	-0.022	6.07	-25.30	24.72
Native	92.1%		0.00	1.00	92.1%		0.00	1.00
Supervisor	25.4%		0.00	1.00	25.1%		0.00	1.00

Note: the summary statistics of the imputed data were calculated using pooled data over 70 imputations.

Appendix 3.7. Measurement invariance of latent constructs.

Before I test the hypotheses over time, I first test whether I can meaningfully can compare the latent constructs I use (i.e., different forms of efficacy) over time. Testing for measurement invariance makes sure that the latent constructs have an equal meaning over time. So, the relationship between each of the indicators with identical wording and scaling over time has to relate similarly to the latent construct over time. Since I have a longitudinal panel design, I use the longitudinal measurement invariance approach (see Little et al. 2007; Edossa et al., 2017). For the measurement invariances tests, I use the maximum likelihood estimator and use the CFI (≥.95), the RMSEA (≤.06) and the SRMR (≤.08) as cut-off points (Hu and Bentler, 1999). I do not rely on the chi-squared statistics because it is overly sensitive with a large sample size (Steenkamp and Baumgartner, 1998). To compare different models, I relied on the recommendations of Chen, who argues that for weak invariance, a decrease in CFI of <0.010, an increase in RMSEA of <0.015 and an increase in SRMR of <0.030 all indicate invariance across groups. For strong invariance, the CFI and RMSEA criteria remain the same, while the SRMR should increase by <0.010 (2007).

The measurement invariance tests (see Appendix 7.1) show that the configural model provides an acceptable fit ($\chi 2$ = 2385, 44, df = 209, CFI = .960, RMSEA = .045, SRMR = .036).[65] In addition, I constrain the factor loadings to be equal between waves. The resulting test for weak invariance (ΔCFI = -.001, ΔRMSEA = .000, ΔSRMR = .001) did not show meaningful deterioration. The last step, to test whether I find strong measurement invariance over time also constrains the intercepts to be equal across waves. The resulting model (ΔCFI = .000, ΔRMSEA = -.001, ΔSRMR = .000) shows again no substantial deterioration in model fit, whereby I conclude that the factors have strong measurement invariance over time.[66] Therefore, in the remainder of this chapter I use models with the restrictions for strong measurement invariance: fixed factor loadings and intercepts.

65 I allow for residual covariances between RECO and CONT and between QUAL and ABLE.

66 Estimating these models using the WLSMV-estimator (in line with the cross-lagged structural equation models) results in the same conclusions, with a deterioration of -0.006 and 0.000 in CFI, 0.006 and 0.000 in RMSEA, and 0.004 and 0.000 in SRMR.

Appendix 3.7.1. Longitudinal measurement invariance.

Model	χ^2	*df*	CFI	RMSEA	SRMR	ΔCFI	ΔRMSEA	ΔSRMR
Configural invariance	2385	209	0.960	0.045	0.036	-	-	-
Metric invariance	2417	216	0.959	0.045	0.037	-0.001	0.000	0.001
Strong invariance	2427	223	0.959	0.044	0.037	0.000	-0.001	0.000

Note: N=5,088.

Appendix 3.8. Full model estimates.

Appendix 3.8.1. Full model estimates for model represented in Figure 3.2.

		Standardized effects		
		Voting	**Party Activities and Contacting**	**Protest**
Auto-regressive effects				
Voice	W1→W2	0.12*	0.12*	0.12*
Internal Workplace Efficacy	W1→W2	0.45*	0.45*	0.45*
External Workplace Efficacy	W1→W2	0.56*	0.56*	0.56*
Internal Political Efficacy	W1→W2	0.90*	0.92*	0.89*
External Political Efficacy	W1→W2	0.69*	0.65*	0.68*
Pol.Part.	W1→W2	0.24*	0.40*	0.37*
Cross-Lagged effects				
Voice-IWE	W1→W2	0.11*	0.11*	0.11*
IWE-Voice	W1→W2	0.02	0.03	0.03
Voice-EWE	W1→W2	0.02	0.02	0.02
EWE-Voice	W1→W2	0.08*	0.08*	0.08*
IWE-IPE	W1→W2	0.21*	0.21*	0.21*
IPE-IWE	W1→W2	0.27*	0.27*	0.27*
EWE-EPE	W1→W2	0.14*	0.14*	0.14*
EPE-EWE	W1→W2	0.16*	0.15*	0.16*
Pol.Part-IPE	W1→W2	0.04*	0.03	0.05*
IPE- Pol.Part	W1→W2	0.33*	0.35*	0.30*
Pol.Part-EPE	W1→W2	0.03*	0.15*	0.05*
EPE-Pol.Part	W1→W2	-0.09*	-0.04	-0.14*
Voice-Pol.Part	W1→W2	-0.00	0.05	0.02
Pol.Part-Voice	W1→W2	0.07*	0.02	-0.01

