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# **Does Organizational Change Trigger Civil Servant Proactivity? The Impact of Past Changes Experienced.**

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# **Does Organizational Change Trigger Civil Servant Proactivity? The Impact of Past Changes Experienced.**

## **Abstract:**

Civil servants are increasingly expected to behave proactively at work, being confronted with workplace changes that require increased autonomy and responsibility. However, proactivity is a resource-intensive behavior that may become increasingly difficult in a demanding work context characterized by frequent change. We examine the impact of organizational change on civil servant proactivity, taking into account civil servants' past change experiences. Analysis of two survey waves in a Belgian government agency reveal that civil servants who experienced many changes in the past behave less proactively in response to new changes compared to their colleagues who only experienced few past changes.

**Keywords:** organizational change, proactive work behavior, public sector

## **1. Introduction**

Civil servants are confronted with rapid changes in their workplace, being asked to work in new ways, using new tools and technologies, while exercising more autonomy and responsibility (Vivona et al. 2020; Demmke, 2019; Anderson-Connolly et al., 2002). Consequently, they are expected to have a flexible, active work attitude and to approach occurring problems in a proactive way (Demmke, 2019; Kruijen & van Genugten, 2020). Proactive work behavior is defined as self-directed and future-focused action to bring about change to one's work situation or within oneself (Grant & Ashford, 2008). While workplace changes are often introduced with the aim to increase efficiency, in practice, they do not always have the envisioned outcome (Van der Voet & Vermeeren, 2017; Wynen et al., 2017). Since prior research found that the

success of public sector change is largely determined by the response of civil servants, it appears they might not respond to these changes quite as expected (Ahmad & Cheng 2018; Van der Voet, Kuipers, & Groeneveld, 2016). This raises the question if the proactivity that is demanded from civil servants to successfully deal with ongoing changes, is, paradoxically, undermined by those same change events.

Organizational change is typically accompanied with a significant increase in job stress, brought on by high job demands, role conflicts, and uncertainty (Fugate et al., 2012; Smollan, 2015; Bordia et al., 2004). This holds particularly true in the public sector, where changes are introduced at an increasingly rapid pace and opportunities to recover in between change events become increasingly scarce (Brunsson, 2009). Stress, in turn, can trigger various coping responses in employees, as they try to manage the challenging situation (Lazarus & Folkman, 1984). Proactivity can be considered a problem-oriented, particularly active type of coping behavior (Parker et al., 2006, Lazarus & Folkman, 1984). Several studies found that job stressors can trigger employees to engage in proactive behavior (Sonnetag & Spsychala, 2012; Fay & Sonnetag, 2002; Ohly et al., 2006), although some important limitations seem to exist. While, in the short run, job stressors such as time pressure can motivate proactive behavior, conservation of resources (COR) theory (Hobfoll, 1989; 2001) suggests that employees who faced repeated stressors over an extended period of time will be depleted from resources, making proactive behaviors increasingly difficult (Bindl & Parker, 2011). Accordingly, having experienced frequent changes over the past years might be such a factor that impacts employee resources and, ultimately, their ability to behave proactively. This suggests that adopting a more historical, process-based view of change - considering civil servants' past change experiences- might reveal effects that would otherwise be missed.

We therefore examine the effect of organizational change on civil servant proactivity, while taking into account the impact of civil servants' past change experiences. Based on insights from COR-theory and stress and coping literature, we propose that civil servants who already experienced many changes in the past will be less proactive in response to new changes compared to their colleagues who only experienced few. We test this proposition using first difference analyses, with longitudinal data obtained from two survey waves in a Belgian government agency. Using data from both survey waves reduces issues of endogeneity, providing greater leverage in distinguishing cause and effect (Stock & Watson, 2020). By considering the potential impact of past change experiences and associated stress, this study responds to calls to make research on public sector change more historical, contextual and processual (Kuipers et al., 2014; Ahmad et al., 2021). Finally, our study also contributes to the public administration literature by using a micro-level perspective, focusing on temporal dynamics in civil servant behavior. As noted by Ahmad et al. "considerations of such micro-level processes in public sector organizations undergoing change remain scarce" (2021: 2). Moreover, it is important to understand effects of change unfolding at the individual level, as these will eventually manifest at the organizational level and impact overall adaptability. Borins (2001), for instance, found that -at the individual level- civil servants that creatively solve problems in a proactive manner and deal with problems before they escalate to crisis proportions are key to public sector innovation.

