New Ways of Working and Employee In-Role Performance in Swiss Public Administration

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Abstract: Following the COVID-19 pandemic, public organizations are tempted to introduce practices that allow employees to work independently of time and space. However, little is known about the impact of such practices on employees' outcomes. The purpose of this study is to investigate the relationship between New Ways of Working (NWW) and in-role performance, while also considering the role that outcome-oriented culture plays in this relationship. Hierarchical regression models are used to analyze a sample of 1204 public employees at the cantonal level in Switzerland. Our findings support the hypothesized positive relationships between two NWW practices (flexibility in time and location and access to organizational knowledge). However, the moderating role of an outcome-oriented culture is only partially supported. Our study emphasizes the significance of having an organizational culture that is aligned with practices such as NWW to improve job performance.

Keywords: new ways of working; in-role performance; outcome-oriented culture; Switzerland; public administration

1. Introduction

The COVID-19 crisis affected countries worldwide between the end of 2019 and the early weeks of 2020, forcing governments to find solutions to contain the virus while also protecting the population, economy, and healthcare sector [1]. Therefore, measures such as lockdowns, shutdowns, and mandatory teleworking were implemented [2]. The latter is part of a set of HRM practices called New Ways of Working (NWW) [3], which may be defined as “practices in which employees are able to work independent of time, place and organization, supported by a flexible work environment which is facilitated by information technologies” [4] (p. 49). Teleworking, flexible working hours and access to organizational knowledge are typical NWW practices—which also include activity-based working (ABW) [5]—and they were widely implemented in public administrations that needed to ensure service continuity [6]. As a result of NWW’s implementation, many public sector employees were forced to learn to perform their tasks away from their usual work environment, managers and co-workers [6]. Similar to other governments around the world, the Swiss Federal Council made teleworking mandatory for all organizations, including public administrations, in mid-March 2020.

Although NWW were widely introduced at the start of the COVID-19 pandemic to assist organizations in ensuring operational continuity [7], the effects of NWW have received little scholarly attention since their initial appearance in the 1990s, when they were implemented in various public and private organizations in the Netherlands [8,9]. Thus, the situation of “forced” remote working provided an opportunity to close this research gap. This study examines the relationship between NWW and individual job performance using the theoretical framework of social exchange theory (SET). Specifically, we focus on in-role performance, which is one of the dimensions of the general concept of job performance, along with extra-role performance, such as organizational citizenship behaviors (OCB) and...
innovative performance [10]. The rationale behind this decision is that in-role performance is directly related to core employee tasks, the completion of which leads to the continued delivery of public services [11]. Accordingly, the first research question is as follows:

**Research Question 1:** What is the relationship between NWW and in-role performance?

The scientific literature on HRM practices has highlighted the importance of considering the organizational context, including variables such as organizational strategy, climate or culture, when implementing such practices [12]. Scholars have emphasized that NWW, as a flexibility oriented HRM practice [13], must be congruent with organizational culture [14,15]. However, we could not find any research that examined the role of organizational culture in the relationship between NWW and employees’ outcomes. One of our goals is to close that gap, and we believe that the Swiss context is particularly interesting for studying that relationship. Since the late 1980s and early 1990s, Swiss public administrations have been quite receptive to the New Public Management (NPM) movement and, consequently, several HRM practices aimed at improving employee performance have been implemented [16,17]. Such reforms demonstrate a cultural shift towards values such as outcome orientation and individual achievement [18]. Little is known, however, about the actual strength of such a culture and its relationship with both NWW and individual performance. Furthermore, some studies have found that values associated with Public Service Motivation (PSM), such as self-sacrifice, public interest and compassion, are prevalent among Swiss public servants [19,20]. Therefore, the second research question is as follows:

**Research Question 2:** What role does an outcome-oriented culture play in the relationship between NWW and in-role performance?

We use the SET framework [21] to answer our research questions, which states that employees exhibit positive work behaviors as long as they perceive HRM practices and the organizational context to be supportive. From this perspective, our study contributes to the emerging NWW literature in public administration by filling a gap caused by a lack of empirical evidence about the links between NWW and in-role performance. Although NWW have been implemented in several European public organizations [22], little is known about these practices, which are surrounded by debates about their positive impact on employee effectiveness [23].

The remainder of this paper is organized as follows. We begin by elucidating the concepts of NWW and in-role performance. We then present our theoretical framework and review the literature on the relationships between NWW, in-role performance, and organizational culture, which subsequently allows us to formulate our hypotheses. The data and methods used to conduct our research have been presented in Section 3. Sections 4 and 5 present and discuss our results, and Section 6 presents our conclusions, limitations and future research directions.