Note: N = 5,088; All parameters are standardized. $^{*}p < 0.05$. All relationships were controlled for by education level, age, age squared, gender, migrant status, and by being a supervisor. The relevant fit indices for the voting model (RMSEA = .040, SRMR = .044), the party activities and contacting model (RMSEA = .039, SRMR = .044), and the protest model (RMSEA = .039, SRMR = .044), indicate acceptable fit for each of the models. Identical items over the three time points were allowed to covary and I imposed strong measurement invariance constrains in all models. Additionally, I allowed for covariances between internal efficacy and external efficacy for both efficacy measurements. IWE = internal workplace efficacy, EWE = external workplace efficacy, IPE = internal political efficacy, EPE = external political efficacy.

Appendix 3.8.2. Full model estimates for model represented in Figure 3.3.

	Standardized effects		
	Voting	**Party Activities and Contacting**	**Protest**
Auto-regressive effects			
Internal Workplace Efficacy	0.44*	0.44*	0.44*
External Workplace Efficacy	0.42*	0.42*	0.42*
Internal Political Efficacy	0.88*	0.91*	0.89*
External Political Efficacy	0.68*	0.64*	0.68*
Pol.Part.	0.24*	0.40*	0.37*
Cross-Lagged effects			
Evaluation (suppress = ref)			
- *Support by supervisor - IWE*	0.09*	0.09*	0.09*
- *Support by supervisor - EWE*	0.64*	0.64*	0.64*
- *No support or suppression - IWE*	-0.02	-0.02	-0.01
- *No support or suppression - EWE*	0.42*	0.42*	0.42*
- *Both support and suppression - IWE*	0.03	0.03	0.03
- *Both support and suppression - EWE*	0.09*	0.09*	0.09*
- *No voice - IWE*	-0.05*	-0.06*	-0.06*
- *No voice - EWE*	0.26*	0.26*	0.26*
IWE-IPE	0.21*	0.22*	0.21*
IPE-IWE	0.27*	0.27*	0.27*
EWE-EPE	0.12*	0.12*	0.12*
EPE-EWE	0.10*	0.09*	0.10*
Pol.Part-IPE	0.04*	0.04	0.05*
IPE- Pol.Part	0.33*	0.34*	0.30*
Pol.Part-EPE	0.04*	0.14*	0.04*
EPE-Pol.Part	-0.10*	-0.03	-0.14*
Evaluation (suppress = ref)			
- *Support by supervisor – Pol.Part*	0.01	0.00	0.00
- *No support or suppression – Pol.Part*	0.00	0.01	0.02
- *Both support and suppression – Pol.Part*	0.02	0.03	0.03
- *No voice – Pol.Part*	0.01	-0.04	-0.01

Note: N = 5,088; All parameters are standardized. $^{*}p < 0.05$. All relationships were controlled for by education level, age, age squared, gender, migrant status, and by being a supervisor. The relevant fit indices for the voting model (RMSEA = .034, SRMR = .044), the party activities and contacting model (RMSEA = .033, SRMR = .044), and the protest model (RMSEA = .034, SRMR = .044), indicate acceptable fit for each of the models. Identical items over the three time points were allowed to covary and I imposed strong measurement invariance constrains in all models. Additionally, I allowed for covariances between internal efficacy and external efficacy for both efficacy measurements. IWE = internal workplace efficacy, EWE = external workplace efficacy, IPE = internal political efficacy, EPE = external political efficacy.