Next, we present our theoretical framework drawing from two stressor-strain theories: Lazarus and Folkman's stress and coping theory as well as COR theory. The Data & Measures section outlines the process of data collection and used measurements. Results are presented in the Methods & Results section, followed by concluding remarks and a review of implications for practice.

## **2. Theoretical Framework**

Extant research on organizational change has found that employees usually perceive changes in their workplace as being stressful events (Cullen-Lester et al., 2019). This is partly due to the anticipated or actual negative outcomes of change (such as reduced autonomy or loss of coworkers), and partly due to the transition process which may create extra work and produce considerable uncertainty (Smollan, 2015, Fugate et al., 2012). This uncertainty is likely to lead to elevated stress levels in employees (DiFonzo & Bordia, 2002). Several longitudinal studies have demonstrated that the effects of frequent change may persist over time, contributing to a chronically stressful work environment (Moore, Grunberg, & Greenberg, 2004; Rafferty & Griffin, 2006; Smollan, 2015). Whenever employees experience stress, they will look for ways to manage the stressful situation, which is referred to as coping. Extant literature shows that employees may resort to various strategies to cope with a changing work environment, some considered more desirable than others (Oreg et al., 2011; Wynen et al., 2022). In this study, we focus on proactive work behavior as a possible coping strategy.

Although the term proactivity has been applied to a multitude of organizational behaviors across different domains, research has identified two core aspects that define any particular behavior as proactive (Cangiano & Parker, 2016). First, proactive behavior is anticipatory and involves thinking ahead about a situation to prevent problems or make the most of future opportunities. Second, proactivity involves taking control of a (anticipated) situation by initiating change (Parker et al., 2006). Due to its broad definition, proactive work behavior to some extent overlaps with other constructs such as intrapreneurship (Rigtering & Weitzel, 2013) and individual entrepreneurial orientation (Bolton & Lane, 2012). While proactive behavior indeed makes up a key dimension of these constructs (Rigtering & Weitzel, 2013; Bolton & Lane,

2012), a key difference lies in their focus and scope. Intrapreneurship specifically emphasizes entrepreneurial employee behavior that targets innovation and organizational growth (Gawke, Gorgievski, & Bakker, 2019). On the other hand, proactive work behavior refers to employees' self-initiated actions aimed at improving their work without necessarily having a strategic, entrepreneurial focus (cf. Grant & Ashford, 2008). Proactivity also shares some common ground with organizational citizenship behavior (Cangiano & Parker, 2016). However, this remains distinct from proactivity in that it is not necessarily anticipatory or future-focused (Cangiano & Parker, 2016). Since this study offers a first exploration of the impact of past change experiences on civil servant proactive behaviors, it examines the broader concept of proactive work behavior rather than the more specific constructs mentioned above.

In the next section -drawing from Lazarus and Folkman's transactional theory of stress and coping (1984)- we explain how behaving proactively may serve as an important, problem-focused coping strategy for employees to deal with the stress of organizational changes.