### 2. Theoretical Background and Hypotheses

#### 2.1. New Ways of Working (NWW)

NWW consists of the combined and complementary use of teleworking, flexible working hours, and activity-based working [23]. Teleworking is a work arrangement that relies heavily on ICT, which enables employees to perform their tasks from any other location (home, client venue, or satellite office, etc.) than an organization’s main office [24]. Flexible working hours give a certain degree to employees to determine their working schedule [25]. Some researchers have combined teleworking and flexible working hours into a single category called “flexibility in time and location” [26,27]. Activity-based working is a style of working which allows employees to perform their tasks in an environment where they do not have an assigned desk and the workspaces are divided into several separate areas designed to handle different types of activities (e.g., concentration, collaboration, and so on) [28]. Although these practices are not new [29], what distinguishes NWW is that they “are mutually supportive of each other and induce complementary effects when used together in a coherent manner” [30] (p. 511). Beyond the three main NWW
dimensions defined above, some scholars have included additional constructs as facets of NWW such as information and communication technology (ICT), management by output, collaborative management, and access to organizational knowledge [26,31,32]. Since the surveyed employees were unable to use ABW during the lockdown period, we limited our examination to two aspects of NWW: flexibility in time and location (comprising teleworking and flexible working hours) and access to organizational knowledge (access to organizational information by colleagues and supervisors). The latter emphasizes the critical role of ICT in the provision of organizational knowledge, which enables employees to access all types of knowledge at a distance as well as to communicate and share their personal knowledge and work experiences with their coworkers and managers [5]. Organizational knowledge is a collective construction. It is made up of formal—such as organizational rules and procedures—as well as informal elements—based on experiences shared between coworkers—that guide employees’ behavior, allowing them to perform their core responsibilities [33]. Overall, NWW practices are closely related to other HR goals such as family-friendly policies and work–life balance, autonomy and decentralized decision-making, teamwork and collaboration, and communication and information sharing [34]. The NWW was implemented in the 1990s in public and private organizations based in the Netherlands before gaining popularity in Belgium [22]. It was only at the beginning of the 21st Century that scholars have begun to show interest by these practices [9]. In recent years, research on NWWs has surged in different national contexts, such as the Netherlands, the Gulf States, Brazil, Belgium, Spain, and Switzerland. Some studies have focused on the implementation process of NWW in organizations. From that perspective, scholars have been particularly interested in disentangling the complex interplays between actors willing to adopt NWW in their organization [15,22]. In other studies, researchers have investigated the relationships between NWW and work outcomes such as work engagement, extra-role performance, and well-being at work [2,5,35,36].

2.2. In-Role Performance in Public Administration

In-role performance is defined as “the achievement of officially required outcomes and behaviors that directly serve the goals of the organization” [37] (p. 5). Specifically, it captures the behaviors and their outcomes associated with the core tasks of one’s job [38], as described in their job description [39]. This concept has been labeled in the literature in a variety of ways, such as task performance [40], job-specific task proficiency [41] or formal performance [42], and several indicators, such as work quantity, work quality, work accuracy, and so on, have been used to measure it [10].

From the late 1980s to the early 1990s, NPM-related reforms pushed performance issues such as productivity, efficiency, and effectiveness of public sector organizations at the top of the political agenda [43–45]. Therefore, in-role performance (of public employees) has grown in popularity among academics as it is directly related to the delivery of public services and, thus, to the achievement of public policy program goals [46].

Individual and organizational variables both serve as predictors of public in-role performance. The relationship between public service motivation (PSM) and task performance has been extensively researched among individual antecedents, highlighting an overall positive relationship between the two concepts [42,46–48]. Several HRM practices’ effects on task performance have been studied as organizational antecedents of in-role performance in the public sector. Development and training, for example, or recruitment and selection, have been found to be positively related to in-role performance [49–51]. The same results have been observed for practices that are also at the core of NWW: team working and collaboration, communication and information sharing, autonomy and decentralized decision-making, and family-friendly policies and WLB [52].

2.3. Theoretical Framework: Social Exchange Theory

SET is based on anthropology, sociology and social psychology [53] and refers to “voluntary actions of individuals that are motivated by the returns they are expected to
bring and typically do in fact bring from others” [21] (p. 91). The reciprocity norm is central to this theory: when someone gives something (love, help, support, object, etc.) to someone else, it is expected that the recipient will return the favor. However, it is not specified what the giver will receive in return or when this will occur [21]. Therefore, trust is a fundamental component of social exchange as it implies that others will fulfill their obligation to give back, which most people do as they do not want to be socially sanctioned (such as being excluded from future transactions). To summarize, SET is about relationships and transactions that will aid in the formation and strengthening of social bonds between individuals and groups [21].

Given that an employment relationship is both an economic and a social exchange, SET can be used in the workplace [54]. It consists of “voluntary actions which may be initiated by an organization’s treatment of its employees, with the expectation that such treatment will eventually be reciprocated” [55] (p. 3). HRM practices, such as autonomy-based practices, training and development programs, family-friendly policies and WLB, and so on, are among those voluntary actions undertaken by organizations to indicate to employees that their organization trusts them, values, and wishes to enter into a long-term professional relationship with them [56]. Employees are then expected to reciprocate with attitudes (commitment, motivation, etc.) and behaviors (such as OCB or in-role performance) that will assist organizations in achieving their objectives.

HRM practices must be congruent with the organizational context to produce the desired effects on employees’ outcomes—in this case, in-role performance. Organizational culture, in particular, “shapes HRM practices, which, in turn, reinforce cultural norms and routines that can shape individual [and firm] performance” [57] (p. 205). From the SET perspective, a misfit between organizational context and HRM practices can send ambiguous signals to employees, who may ultimately perceive their working environment as less supportive. Consequently, these employees will be less likely to give back, will be less engaged, and their performance will continue to worsen [53].