Appendix 3.8.3. Full model estimates for model represented in Figure 3.4**.**

	Standardized effects
Auto-regressive effects	
Voice	0.12*
Internal Workplace Efficacy	0.45*
External Workplace Efficacy	0.56*
Internal Political Efficacy	0.89*
External Political Efficacy	0.56*
Cross-Lagged effects	
Voice-IWE	0.12*
IWE-Voice	0.03
Voice-EWE	0.02
EWE-Voice	0.07*
IWE-IPE	0.22*
IPE-IWE	0.26*
EWE-EPE	0.10*
EPE-EWE	0.12*
Satisfaction with government response -IPE	0.03
Preferred party in government -IPE	0.01
Satisfaction with government response -EPE	0.29*
Preferred party in government -EPE	0.14*
Preferred party performance - Voice	-0.03

Note: N = 5,088; All parameters are standardized. $^{*}p < 0.05$. All relationships were controlled for by education level, age, age squared, gender, migrant status, and by being a supervisor. The relevant fit indices for the model (RMSEA = .041, SRMR = .045) indicate acceptable fit. Identical items over the three time points were allowed to covary and I imposed strong measurement invariance constrains in all models. Additionally, I allowed for covariances between internal efficacy and external efficacy for both efficacy measurements. IWE = internal workplace efficacy, EWE = external workplace efficacy, IPE = internal political efficacy, EPE = external political efficacy.

Appendix 4.1. Differences between dropouts and nondropouts.

	Dropouts	**Nondropouts**
Lower Education	0.116	0.102
Middle Education	0.453	0.471
High Education	0.432	0.427
Political Participation	5.814	6.165
Workplace Voice	0.849	0.869
Problem Solved	0.386	0.389
Supervisor Support	0.330	0.336
Coworker Support	0.567	0.553
Political Discussion	0.760	0.758
Social Capital	0.666	0.658

Note: *significant ($p<0.05$) difference between groups.

Appendix 4.2. Types of political participation.

Type of political participation	% of respondents	Mode of participation
Voted in municipal election	85.8%	Vote
Being a member of a political party	4.5%	Party Activity
Contact a local or national politician for a political reason	2.6%	Contact
Attend a political meeting	3.2%	Party Activity
Donate money to a political party or political organization	2.2%	Party Activity
Do voluntary work for a political party or other organization with a political aim	1.6%	Party Activity
Sign a petition	17.4%	Consumer Participation
Vote during a referendum	43.3%	Referendum
Buy or boycott certain products for a political reason	5.1%	Consumer Participation
Contact or appear in the media for a political reason	0.9%	Contact
Mobilize others for a political reason (e.g., mobilization of others via the Internet)	1.4%	Protest
Take part in a demonstration	2.1%	Protest
Participate in illegal activity for a political reason (e.g., create a public nuisance, damage public or private property or participate in violence)	0.2%	Protest

Note: N=3,037.

Appendix 4.3. Items used for social capital.

Do you have anyone at work …
with whom you can talk about personal problems
who you can ask to do something fun
with whom you can be sociable
from whom you can borrow 100 euro
who can do your shopping when you are ill
who can help you with transport (for example when you are sick or when your car broke down)

Appendix 4.4. OLS regression estimates of the relation between education and workplace political socialization including control variables.

	Works Council	Labour Union	Workplace Voice	Problem Solved	Supervisor Support	Coworker Support	Political Discussion	Social Capital
Education Level (low = ref)								
- *Middle*	0.01	-0.03	0.03	0.03	0.01	0.01	0.08*	0.03
	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)
- *High*	0.07*	-0.05	0.06*	0.04	0.06	0.04	0.16*	0.05*
	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)	(0.03)	(0.02)
Constant	0.03	0.17*	0.82*	0.48*	0.42*	0.45*	0.64*	0.67*
	(0.03)	(0.03)	(0.04)	(0.04)	(0.04)	(0.05)	(0.04)	(0.03)

Note: N=3,037; *p<0.05; I applied linear probability models with robust standard errors for models for works council, labour union, workplace voice, supervisor support, coworker support, and political discussion; standard errors in parentheses.

Appendix 4.5. How EGP class and workplace socialization mediate the effect of being higher educated compared to lower educated on different types of workplace political socialization and political participation.