### ***2.1 Proactivity as a Coping Response***

According to Lazarus and Folkman's (1984) transactional model of stress and coping, individuals will experience stress when they perceive their environment as being challenging, threatening, or harmful. This initial evaluation of the environment is referred to as primary appraisal (Lazarus & Folkman's, 1984). Whereas appraisals of threat or harm are characterized by negative emotions, occurring when individuals believe an event has or will damage them, appraisals of challenge are characterized by positive emotions, occurring when individuals have sufficient coping resources and believe the situation holds the potential for personal rewards or growth (Hobfoll, 1989; Lazarus, 1991). Hence, in a context of organizational change, employees will experience stress if they appraise these changes as being either challenging,



threatening, or harmful. A perception of harm, for instance, can stem from the loss of valued colleagues in the event of restructurings or downsizings, or the loss of highly rated job aspects earned over time, such as power or prestige (Robinson & Griffiths, 2005; Jimmieson et al., 2004). When such events have not yet taken place but are anticipated by employees, they will contribute to perceptions of threat (cf. Lazarus & Folkman, 1984). This sense of threat can linger on until long after any actual loss has occurred (Wynen et al., 2022). Furthermore, changes may also be appraised as challenging by employees if they believe the change presents interesting opportunities for personal growth.

Lazarus and Folkman (1984) explain that this primary appraisal of an event is followed by a secondary appraisal, in which individuals consider the availability and likely success of different coping strategies to resolve the perceived challenge, threat or harm. Lazarus et al. (1984) argue that the amount of control individuals perceive and the resources they have available will largely determine what type of coping behavior individuals resort to (Lazarus & Folkman, 1984; Lazarus, 1991). Specifically, Lazarus et al. (1984) distinguish between two main types of coping strategies: problem-focused vs. emotion-focused coping. Problem-focused coping is aimed at addressing the problem that is causing the distress, while emotion-focused coping is aimed at regulating one's emotional response to the problem instead (Lazarus et al., 1984; Callan, Terry, & Schweitzer, 1994). Emotion-focused forms of coping will consist of strategies to control the emotional impact of stressful events such as feelings of fear, anger, and sadness. This is most likely to occur when individuals perceive that nothing can be done to resolve the problem itself (Lazarus et al., 1984). Accordingly, in a context of organizational change, employees will likely resort to emotion-focused coping when they feel they have no control over the changes being implemented nor possess the needed resources to affect the outcomes (Wynen et al., 2022). When they perceive that they have the necessary resources to

manage the challenges accompanying organizational change, employees will be more inclined to resort to problem-focused coping strategies (Lazarus et al., 1984; Terry, Callan, & Sartori, 1996). In such circumstances, information seeking as well as making plans of action have been identified as key problem-focused strategies for dealing with change-related stress (Callan, 1993; Robinson & Griffiths, 2005)

Based on these insights, proactive work behavior can serve as a problem-focused coping strategy employees may resort to when they are confronted with organizational change. Several studies indicate that job stressors such as time pressure and uncertainty can trigger employees to engage in proactive behavior (Sonnetag & Spychala, 2012; Fay & Sonnetag, 2002; Ohly et al., 2006). Given that uncertainty, reduced job control and increased work pressure are key factors that make change stressful (Bordia et al., 2004; Seo & Hill, 2005), employees may thus address these issues by behaving (more) proactively. By adjusting their behavior, taking initiative, and voicing their concerns, employees can attempt to regain their sense of control and reduce feelings of uncertainty (Crant, 2000; Grant & Ashford, 2008). They can suggest ideas to address not only current but also anticipated issues, thereby reducing their levels of stress and potentially mitigating the future occurrence of change-related stress (cf. Aspinwall & Taylor, 1997). Hence, we arrive at our first hypothesis:

*H1: Employees who experienced new changes in the last year will respond by behaving more proactively.*

## ***2.2 Proactivity in a Context of Ongoing Organizational Change – a COR Perspective***

In the previous section we discussed proactivity as a problem-focused coping strategy employees can resort to in response to organizational change (cf. Lazarus & Folkman, 1984).

When employees are confronted with a changing work environment, they can increase their proactive actions in an attempt to address aspects of change that are causing them distress (i.e. reduced job control, autonomy). Proactivity, however, has been described as a particularly resource-intensive behavior. Due to its self-initiated, self-directed and anticipatory nature, it usually requires considerable energy, time and attention for planning and enacting (Cangiano, Parker, & Ouyang, 2021). In the next section, using Hobfoll's (1989) Conservation of Resources (COR) theory, we build our argument that proactivity as a coping response will become increasingly unlikely in employees who already experienced many changes in past. While both are stressor-strain theories, COR theory presents an alternative (but complementary) view on the stress process as described by Lazarus and Folkman: it posits that the (actual or anticipated) loss of resources (considered 'objective elements') will be the main cause of stress in employees, rather than their personal appraisal of a situation (Van Doninck et al., 2022).