In the context of our study, we contend that SET is an appropriate framework for analyzing the relationships between our variables. Indeed, by implementing NWW practices, the organization communicates to its employees that it values, trusts, and supports them. The NWW practices seek to protect employees’ health by ensuring social distancing. Simultaneously, they provide employees with the option of working remotely. Finally, SET helps us understand the relationship between NWW, organizational culture, and individual behaviors by allowing us to discuss the fits and misfits between these variables.

2.4. Literature Review
2.4.1. NWW and In-Role Performance

Organizational discourses frequently surround NWW implementation, depicting these practices as a means of improving, among other outcomes, in-role performance [58]. However, because NWW have been rarely studied, empirical evidence about its influence on in-role performance is scarce [9]. Furthermore, the few existing studies yield inconclusive results and are primarily based on research conducted in private organizations. A preliminary review of NWW literature found no statistically significant relationship between NWW and in-role performance [32]. The same conclusion was drawn by a study that examined a sample of employees from a Dutch financial company [59]. Conversely, two studies conducted in other Dutch-financial organizations found that NWW were positively related to in-role performance [4,60]. A recent study on Swiss public administration revealed a positive relationship between two NWW aspects (time and location flexibility, as well as access to colleagues) and in-role performance [2]. Given the scarcity of NWW evidence (as a bundle), we focus on individual practices of time and location flexibility (teleworking and flexible-working hours) and access to organizational knowledge in public administration.

Flexibility in time and location (FTL) and in-role performance: According to factor analyses from two previous studies, FTL is a higher order construct that includes telework-
ing and flexible-working hours \[26,27\]. However, aside from the aforementioned study by Giauque and team, we have found no research in the field of public administration that uses such a variable. Therefore, we reviewed the relevant literature on teleworking and flexible-working hours. Although we observed that teleworking is an important topic in the field of public administration \[61–64\], we found no studies assessing the relationship between teleworking and in-role performance in that specific field. Conversely, some evidence is available from studies conducted in private organizations. A meta-analysis of 46 studies with over 12,000 respondents showed that teleworking is positively related to in-role performance \[24\]. Similar findings were obtained from a literature review conducted by Allen and team \[65\]. A recent study assessing the effectiveness of a voluntary telecommuting program in a private U.S. organization found that the intensity of teleworking was positively related to in-role performance: the higher the percentage of time spent teleworking, the higher the supervisor-assessed in-role performance \[66\]. However, in another U.S. private firm, teleworking intensity was negatively related to in-role performance \[67\]. Finally, a study based on data from nine countries revealed a negative relationship between teleworking and in-role performance \[68\].

In terms of the practice of flexible working hours, we found no research being conducted in the public sector. Some scarce and tempered evidence is available from research conducted in private companies \[69\]. A positive relationship between flexible work schedule and in-role performance was discovered in a sample of employees from U.S. pharmaceutical companies \[70\]. However, studies in various industries and countries revealed no relationship between flexible working hours and in-role performance \[25,71\]. Recently, a study conducted in seven multinationals from eleven countries found that flexible HRM practices based on flexible working hours were positively related to perceived task performance \[13\].

Despite these limited results, and based on SET, we posit that FTL is positively related to in-role performance. First, NWW practices such as teleworking and flexible working hours provide employees with greater autonomy and flexibility in organizing their workday by allowing them to choose when and where they perform their work tasks \[32\]. As a result, employees can improve their work–life balance, and as they perceive support from their organization, they will reciprocate with consistent in-role performance \[27\]. Second, NWW in general, and FTL in particular, seeks to switch from a control-based management to an objective-based management \[4\]. Therefore, employees are given more responsibility and leeway in decision making, and they are expected to reciprocate with high levels of task performance as they perceive a higher level of trust from the organization \[23\]. To summarize, providing FTL is a signal from the organization that it cares about its personnel. Employees are expected to deliver positive job outcomes in return \[72\]. Therefore, we propose the following hypothesis:

**Hypothesis 1a:** FTL is positively related to in-role performance.

Access to organizational knowledge (AOK) and in-role performance: Technology is a key enabler of knowledge management \[73\]. Employees can create, store, and share knowledge within organizations using the ICT infrastructure. While ICT tools, such as e-mails and video conferencing, grant a digital access to formal work procedures, organization’s database, and so on \[33\], they allow employees to connect with their peers and thereby access an implicit form of organizational knowledge \[68,74\]. Prior research has discovered that organizational knowledge in general, and knowledge sharing in particular, are positively related to task performance in public settings \[75\]. Data from a Korean public organization revealed that the greater the degree of knowledge sharing—defined as “a process of exchanging and processing knowledge” \[76\] (p. 582) facilitated by technology infrastructure and tools—between employees, the higher their in-role performance \[77\]. A similar result was discovered in a sample of Finnish public employees \[78\]. Employees’ use of organizational knowledge and development of new knowledge were positively related to in-role performance in a Vietnamese public university \[79\]. Overall, access to organizational
knowledge provides employees with the critical component of competencies for performing their role. In this regard, AOK may be perceived by employees as organizational support and thus as a lever of in-role performance. Therefore, we propose the following hypothesis:

**Hypothesis 1b:** AOK is positively related to in-role performance.

2.4.2. The Moderating Role of an Outcome-Oriented Culture

Although we hypothesize a positive relationship between our main variables, existing HRM literature emphasizes that practices such as NWW must be congruent with the organizational context to foster in-role performance [80]. Employees will understand what behaviors are expected of them if HRM practices are aligned with variables such as organizational climate or strategy [55]. Organizational culture is a critical contextual variable that should be aligned with HRM practices [81] to moderate their relationship with employee outcomes [82].