Dependent variable	Works Council[b]	Labour Union[b]	Workplace Voice[b]	Problem Solved[a]	Supervisor Support[b]	Coworker Support[b]	Political Discussion[b]	Social Capital[a]	Political Participation[a]
Mediator	EGP class	EGP class	EGP class	EGP class	EGP class	EGP class	EGP class	EGP class	Workplace Socialization
Indirect effect	0.161#	-0.126#	0.246*	0.020#	0.284*	0.207*	0.340*	0.055*	0.462*
95% CI of indirect effect	-0.010 – 0.333	-0.266 – 0.014	0.062 – 0.430	-0.001 – 0.041	0.152 – 0.417	0.085 – 0.330	0.198 – 0.482	0.034 – 0.077	0.109 – 0.845
Proportion of total effect mediated	0.298	0.440	0.448	0.457	0.943	0.900	0.394	0.889	0.067

Note: N=3,037; * significant indirect effect ($p<0.05$; #<0.10); [a]effects calculated using linear probability models; [b] effects calculated using logistic regression models; I use education level as the independent variable, EGP class (working class, intermediate class, and service class) as the mediator, and contract type, gender, age and age squared as controls for all the effects for the first seven models, while the workplace political socialization variables serve as mediation variables for the last model; 1000 bootstrap samples are used for the calculation of the 95% confidence intervals of the indirect effects.

Appendix 4.6. Bivariate effects of workplace political socialization on political participation.

Social Capital	0.87							
	(0.56)							
Political Discussion		2.85*						
		(0.43)						
Works Council			3.49*					
			(0.49)					
Labour Union				2.33*				
				(0.44)				
Workplace Voice					1.77*			
					(0.55)			
Problem Solved						0.79		
						(0.50)		
Supervisor Support							0.73	
							(0.38)	
Coworker Support								1.47*
								(0.36)
Constant	12.54*	10.90*	12.55*	12.56*	11.56*	12.79*	12.85*	12.29*
	(0.40)	(0.37)	(0.19)	(0.21)	(0.51)	(0.27)	(0.22)	(0.27)

Note: N=3,037; *p<0.05; standard errors in parentheses.

Appendix 4.7. Effects of work on political participation using a negative binomial regression.

	Negative Binomial Regression
Social Capital	-0.17
	(0.09)
Political Discussion	0.23*
	(0.07)
Works Council	0.27*
	(0.06)
Labour Union	0.23*
	(0.05)
Workplace Voice	0.03
	(0.09)
Problem Solved	0.02
	(0.08)
Supervisor Support	0.04
	(0.06)
Coworker Support	0.14*
	(0.05)
Education Level (Low = ref)	
- *Middle*	0.47*
	(0.12)
- *High*	0.93*
	(0.12)
Contract type (permanent = ref)	
- *Temporary*	0.28*
	(0.07)
- *Other*	0.20*
	(0.10)
Outside Political Discussion	0.08
	(0.13)
Outside Social Capital	0.36*
	(0.11)
Female	-0.24*
	(0.05)
Age *(16 years = 0)*	-0.01
	(0.01)
Age squared[a]	0.05*
	(0.02)
Constant	-1.57*
	(0.18)

Note: N=3,037; *p<0.05; standard errors in parentheses. [a]For interpretation purposes, I presented the actual effect multiplied by 100.

Appendix 5.1. Explaining political trust excluding (experiences with) voice variables.

	Model 1
Political Discussion	0.14*
	(0.03)
Open Workplace Climate	0.12*
	(0.02)
Works Council	-0.01
	(0.04)
Trade Union	-0.02
	(0.03)
Influence Organizational Policies	0.07*
	(0.01)
Education Level *(ref = high)*	
- Middle Education Level	-0.29*
	(0.03)
- Low Education Level	-0.55*
	(0.05)
Age *(0 = 15 years)*[a]	-0.19
	(0.10)
Gender *(1 = male)*	0.00
	(0.02)
Political Outcome Satisfaction	0.38*
	(0.01)
Political Interest	0.21*
	(0.03)
Constant	-0.80*
	(0.06)
Explained Variance	0.248

Note: N=4831; *p<0.05; standard errors in parentheses. [a] For interpretation purposes, I presented the actual effect multiplied by 100.

Appendix 5.2.1. Descriptive statistics.