Hobfoll's COR-theory is one of the most widely cited theories in organizational psychology and organizational behavior and has also gained increasing attention in the public management literature (Jin, McDonald, & Park, 2018; Borst et. al, 2019; Giauque & Weissbrodt, 2021). It centers on the proposition that individuals are motivated to both protect their current resources and acquire new resources (Hobfoll, 1989). Hobfoll (1989) has defined resources as any attributes – tangible or intangible- that are highly valued by individuals. In the context of work, resources can consist of personal characteristics (e.g. self-efficacy, energy), job characteristics (e.g. autonomy), professional skills and social conditions (e.g. social support, esteem). A first principle of COR theory is that resource loss is disproportionately more salient than resource gain (cf. 'primacy of loss principle'). With this principle, Hobfoll posits that resource loss will have a more powerful impact on individuals than resource gain, and that this impact will also be felt much faster. The second key principle of COR theory is that people must invest resources

in order to protect against resource loss, recover from losses, and gain additional resources (cf. ‘resource investment principle’) (Hobfoll, 1989; Hobfoll et al., 2018). In line with the latter principle, employees investing resources in proactive behavior might be attempting to protect against (further) resource loss or trying to gain additional resources. In times of organizational change, employees might behave more proactively to gain -or regain- resources that are frequently comprised during change, such as a sense of control, autonomy, feelings of mastery, etc. (Robinson et al., 2005).

However, Hobfoll (2001) also explains that as individuals lose resources, investment becomes increasingly difficult, potentially leading to a so-called ‘resource loss spiral’. Especially when resources are already low, individuals will focus on protecting their remaining resources by spending less energy in the workplace, rather than attempting to gain new resources (cf. the primacy of loss principle) (Hobfoll, 1989; 2001; Halbesleben & Bowler, 2007). Prior studies already indicated that frequent organizational change places heavy resource demands on employees, as they need to manage change not only from a practical point of view (e.g. increased workload), but also from a psychological point of view, given that change can bring along considerable uncertainties concerning key aspects of an employee’s job (Bordia et al., 2004; Jimmieson et al., 2004). Accordingly, employees experiencing frequent organizational change are increasingly likely to suffer from resource depletion, with resources being chronically low (Bernerth et al., 2011; Rafferty & Griffin, 2006; Bindl & Parker, 2011). As argued by Bernerth et al. (2011), employees can only handle so much change and disruption before their ability to cope becomes overwhelmed. Moreover, Smollan (2015) found that even when a change has been implemented, respondents still report to suffer from inadequate resources, and the feeling of “needing to do more with less”. This indicates that stress and loss of resources does not only occur during the implementation phase of organizational change but

can persist long after the formal completion of a particular change event. It also provides further support for the assumption that when change happens frequently, resource depletion becomes increasingly likely. In addition, it points at the need to examine the aggregated impact of changes experienced over the past years rather than focus on the effects of one single change event. Moreover, extant literature indicates that resources are finite, and individuals are forced to make allocation decisions regarding the resources they have (Halbesleben et al., 2014). Hence, in line with COR's primacy of loss principle, we can assume that the resource depletion resulting from ongoing organizational change will make it increasingly difficult for employees to free up the resources that are needed to behave proactively. In such conditions, employees, will be less inclined to try and gain additional resources by investing in proactivity, which is not only a resource-intensive but also a risky behavior, as outcomes are not always beneficial to the performer (Cangiano & Parker, 2016; Wu et al., 2018). Instead, employees will rather turn towards more defensive strategies aimed at preventing (further) resource loss (cf. Hobfoll et al., 2018).