Organizational culture is defined as “a set of beliefs and values shared by members of the same organization that influence their behaviors” [83] (p. 177). Cultural values and norms are (more or less) internalized by members of an organization [84] and guide their behavior [85]. Organizational culture has been studied from both qualitative and quantitative perspectives [86], with each approach emphasizing different cultural levels. While qualitative approaches to organizational culture focus on deeper levels of culture such as assumptions and beliefs [87], quantitative approaches are focused on an intermediate level of culture that is fundamentally made up of values and cultural traits [87]. According to this perspective, organizational culture is made up of several coexisting dimensions [88]. It is noteworthy that the majority of existing culture scales include a performance dimension [89].

Several studies have highlighted that organizational culture is positively related to in-role performance [83,90,91]. However, the majority of these studies have been conducted in private sector businesses. Nevertheless, we found three studies that use public sector data. In a sample of public-sector employees from Hong Kong, Cheung and Yeung [92] observed that task performance was positively related to a nurturing culture which was based on values aimed at supporting employee performance, such as training, feedback, and so on. In a sample from South Korean public administration, employees’ in-role performance was found to be positively related to a learning-oriented culture that promoted continuous learning and ideas exchange among employees. Finally, in a study conducted on Maltese public officers, Camilleri and Van Der Heijden [42] discovered that an outcome-oriented culture was indirectly (and positively) related to formal performance.

In this study, we focus our attention on outcome-oriented culture as it emphasizes values such as being competitive, achievement- and result-orientation, as well as having high performance expectations [93,94]. This cultural orientation is consistent with the NPM reforms of recent decades, in which the market model and individual performance management became the cornerstones of public sector reforms in Western countries [17,95]. An outcome-oriented-oriented culture is “the appropriate institutional support cultivated in the workplace” [85] (p. 41) to inform employees about the behaviors that are expected to deliver quality public services and, thus, to achieve the organizational objectives of efficiency and effectiveness [96,97]. In this regard, the values and the practices introduced by the NPM reforms had an impact in Switzerland, particularly in the HRM of public organizations [20]. Therefore, increasing expectations for sustained in-role performance have become the norm, and this is a direct result of the NPM movement’s increased focus on public organization performance in terms of efficiency and customer focus [98].

Furthermore, the implementation of HRM practices such as performance appraisal or performance-related pay has resulted in an emphasis on the individualization of performance, and thus an orientation towards self-interest [16–18]. Individual achievement requires employees to not only deliver quality and effective work outcomes, but also to constantly seek to improve their own work performance by pursuing ambitious goals [99].
Except for the aforementioned study by Camilleri and Van Der Heijden, empirical evidence on the relationship between outcome-oriented culture and in-role performance is scarce. Nevertheless, we contend that the presence of such cultural traits will be positively related to in-role performance in the context of NWW in the lockdown period, with employees far from their office environment. Indeed, we assume that these sub-cultural dimensions socialized employees and made them aware of what was expected of them; namely, to deliver quality services and thereby a high level of performance. From a SET perspective, we assume that employees whose values align with those of the organization will continue to provide consistent in-role performance, even when working remotely. Therefore, we propose the following hypotheses:

**Hypothesis 2a:** High performance expectations, as a cultural trait, moderate the relationship between NWW practices and in-role performance. Specifically, the relationship between FTL and in-role performance, as well as AOK and in-role performance will be stronger when there is a performance-oriented culture.

**Hypothesis 2b:** Individual achievement orientation, as a cultural trait, moderates the relationship between NWW practices and in-role performance. Specifically, the relationship between FTL and in-role performance, as well as AOK and in-role performance will be stronger when there is an individual achievement-oriented culture.

Figure 1 depicts the model to be tested.

![Theoretical model](image)

**Figure 1.** Theoretical model.

### 3. Methods

#### 3.1. Data Collection and Sample Characteristics

The data for this study were collected from employees of a Swiss cantonal public administration based in the French-speaking part of Switzerland between 25 May and 12 June 2020, during the Swiss lockdown. We arrived at an agreement with the HR manager and sent him a link to our web survey, which was then forwarded to 3223 employees from 24 different work units.