	Mean	Std. dev	Min	Max
Political Trust (W2)	0.00	0.970	-1.91	2.61
Political Discussion	75.6%		0.00	1.00
Open Workplace Climate	0.20	0.619	-1.59	1.30
Works Council	15.6%		0.00	1.00
Trade Union	25.7%		0.00	1.00
Workplace Voice	88.0%		0.00	1.00
Coworker Support	55.4%		0.00	1.00
Supervisor Support	34.0%		0.00	1.00
Outcome Satisfaction	0.34	0.355	0.00	1.00
Influence Organizational Policies	2.87	1.123	1.00	5.00
Low Education Level	7.5%		0.00	1.00
Middle Education Level	45.4%		0.00	1.00
High Education Level	47.1%		0.00	1.00
Age *(0 = 15 years)*[a]	0.25	0.122	0.00	0.49
Gender *(1 = male)*	50.9%		0.00	1.00
Political Outcome Satisfaction	1.61	0.953	0.00	4.00
Political Interest	54.7%		0.00	1.00
Political Trust (2017)	0.01	0.975	-2.08	2.56
N	2799			

Appendix 5.2.2. Correlation matrix.

	Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Political Trust (W2)	1.000																	
2	Political Discussion	0.120	1.000																
3	Open Workplace Climate	0.141	0.115	1.000															
4	Works Council	0.010	0.056	-0.028	1.000														
5	Trade Union	-0.034	0.017	-0.017	0.163	1.000													
6	Influence Organizational Policies	0.144	0.049	0.284	0.039	-0.052	1.000												
7	Workplace Voice	0.026	0.059	0.075	0.010	0.071	0.041	1.000											
8	Coworker Support	0.081	0.143	0.084	0.006	0.046	-0.000	0.386	1.000										
9	Supervisor Support	0.087	0.067	0.176	0.004	-0.033	0.125	0.258	0.117	1.000									
10	Outcome Satisfaction	0.068	0.049	0.160	-0.004	-0.027	0.159	0.352	0.056	0.497	1.000								
11	Low Education Level	-0.148	-0.078	-0.013	-0.036	0.016	-0.035	-0.041	-0.056	-0.047	0.013	1.000							
12	Middle Education Level	-0.176	-0.097	-0.056	-0.028	0.042	-0.102	0.019	-0.021	-0.055	-0.047	-0.260	1.000						
13	High Education Level	0.254	0.138	0.063	0.047	-0.051	0.121	0.002	0.050	0.080	0.040	-0.268	-0.860	1.000					
14	Age *(0 = 15 years)*[a]	-0.033	0.036	-0.012	0.186	0.230	-0.039	0.057	0.039	-0.069	-0.103	-0.002	0.083	-0.082	1.000				
15	Gender *(1 = male)*	-0.027	0.060	0.004	0.075	0.060	0.046	-0.018	-0.126	-0.034	-0.012	0.057	0.043	-0.073	0.106	1.000			
16	Political Outcome Satisfaction	0.373	-0.012	0.065	0.008	-0.052	0.065	0.044	0.028	0.061	0.069	-0.020	-0.063	0.073	-0.061	-0.076	1.000		
17	Political Interest	0.155	0.157	0.027	0.108	0.081	0.033	0.004	0.069	0.005	-0.030	-0.136	-0.156	0.227	0.201	0.101	-0.036	1.000	
18	Political Trust (2017)	0.733	0.115	0.171	0.007	-0.033	0.158	0.011	0.062	0.083	0.074	-0.157	-0.188	0.271	-0.016	-0.031	0.313	0.176	1.000

Note: N=2799.

Appendix 5.3. Explaining political trust using different mechanisms.

	Model 1	Model 2	Model 3	Model 4
Political Discussion	0.18*			
	(0.04)			
Open Workplace Climate		0.16*		
		(0.03)		
Works Council			-0.03	
			(0.05)	
Trade Union			-0.04	
			(0.04)	
Workplace Voice			0.02	-0.10
			(0.05)	(0.06)
Coworker Support				0.12*
				(0.04)
Supervisor Support				0.06
				(0.04)
Outcome Satisfaction				0.06
				(0.06)
Influence Organizational Policies				0.08*
				(0.01)
Education Level *(ref = high)* - Middle Education Level	-0.33*	-0.34*	-0.34*	-0.32*
	(0.04)	(0.03)	(0.04)	(0.04)
- Low Education Level	-0.61*	-0.62*	-0.63*	-0.60*
	(0.07)	(0.07)	(0.07)	(0.07)
Age *(0 = 15 years)*[a]	-0.18	-0.17	-0.11	-0.13
	(0.14)	(0.14)	(0.15)	(0.14)
Gender *(1 = male)*	0.01	0.01	0.02	0.02
	(0.03)	(0.03)	(0.03)	(0.03)
Political Outcome Satisfaction	0.37*	0.36*	0.37*	0.36*
	(0.02)	(0.02)	(0.02)	(0.02)
Political Interest	0.22*	0.23*	0.24*	0.23*
	(0.03)	(0.03)	(0.03)	(0.03)
Constant	-0.61*	-0.51*	-0.50*	-0.73*
	(0.06)	(0.05)	(0.07)	(0.08)
Explained Variance	0.217	0.221	0.212	0.224

Note: N=2799;*p<0.05; standard errors in parentheses. [a] For interpretation purposes, I presented the actual effect multiplied by 100.