While we previously framed proactivity as a problem-focused coping strategy employees can resort to in response to organizational change (cf. Lazarus & Folkman, 1984), insights from COR theory call for a more nuanced view. Based on the theory's key principles, we should consider that when employees already faced many changes in the past, proactivity as a coping response will become less likely. Accordingly, we arrive at our second hypothesis:

*H2: Employees who experienced many changes in the past will be less proactive in response to new changes compared to their colleagues who experienced few changes in the past.*

### 3. Data and Measures

#### *Data Collection*

The data stem from a large-scale survey held at a Belgian government agency tasked with policy development and service delivery in the health and welfare sector. The agency executes a diverse set of tasks and employs different types of profiles, ranging from street-level bureaucrats and administrative personnel to policy officers. The data were collected over two points in time, with a first survey wave conducted in 2021 and the second wave conducted 11 months later in 2022. The agency under study is the product of a recent merger of two formerly separate agencies. The operational implementation of the merger was still ongoing at the time of the two surveys. The study targeted the entire organization, consisting of a total of around 3000 employees who all received a personal email invitation to participate.

< Insert Table 1 about here >

A total of 710 respondents participated in both survey waves, making for a sample of 1420 observations. Table 1 (column 1) provides an overview of the demographic characteristics of our sample. Women make up most of the sample (82.8%), which is in line with the overall overrepresentation of women in the agency. The sample is evenly distributed in terms of age groups, except for the lower number of respondents in the youngest and oldest age categories. The data show that the average tenure among respondents is relatively low, with almost a third of respondents having a tenure of less than five years (31.4%). Most respondents also held a high function level (90.4% with level A or B) which indicates that most respondents were relatively highly educated (A: Master's degree or equivalent, B: Bachelor's degree or equivalent, C: secondary education diploma, D: no diploma required).

Goodness-of-Fit analyses indicate the sample is not entirely representative for the population of employees in the agency, revealing issues with gender ( $\chi^2(1)=11.76$ , p-value=.0006), tenure ( $\chi^2(7)=19.84$ , p-value=.0059) and level ( $\chi^2(3)=13.76$ , p-value=.0032). A common approach to increase representativeness of such a sample exists in calculating and using weights based on specific population characteristics. However, the use of weights would, in our case, only offer a false sense of representativeness.<sup>1</sup> Due to the limited representativeness of our sample, caution is needed when drawing causal inferences.

### ***Measures***

*Proactive work behavior* consisted of five items asking respondents about their perceived proactivity at work. The first three items are adapted from Cangiano, Parker & Yeo's (2019) measure of proactivity; the last two items were developed in cooperation with the agency: 1) I come up with ideas to improve the way my tasks are performed; 2) I introduce better ways to perform my tasks; 3) I come up with creative ideas; 4) I raise issues even though I assume that a dispute may arise; 5) I make suggestions about how recurring problems can be avoided. These items align with the core definition of proactive behavior as being both future-oriented and change-initiating (Parker et al., 2006). The answer categories ranged from 1 – never to 5 – always. For the analysis factor scores were calculated. Factor analysis (available in appendix) shows that all five items load on the same factor (eigenvalue > 1).

To measure respondents' perception of the overall frequency and impact of changes they experienced, we use four items adapted from Rafferty & Griffin (2006). The items included: 1) Change occurs frequently in my work context; 2) I feel that we are always changing things; 3) Taken together, the changes of the past three years have had a significant impact on my work; 4) I feel that the same things in my immediate work environment are constantly being changed. Answer categories ranged from 1 - strongly disagree to 7 - strongly agree. Factor analysis

(available in appendix) confirms that all four items load on the same factor (eigenvalue > 1). Further analyses are performed with the alpha-score (the summative score divided by the number of items over which the sum is calculated). Differencing our measurement of change across the two times of measurement (2021 vs. 2022) tells us to what extent respondents perceived new changes in the last year. To discern the effect of past changes experienced, we use the measurement from the first survey wave and divide our sample into two respondent groups: those who experienced many changes in the past vs. those who only experienced few. For this we used a cutoff value of '6' (based on the alpha-score), meaning only those who fully to strongly agreed that change over the past years happened frequently and was impactful were categorized in the 'many changes' group. By using a cutoff value at the higher end, we make sure that the respondents in the 'many changes' group effectively perceived a high amount of change in the past years. Columns 2 and 3 of Table 1 present information on the characteristics of both groups.