The primary purpose of the survey was to determine the level of perceived task performance while using NWW. The questionnaire also covered topics such as organizational characteristics (i.e., organizational climate and culture) and socio-demographics. Finally, we received a total of 1373 completed questionnaires, yielding a 42.6% response rate. As presented in Table 1, females comprised the majority of our sample (70.5%). Our respondents were 45.8 years old on average, and 51% had at least one child. Our participants had a high level of education on average, with 61.2% holding a university degree. Moreover, organizational tenure was significantly high as more than half of the respondents had over ten years of tenure. When those with five to ten years of experience were included, this figure rose to 70%.
Table 1. Sample Characteristics (n = 1204 Employees).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>29.5</td>
</tr>
<tr>
<td>Female</td>
<td>70.5</td>
</tr>
<tr>
<td>Age</td>
<td>Mean = 45.8 years</td>
</tr>
<tr>
<td>Having children</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>51.1</td>
</tr>
<tr>
<td>No</td>
<td>48.9</td>
</tr>
<tr>
<td>Highest level of education achieved</td>
<td></td>
</tr>
<tr>
<td>Elementary School</td>
<td>0.6</td>
</tr>
<tr>
<td>Apprenticeship</td>
<td>16.4</td>
</tr>
<tr>
<td>Vocational High School</td>
<td>8.8</td>
</tr>
<tr>
<td>High School</td>
<td>3.6</td>
</tr>
<tr>
<td>High Vocational Diploma</td>
<td>9.4</td>
</tr>
<tr>
<td>University Degree</td>
<td>61.2</td>
</tr>
<tr>
<td>Organizational tenure</td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>7.4</td>
</tr>
<tr>
<td>1–3 years</td>
<td>13.1</td>
</tr>
<tr>
<td>3–5 years</td>
<td>9.7</td>
</tr>
<tr>
<td>5–10 years</td>
<td>18.3</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>51.5</td>
</tr>
</tbody>
</table>

3.2. Measures

The variables are based on previous research scales and are measured on a five-point Likert-type scale ranging from 1 to 5, with 1 being “strongly disagree” and 5 being “strongly agree.” All our measures are based on self-reported data. Although self-reported data may be a limitation, it is noteworthy that access to objective data is difficult [100], or even impossible in public administration, owing to the lack of such indicators and data privacy issues. Furthermore, in a crisis, obtaining data from multiple sources is challenging if not impossible. Finally, in accordance with Aiken and West [101], all independent variables are centered around their mean to avoid multicollinearity issues. Appendix A presents a list of all the items used.

NWW: We use a simplified multi-dimensional measure developed by Gerards and team [26] that has two dimensions, namely FTL and AOK. FTL is constructed based on two items measuring teleworking and flexible working hours. It has a scale reliability coefficient (Cronbach’s alpha) of 0.67, which is higher than the acceptable lower limit of 0.60 [102]. Although this value is quite low, we retain it as it makes theoretical sense. AOK is measured by four items that assess information access and direct access to colleagues and supervisors. The scale reliability coefficient is 0.79.

Outcome-oriented culture: We use two items of the outcome orientation scale adapted by Harrison and Baird [94] from O’Reilly et al. [84] that closely fit the NPM values of performance and individual achievement (or interest). These items measure outcomes that emphasize customer focus and efficient service delivery, which are core objectives of public administrations [103]. Confirmatory factor analysis, however, revealed that these items performed poorly on the same factor. Therefore, we use two items, namely, “individual achievement orientation” and “high expectations for performance.” Individual-achievement orientation is associated with the concept of self-enhancement, which leads individuals to pursue ever more ambitious goals [99]. High expectations for performance is related to concepts such as efficiency or work quality [104].

In-role performance: This variable has been operationalized in several ways in public administration [105]. With the exception of certain studies, such as Bellé [106], objective measures have been rarely used as they are difficult to access owing to anonymity issues [107] or they are simply missing. Therefore, most researchers have relied on self-assessment of individual performance [46]. Some studies have used a single item assessment of task performance [107], whereas others have used an index of multiple items [108]. Alonso and Lewis [109] used both grade levels, i.e., an individual performance assessment provided by supervisors and self-performance ratings. Caillier [105] focused on work-goals
achievements. We use three items from a general measure developed by Palvalin et al. [110] in our study to assess employees’ effectiveness, work quality, and level of goal achievement. Confirmatory factor analysis reveals that these items were focused on a single factor, with a Cronbach’s alpha of 0.91.

Controls: We employ variables identified in previous studies as having a relationship with in-role performance and potentially influencing the effective use of NWW practices [42]. The participants’ ages are determined by asking for their birthdates. Gender is classified into two categories: male (coded as 0) and female (coded as 1). Participants who do not have children at home are coded 0, while those who have children at home are coded 1. The education level is categorized as follows: elementary school (1), apprenticeship (2), vocational high school (3), high school (4), high vocational diploma (5), and university degree (6). Finally, we classify organizational tenure into five categories: below one year (1), from one year to less than three years (2), from three years to less than five years (3), from five years to less than ten years (4), and more than ten years (5).

3.3. Data Analysis

The statistical method used in this study is hierarchical regression analysis in Stata 16.1. Hierarchical regression models are a technique for determining “the influence of several predictor variables in a sequential way, such that the relative importance of a predictor may be judged on the basis of how much it adds to the prediction of a criterion” [111] (p. 10). Consequently, we have developed four models. The first model regresses in-role performance on control variables. The NWW variables are added in the second model. The outcome-oriented culture variable is then included in the third model. Finally, the interaction terms between NWW and outcome-oriented culture are added in the fourth model.

We analyzed the risk of multicollinearity in each of the regression models. Variance inflation factors (VIFs) were between 1.266 and 1.500, indicating that multicollinearity was not an issue [112].