Appendix 5.4. Explaining political trust including political discussion outside of the workplace.

	Model 1
Political Discussion	0.10*
	(0.04)
Open Workplace Climate	0.11*
	(0.03)
Works Council	-0.03
	(0.05)
Trade Union	-0.04
	(0.04)
Workplace Voice	-0.10
	(0.06)
Co-worker Support	0.09*
	(0.04)
Supervisor Support	0.04
	(0.04)
Outcome Satisfaction	0.04
	(0.06)
Influence Organizational Policies	0.06*
	(0.02)
Education level *(ref = high)*	
- Middle Education Level	-0.29*
	(0.04)
- Low Education Level	-0.56*
	(0.07)
Age *(0 = 15 years)*[a]	-0.06
	(0.14)
Gender *(1 = male)*	0.01
	(0.03)
Political Outcome Satisfaction	0.36*
	(0.02)
Political Interest	0.20*
	(0.04)
Outside Political Discussion	0.13*
	(0.04)
Constant	-0.77*
	(0.08)
Explained Variance	0.236

Note: N=2799; *p<0.05; standard errors in parentheses. [a] For interpretation purposes, I presented the actual effect multiplied by 100.

Appendix 5.5. Effects of political discussion, open workplace climate, and coworker support on political trust by education level interaction models.

	Model 1	Model 2[67]	Model 3
Political Discussion	-0.04	0.14*	0.06*
	(0.05)	(0.04)	(0.03)
Open Workplace Climate	0.00	0.05	0.00
	(0.02)	(0.04)	(0.02)
Works Council	-0.01	-0.04	-0.00
	(0.03)	(0.05)	(0.03)
Trade Union	0.00	-0.04	0.00
	(0.03)	(0.04)	(0.03)
Workplace Voice	-0.01	-0.10	-0.01
	(0.04)	(0.06)	(0.04)
Co-workers' Support	0.05	0.09*	0.01
	(0.03)	(0.04)	(0.04)
Supervisor Support	0.03	0.04	0.03
	(0.03)	(0.04)	(0.03)
Outcome Satisfaction	-0.02	0.04	-0.02
	(0.04)	(0.06)	(0.04)
Influence	0.02	0.06*	0.02
	(0.01)	(0.02)	(0.01)
Low Education Level	-0.25*	-0.62*	-0.26*
	(0.09)	(0.07)	(0.07)
Middle Education Level	-0.23*	-0.33*	-0.12*
	(0.05)	(0.04)	(0.04)
Age[a]	-0.15	-0.07	-0.15
	(0.11)	(0.14)	(0.11)
Male	0.02	0.01	0.02
	(0.02)	(0.03)	(0.02)
Political Outcome Satisfaction	0.17*	0.36*	0.17*
	(0.01)	(0.02)	(0.01)
Political Interest	0.05*	0.21*	0.05*
	(0.03)	(0.03)	(0.03)

67 In line with the base model presented in Table 2 of this chapter, I do not find a significant effect of open workplace climate when controlling for previous levels of political trust.

Appendix 5.5. Effects of political discussion, open workplace climate, and coworker support on political trust by education level interaction models (continued).

	Model 1	Model 2	Model 3
Low Education Level * Political Discussion	0.10		
	(0.10)		
Middle Education Level * Political Discussion	0.19**		
	(0.06)		
Low Education Level * Open Workplace Climate		0.18	
		(0.10)	
Middle Education Level * Open Workplace Climate		0.11*	
		(0.05)	
Low Education Level * Co-worker Support			0.19*
			(0.10)
Middle Education Level * Co-worker Support			0.06
			(0.05)
Political Trust (W1)	0.65*		0.65*
	(0.01)		(0.01)
Constant	-0.26*	-0.75*	-0.32*
	(0.07)	(0.08)	(0.07)

Note: N=2799; *p<0.05; standard errors in parentheses. [a] For interpretation purposes, I presented the actual effect multiplied by 100.