Several control variables were also included in the analyses. A first control variable is intrinsic motivation, which consists of five items to determine to what extent respondents are intrinsically motivated to put in effort at work (factor analysis available in appendix). Example items include: I put in effort at work, because the work I do is interesting; because I find it personally important to dedicate myself to my work; because committing myself to this work is consistent with my personal values (cf. Strauss, Parker, & O'Shea, 2017). This measure was included since literature indicates this type of motivation is a strong driver of proactive work behavior (Parker et al., 2010). Several authors found that proactive actions are facilitated when they are motivated by an innate interest or enjoyment in the task itself, or because the proactivity helps to achieve goals that are extremely important to an individual (Parker et al., 2010; Ryan & Deci, 2008). It is also an important factor to consider when looking at the personal



consequences of behaving proactively (Cangiano & Parker, 2016). In addition, the following demographic controls variable were included, in line with previous research on proactivity: function level, tenure, age (cf. Fay & Sonnentag, 2002; Sonnentag & Spsychala, 2012; Fuller, Marler, & Hester, 2006). Finally, our analyses also include the year in which the survey was administered, to control for any effect of the time of measurement.

#### 4. Method and Results

The method consists of first difference analysis. At the start of this study, each individual was assigned a unique identifier code so their responses could be tracked across both survey waves. Using the data obtained from 710 respondents across two survey waves (2021 and 2022), we calculate the first difference estimator. We calculate the first difference for the dependent variable, proactive behavior, as follows:

$$\Delta y_{it} = y_{it} - y_{it-1}.$$

Whereby t-1 refers to the previous period (with t referring to year 2022). We also do this for the explanatory variables:

$$\Delta y_{it} = \beta_0 + \beta_1(x)_{it} + (a_i + u_{it}) - [\beta_0 + \beta_1(x)_{it-1} + (a_i + u_{it-1})].$$

$a_i$  is called the fixed or unobserved effect, whereas  $u_{it}$  is the idiosyncratic or time-varying error and represents unobserved factors that change over time and affect  $y_{it}$ . From the above formula, it becomes clear that the fixed effect  $a_i$  is eliminated. Accordingly, factors that do not vary over time but could affect both the explanatory variables and proactive work behavior are removed (cf. Wynen & Op de Beeck, 2014). Examples of such time in-variant factors are organizational size and culture (at the organizational level), and personality traits and gender (at the individual level). The first-difference approach neutralizes the effect of these factors on our measurement

of change and proactivity. This model thus reduces the issue of endogeneity, yet it cannot exclude it entirely. There might still exist certain time-variant factors we did not measure (and that are not controlled for by the first difference analysis), which could affect both our independent and dependent variables. Table 2 (column 1) presents the results of the first-difference estimator, analyzing the impact of perceived new changes (i.e., changes experienced between 2021 and 2022) on proactive work behavior. This is followed by the same analysis, but this time considering individuals' perception of past changes they experienced measured at t1, with results split out for respondents who experienced many changes vs. those that experienced few (columns 2 and 3). We estimate this model using ordinary least squares (OLS).