We searched for missing data patterns since missing data can be a severe threat to statistical generalizability. Most of our variables had missing data levels of approximately 1%, which is substantially below the “problematic” threshold of 15% [102]. Thus, we used list-wise deletion without running the danger of significantly lowering the sample size, which was eventually made up of 1204 observations.

4. Results

Table 2 presents the descriptive statistics and bivariate associations of the variables. With the exception of FTL and high-performance expectations, all variables are positively and strongly correlated. The statistically significant correlations range from 0.11 to 0.49. The latter is concerned with the relationship between AOK and in-role performance.

Table 3 presents the results of the different hierarchical regression models. The first model explains only 1% of the dependent variable, with two variables statistically significant for in-role performance: education (b = −0.040, p < 0.01) and organizational tenure (b = 0.068, p < 0.01).

Table 2. Descriptive Statistics, Reliabilities and Correlations (n = 1204 Employees).

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Flexibility in Time and Location</td>
<td>3.77</td>
<td>1.11</td>
<td>(0.67)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Access to Organizational Knowledge</td>
<td>3.92</td>
<td>0.83</td>
<td>0.31 *</td>
<td>0.79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Individual Achievement Orientation</td>
<td>3.08</td>
<td>1.13</td>
<td>0.13 *</td>
<td>0.21 *</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. High Expectations for Performance</td>
<td>3.51</td>
<td>0.99</td>
<td>0.01</td>
<td>0.15 *</td>
<td>0.30 *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. In-Role Performance</td>
<td>4.06</td>
<td>0.86</td>
<td>0.30 *</td>
<td>0.49 *</td>
<td>0.11 *</td>
<td>0.19 *</td>
<td>(0.91)</td>
</tr>
</tbody>
</table>

Note: The symbol * denotes p < 0.05, respectively.
### Table 3. Hierarchical Regressions Predicting In-Role Performance (n = 1204).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
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<tbody>
<tr>
<td></td>
<td>b (SE)</td>
<td>b (SE)</td>
<td>b (SE)</td>
<td>b (SE)</td>
</tr>
<tr>
<td><strong>Personal Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>4.117 *** (0.156)</td>
<td>3.886 *** (0.134)</td>
<td>3.937 *** (0.134)</td>
<td>3.918 *** (0.134)</td>
</tr>
<tr>
<td>Age</td>
<td>−0.003 (0.003)</td>
<td>0.003 (0.003)</td>
<td>0.003 (0.003)</td>
<td>0.003 (0.002)</td>
</tr>
<tr>
<td>Gender</td>
<td>0.050 (0.054)</td>
<td>0.040 (0.046)</td>
<td>0.044 (0.046)</td>
<td>0.048 (0.046)</td>
</tr>
<tr>
<td>Children</td>
<td>−0.023 (0.050)</td>
<td>−0.028 (0.042)</td>
<td>−0.037 (0.042)</td>
<td>−0.025 (0.042)</td>
</tr>
<tr>
<td>Education</td>
<td>−0.040 ** (0.015)</td>
<td>−0.041 ** (0.013)</td>
<td>−0.041 ** (0.013)</td>
<td>−0.042 ** (0.013)</td>
</tr>
<tr>
<td>Organizational Tenure</td>
<td>0.068 ** (0.021)</td>
<td>0.051 ** (0.018)</td>
<td>0.045 * (0.018)</td>
<td>0.047 ** (0.018)</td>
</tr>
<tr>
<td><strong>New Ways of Working</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexibility in time and location [FTL]</td>
<td>0.137 *** (0.020)</td>
<td>0.143 *** (0.020)</td>
<td>0.134 *** (0.020)</td>
<td></td>
</tr>
<tr>
<td>Access to organizational knowledge [AOK]</td>
<td>0.465 *** (0.027)</td>
<td>0.454 *** (0.030)</td>
<td>0.470 *** (0.027)</td>
<td></td>
</tr>
<tr>
<td><strong>Outcome-oriented culture</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High expectations for performance [HEP]</td>
<td>0.095 *** (0.022)</td>
<td></td>
<td>0.091 *** (0.022)</td>
<td></td>
</tr>
<tr>
<td><strong>Outcome-oriented culture</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual achievement orientation [IAO]</td>
<td>−0.040 * (0.020)</td>
<td></td>
<td>−0.043 * (0.020)</td>
<td></td>
</tr>
<tr>
<td><strong>Interactive terms</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FTL x HEP</td>
<td></td>
<td></td>
<td>−0.019 (0.020)</td>
<td></td>
</tr>
<tr>
<td>FTL x IAO</td>
<td></td>
<td></td>
<td>−0.036 * (0.017)</td>
<td></td>
</tr>
<tr>
<td>AOK x HEP</td>
<td></td>
<td></td>
<td>0.016 (0.026)</td>
<td></td>
</tr>
<tr>
<td>AOK x IAO</td>
<td></td>
<td></td>
<td>0.089 *** (0.024)</td>
<td></td>
</tr>
<tr>
<td><strong>R²</strong></td>
<td>0.02</td>
<td>0.29</td>
<td>0.30</td>
<td>0.31</td>
</tr>
<tr>
<td>Var. R²</td>
<td>0.28</td>
<td>0.01</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.01</td>
<td>0.29</td>
<td>0.30</td>
<td>0.31</td>
</tr>
</tbody>
</table>

Note: The symbols *, **, and *** denote p < 0.05, p < 0.01, and p < 0.001, respectively.