8

Research Data Management

The data obtained and used for my PhD project have been captured and stored in the Workgroup, the official intranet cloud, as recommended by the department. The data used in this thesis have been collected with consent of the participants. The data was collected within the project "Linking the Discontented Employee and the Discontented Citizen". The data used in this project has a back-up on the university server belonging to the department (C013688) and are accessible by senior staff members.

9

Summary in Dutch

In dit proefschrift bestudeer ik de link tussen politieke socialisatie op het werk enerzijds en politieke participatie en politiek vertrouwen anderzijds. Specifiek draag ik bij aan een beter begrip van de opleidingsverschillen in politieke participatie en politiek vertrouwen. Daarbij focus ik op het werk als socialisatie-omgeving: een omgeving die tot nu toe weinig aandacht heeft gekregen in het begrijpen van deze verschillen. Voor mijn onderzoek gebruik ik de 'Work and Politics Panel Survey'.

Eerdere onderzoeken naar de effecten van politieke socialisatie op het werk hebben tegenstrijdige bevindingen. Ik presenter drie mogelijke oorzaken van deze tegenstrijdige bevindingen en introduceer drie vernieuwingen om deze oorzaken aan te pakken. Ten eerste kijk ik naar zowel aanmoedigende als teleurstellende ervaringen met participatie op het werk. Ik stel dat teleurstellende ervaringen met participatie op het werk politieke participatie en vertrouwen kunnen doen afnemen. Mijn resultaten laten zien dat de effecten van participatie op het werk op politieke participatie en vertrouwen inderdaad afhankelijk zijn van de evaluatie van de ervaring.

Ten tweede test ik twee theoretische mechanismen die het werk en de politiek linken in het zelfde model. Het eerste mechanisme, het spillover-mechanisme, verondersteld een positieve relatie omdat het verwacht dat vaardigheden en houdingen opgedaan op het werk overslaan naar vaardigheden en houdingen in de politiek. Het tweede mechanisme, het competitiemechanisme, verondersteld een negatieve relatie tussen werk en politiek omdat de middelen die nodig zijn om te participeren op het werk (zoals tijd en energie), niet gebruikt kunnen worden voor participatie in de politiek. Wanneer beide mechanismen gelden, kunnen de tegenstrijdige effecten elkaar opheffen, wat de tegengestelde effecten die gevonden zijn in eerder onderzoek mogelijk verklaren. In mijn proefschrift vind ik steun voor het spillover-mechanisme, maar niet voor het competitie-mechanisme, maar het spillover-mechanisme kan ook particpatie- en vertrouwen-verlagend werken.

Ten derde test ik de effecten van meer alledaagse vormen van participatie op het werk in plaats van weinig voorkomende typen vormen van participatie op het werk zoals coöperaties. Specifiek kijk ik naar de effecten van ervaringen met mondigheid op het werk. Ik vind dat deze ervaringen effecten hebben op politieke participatie en vertrouwen. Omdat deze effecten vaak niet meegenomen zijn in eerdere onderzoeken is het totale effect van ervaringen op het werk op politiek gedrag en houdingen mogelijk groter dan eerder gedacht.

In de laatste twee hoofdstukken van mijn proefschrift pas ik deze innovaties toe om een beter begrip te krijgen van opleidingsverschillen in politieke participatie en vertrouwen. Ten eerste vind ik dat hoger opgeleiden meer politieke socialisatie op het werk genieten, wat deels verklaard waarom ze meer politiek participeren.

Ten tweede vind ik dat politiek socialisatie op het werk ook politiek vertrouwen beïnvloedt. De effecten van politieke socialisatie op het werk op politiek vertrouwen zijn groter voor lager opgeleiden dan voor hoger opgeleiden, wat impliceert dat politieke socialisatie op het werk kan bijdragen aan het verkleinen van de opleidingskloof in politiek vertrouwen. Mijn proefschrift laat dus zien dat kijken naar het werk als socialisatieomgeving, politieke ongelijkheden kan helpen begrijpen en dat politieke socialisatie op het werk mogelijk kan bijdragen aan het vergroten of verkleinen van deze ongelijkheden.

10

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