< Insert Table 2 about here >

The first regression is statistically significant ( $R^2 = 0.0445$ ,  $F(5, 704) = 6.56$ ,  $p = .000$ ), with perceived new changes having a significant positive impact on proactive work behavior ( $\beta = .121$ ,  $p = 0.001$ ). These results support our first hypothesis, indicating that proactivity might serve as a coping strategy in response to organizational change. Furthermore, the extent to which respondents are intrinsically motivated has a significant positive impact on proactive work behavior. This is line with extant literature on motivation and work performance that identified intrinsic motivation as an important driver and facilitator of proactivity (Parker et al., 2010; Ryan & Deci, 2008). The results also show a significant positive impact of respondents' function level on proactive work behavior. This is not surprising since these employees are more likely to have a role that encourages or often even requires a proactive work attitude (cf. Fay & Sonnentag, 2002; Erdogan & Bauer, 2005). We find a significant negative effect of age on proactivity, similarly to previous studies (e.g., Sonnentag et al., 2012; Binnewies et al., 2009). Sonnentag et al. (2012) suggests that employees' self-efficacy -a key antecedent of

proactivity- is likely to increase with age, but that at the same time other processes might undermine older workers' tendency to show proactive behavior. They might, for instance, be less convinced that their proactive efforts will lead to positive outcomes (although they are confident that they can act proactively). Additionally, Binnewies et al. (2009) noted that decreased cognitive and self-regulatory resources may make it more difficult for older employees to allocate resources to certain tasks. This could also explain why proactive actions at work seem to decrease with age. Respondent's tenure did not significantly impact levels of proactivity.

Next, we performed another first difference analysis, this time including individuals' perception of past changes (many vs. few, measured in wave 1). The results are shown in columns 2 and 3 of Table 2. As mentioned, the cutoff to distinguish between respondents who experienced many changes in the past vs. those that experienced few was set at a value of 6 (based on average score calculated across all items; meaning only those who fully to strongly agreed that change over the past years happened often and was impactful were categorized in the 'many changes' group). These results support our second hypothesis: While the effect of new changes on proactivity remained significantly positive for employees who only experienced few changes in the past ( $\beta = .223$ ,  $p = 0.002$ ), this effect disappeared for respondents who had already experienced many changes in the past ( $\beta = .0657$ ,  $p = 0.170$ ). For the latter group, experiencing new changes (in the last year) did not lead to a significant increase in proactive work behavior. The last column of Table 2 displays whether the coefficients of both regressions significantly differ. The results confirm that the coefficient for new changes experienced significantly differs across both groups. Furthermore, we note that for both respondent groups, function level and intrinsic motivation remained significant predictors of proactivity. Age also maintained its significant negative impact on proactivity but only for the group that experienced few changes

in the past. This may imply that in a work context of ongoing organizational change, even older workers may experience some pressure to behave more proactively (reducing the negative effect of age). The effect of respondents' tenure level remained insignificant.

## **5. Discussion and Conclusion**

This paper examines how civil servants' past change experiences affect their ability to behave proactively in response to new changes. The analyses were performed with longitudinal data of two survey waves, held in a Belgian government agency. The empirical analysis confirmed our theoretical expectations. We find a positive relationship between (perceived) new changes and proactive work behaviour. However, taking a closer look at the data, we find that this positive effect is limited to employees who only experienced few changes in the past (at the time of the first survey wave).

We conceptualized proactivity as a problem-focused form of coping employees might use to address the aspects of change that are causing them distress (such as reduced job control or autonomy). Our analyses demonstrated that employees indeed used this coping strategy in response to new changes they experienced over the last year. However, this was only true for those employees who had experienced low levels of organizational change at the time of the first survey wave. Those who had already experienced many changes in the past did not respond by increasing their proactive behaviour. This is in line with our prediction based on COR-theory, assuming that employees who experience frequent and impactful change suffer from resource depletion, making proactivity increasingly difficult. It confirms our assumption that they would not have the required resources anymore for behaving proactively and instead would favour more defensive strategies for resource preservation.