The second model explains 29% of the variance in in-role performance. The addition of the NWW variables results in the highest increase in R² of all the models. Both FTL (b = 0.137, p < 0.001) and AOK (b = 0.465, p < 0.001) are positively related to in-role performance. Among the socio-demographic variables, education is negatively related to in-role performance (b = −0.041, p < 0.01), whereas organizational tenure is positively related (b = 0.051, p < 0.01).

The introduction of the cultural variables in Model 3 has a negligible impact on the model’s overall quality (R² change of 0.01). Nevertheless, these variables are positively related to high performance expectations (b = 0.095, p < 0.001) and negatively related to individual achievement orientation (b = −0.040, p < 0.05). Furthermore, NWW variables remain significantly and positively related to in-role performance (FTL: b = 0.143, p < 0.001, and AOK: b = 0.454, p < 0.001). Among the control variables, education (b = −0.041, p < 0.01) and organizational tenure (b = 0.045, p < 0.05) remain significant.

Although interactional terms between NWW and culture contribute little explanatory power, the fourth model has the highest quality, explaining 31% of change in in-role performance. With 28%, the NWW variables explain the majority of the changes in in-role performance. This model supports hypotheses 1a and 1b: higher levels of FTL (b = 0.134, p < 0.001) and AOK (b = 0.470, p < 0.001) are associated with higher in-role performance. Among the control variables, education level is negatively related to in-role performance.
(b = −0.042, p < 0.01), whereas organizational tenure is positively associated with in-role performance (b = 0.047, p < 0.01).

An outcome-oriented culture has a direct impact on in-role performance. To begin with, the higher the performance expectations, the higher the self-assessed in-role performance (b = 0.091, p < 0.001). Conversely, an achievement-orientation culture is negatively related to in-role performance (b = −0.043, p < 0.05).

The fourth model does not support Hypothesis 2a as a culture of high-performance expectations plays no moderating role. However, Hypothesis 2b is partially supported. While a culture emphasizing individual-achievement positively moderates the association between AOK and in-role performance (b = 0.089, p < 0.001), it negatively moderates the relationship between FTL and in-role performance (b = −0.036, p < 0.05).

Figure 2 summarizes our findings.

![Figure 2](Image)

**Figure 2.** Results summary. Note: The symbols *, **, and *** denote p < 0.05, p < 0.01, and p < 0.001, respectively.

5. Discussion

This study seeks to improve our understanding of the relationship between two NWW practices—FTL and AOK—and in-role performance in the public sector, while also considering the role that outcome-oriented culture plays in this relationship.

First, our findings demonstrate that NWW practices are positively related to in-role performance and have the greatest impact among all independent variables. Specifically, we observe that AOK is an important predictor of in-role performance. This result indicates that, while having people work from home, it is critical for an organization to ensure that it is technologically capable of granting a complete AOK [68]. Employees will be able to perform their core tasks more effectively if they can efficiently access the collective knowledge contained in the organization’s information system and if they can easily contact their co-workers and supervisors for work-related information and support [74]. This first result supports the social exchange theory. Employees will make extra efforts to perform well if they believe their organization supports them in their duties.

However, to a lesser extent, FTL also positively influences in-role performance. This work arrangement is likely to have given people more autonomy to organize their working days during the lockdown. Since they were no longer required to go to the office, they could choose the working hours that best fit their circadian rhythms, and they could also improve their work–life balance [2,113]. Therefore, this result is consistent with an SET perspective because when an organization trusts and cares about its employees, they reciprocate with high task performance.

Second, our findings highlight the ambidextrous role of outcome-oriented culture, which can both help and hinder in-role performance. Values are certainly important in public service as they guide employee behavior [11]. Our results demonstrate that an outcome-oriented culture is directly related to in-role performance. To begin, having high performance expectations is positively and directly related to our dependent variable. This could be interpreted as public employees being “socialized” with values emphasizing performance, service quality, and user orientation prior to the lockdown, owing to the
implementation of NPM principles in Swiss public administrations. Therefore, employees held on to these cultural elements even when working from home during the Swiss lockdown. Furthermore, despite being far from their organization, co-workers and supervisors, employees understand what is expected of them in terms of work duties and are capable of providing public services to users [85]. Furthermore, an individual achievement-orientation culture is negatively and directly related to in-role performance. Such a cultural trait is strongly associated with self-improvement [114], which is consistent with the NPM movement, emphasizing the individualization of performance and thus competition among public workers [16]. However, as highlighted in PSM literature [115,116], such an HRM approach may be contrary to the “preferred” values of self-sacrifice, compassion, and general interest exhibited by Swiss public employees [19]. Therefore, there is a risk of misalignment between personal and organizational values. From an SET perspective, it is likely that the perceived misfit by the employees resulted in lower motivation and, as a result, lower self-rated task performance [20].

Third, an outcome-oriented culture does not produce the expected moderation. While having high performance expectations has no moderating effect, an individual-achievement oriented culture plays both positive and negative moderating roles. This cultural trait negatively moderates the relationship between FTL and in-role performance, which may be interpreted as a misalignment of these two organizational characteristics [57]. It is important to understand that in an individual achievement oriented culture, employees need to make themselves and their work visible to their supervisors and/or their co-workers to demonstrate that they contribute to organizational goals [75,117]. Moreover, this culture prompts public employees to obtain regular feedback regarding their performance [118]. However, our findings suggest that FTL makes employees uncomfortable as they may not have “face-to-face” interactions with their colleagues and supervisors. Therefore, they have less visibility and feedback on their performance [64,119] and, subsequently, their perceived in-role performance suffers owing to the lack of organization support.

In contrast, an individual achievement-oriented culture positively moderates the relationship between AOK and in-role performance. In other words, there is an alignment between this specific NWW practice and organizational culture [80]. In this case, we posit that AOK represents the perceived individual achievement-based culture. It demonstrates the organization’s willingness to provide its employees with the best working conditions possible by offering them adequate technological tools for sharing knowledge and performing their tasks. Employees respond by maintaining a consistent level of in-role performance.

On a practical level, our study suggests that public-sector leaders must pay attention to the interaction of cultural elements and NWW. Although COVID-19 was a unique situation in which flexible ways of working had to be implemented instantly, public managers must ensure that the implementation of NWW is accompanied by an organizational culture that is vertically aligned with the target objectives of such innovative HRM practices [3,14,31]. NWW must be supported by values such as trust and collaboration while ensuring that employees have easy and quick access to organizational information, as well as to their co-workers and supervisors, since the latter provide the necessary support to perform and feel well at work [26,120]. In addition, we recall that the introduction of NWW consists of an organizational change [15]. This implies that employees as well as managers must adapt to a different way of carrying out their tasks, communicating, and interacting with colleagues. In this sense, the use of NWW can lead to certain risks such as professional isolation, lack of feedback, or even an increasingly blurry boundary between their private and professional life [121]. Therefore, we suggest that organizations communicate these risks and provide adequate training to facilitate the transition to NWW.
6. Conclusions

This study contributes to our understanding of the relationship between NWW and in-role performance in public administration. We have demonstrated that practices such as FTL and AOK are positively related to in-role performance. Furthermore, our study shows when NWW practices are widely implemented in public administration, organizational culture must be aligned with them to deliver expected performance outcomes [81]. Public organization leaders, in particular, must be aware of the potential contradictory injunctions, that their personnel may perceive, by communicating organizational culture traits emphasizing a market model that may be in conflict with individual values still oriented towards the public service ethos [122].

This study has certain limitations. First, because our data are based on self-reported measures, common method variance may be an issue, inflating or deflating the statistical relationships observed in our research [123]. However, some scholars believe that such a problem is oversimplified and exaggerated [124]. Nevertheless, we used two techniques to account for potential biases. First, we have paid special attention to ensuring the confidentiality and anonymization of the data obtained from our respondents. We have avoided ambiguous concepts by keeping our research questions simple and avoiding double-barreled questions [125]. Furthermore, following Podsakoff and team [125], we have conducted the Harman’s single-factor test as a statistical remedy. The results of this test indicate that common method variance may not be a problem as neither a single factor nor a general factor accounted for the majority of the covariance between the measures.

Second, since we used cross-sectional data in the study, causal relationships cannot be inferred. Third, our fourth regression model could only explain 30% of the variance in in-role performance. Although statistically significant, demographic characteristics and organizational culture account for only a small portion of the dependent variable. This leads us to recognize the endogeneity issue which may arise, among other issues, when explanatory variables are omitted [126]. For instance, in-role performance was also related to variables such as job satisfaction [127] or work engagement [34], which were not taken into account in our study. Therefore, future research must incorporate more variables by employing a longitudinal design.

Fourth, our research was conducted during the COVID-19 pandemic, when NWW were mandatory rather than discretionary, as the underlying philosophy of NWW would suggest [128]. Therefore, it would be beneficial to replicate this study during a time when employees have a real choice over where and when they work. This would allow us to not only verify the results of our study, but also to include an important aspect of NWW that is not covered in this study, namely activity-based working. It would also allow scholars to assess whether the full bundle of NWW practices, rather than just some of them, as is the case in this study, are effective HRM practices that help organizations and employees achieve performance and well-being outcomes, and not just a management fashion [15].

Finally, because we conducted our research within a single public organization based in a single country, the findings cannot be generalized to other organizational and national contexts. Given the influence of cultural aspects [129], it would be interesting to replicate this study in other parts of Switzerland, such as the German speaking region, which is frequently portrayed as culturally distinct [130], as well as beyond Swiss borders.

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Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Conflicts of Interest: The author declares no conflict of interest.
Appendix A

Questionnaire items:
NWW—Flexibility in Time and Location:
- I am able to determine where I work.
- I am able to set my own working hours.

NWW—Access to Organizational Knowledge:
- I can access all necessary information on my computer, smartphone, and/or tablet.
- I am able to reach colleagues within the team quickly.
- I am able to reach managers quickly.
- I am able to reach colleagues outside the team quickly.

Outcome-Oriented Culture:
- In my organization, having high expectations for performance is valued.
- In my organization, being individual achievement oriented is valued.

In-Role Performance:
- I achieve satisfactory results in relation to my goals.
- I am usually able to carry out my work tasks efficiently (smoothly, without problems).
- The quality of my work outputs is high.

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