Such lowered proactivity can be problematic for several reasons. First, the turbulent environment in which public organizations operate, requires a proactive, adaptable workforce (Cangiano & Parker, 2016; Sørensen & Torfing, 2011). Many changes are therefore aimed at achieving such a proactive and adaptable workforce. However, our results show these changes may under some circumstances achieve the exact opposite. When civil servants stop behaving proactively in response to changes, this could undermine the long-term adaptability of public organizations. Second, Lazarus & Folkman's (1984) stress and coping theory as well as empirical studies (e.g., Callan, 1993) indicate that proactivity is an important problem-focused coping behavior. In the context of organizational change, civil servants may resort to proactive behavior to cope with change-related stressors. However, our results show that, paradoxically, experiencing very frequent organizational change undermines employees' capability to resort to proactivity. Our findings indicate that when employees already experienced many changes in the past, they are likely to suffer from resource depletion, which not only undermines proactivity but arguably also has negative effects on overall individual wellbeing and job performance (cf. Hobfoll et al., 2018).

Whereas our theoretical argument was formulated in a generic way and is therefore potentially applicable to any kind of organization, the empirical setting of the paper is a government agency. What are the implications of our findings for public organizations in particular? A widespread stereotype about public sector organizations is their inherent stability, or, negatively framed, their failure to adapt to changing circumstances and to innovate. An important lesson from recent scholarship is that public organizations are subject to frequent structural changes such as mergers or split-ups (Læg Reid et al. 2013; MacCarthaigh 2014; Fleischer et al. 2022). At the organizational level, several studies have demonstrated problematic effects of frequent organizational change in government organizations, such as higher absenteeism rates (Wynen

et al. 2019), increased fear of speaking up (Wynen et al. 2020), and diminished role clarity (Verlinden et al. 2022). Against this background, our findings add a micro-level perspective to this growing body of literature, suggesting that organizational change should be used with caution if decision-makers wish to avoid problematic effects.

However, changes are often driven by political concerns, such as governments' or ministers' desire to signal their policy intent or to demonstrate their ability to reform the government apparatus (James et al. 2016). Hence, public employees are confronted with organizational changes they may not perceive as driven by changes in the organization's environment or internal problems. When change is externally imposed, public organizations and their leaders can actively seek to prevent such changes or mitigate their effects (Dommet & Skelcher 2014; Askim et al. 2020). Pressures to achieve short term political deliverables may also undermine civil servants' capacity to work proactively towards longer-term goals (Pandey, 2010). Consequently, the effects of organizational change on civil servants' proactive behavior could vary depending on the nature of change events (externally imposed vs. self-initiated), which could be explored by future research.

The documented effect of turbulent change episodes on proactive behavior in this paper must also be analysed in the light of the specific characteristics of public sector employees. An extensive literature on "Public Service Motivation" (PSM) demonstrates that they are particularly motivated to contribute to society (see Vandenabeele et al. 2018 for an overview). A key implication is that our results may be specific to public sector organizations. If public employees are especially motivated to contribute to society through their work and self-select into public organizations because of their intrinsic concerns for policy (Gailmard 2010), they arguably may be motivated to "try harder" despite the adverse circumstances of ongoing

organizational change. For instance, the high motivation of public employees to contribute to society despite difficult working conditions has been demonstrated in multiple studies of street level bureaucrats' coping behavior (Tummers et al. 2015). Hence, we may see a different picture in private organizations, where employees typically score lower on PSM and may display less proactive behavior in response to organizational changes (e.g., Andersen, Pallesen, & Pedersen 2011).

Our findings also add to existing insights on civil servants' role as change agents. McDermott et al. (2013) already challenged the straightforward distinction between civil servants as recipients vs. agents of change, showing how 'first-order' policy recipients can become 'second-order' change agents who proactively adapt and add to policy initiatives to suit local contexts. In recent years, public management scholars have continued to emphasize that civil servants are not merely passive recipients of change, but that they also actively contribute to the success of change initiatives (Oreg et al. 2018, Ahmad et al. 2020). Ahmad et al. (2020) identified a number of individual attributes and organizational factors that affect civil servant's activity/passivity during times of change. They found that civil servants who displayed high levels of (internal) locus of control, change-related self-efficacy, and prosocial motivation were more likely to proactively respond to change efforts (Ahmad et al., 2020). Civil servants were also more likely to display proactive behaviors in contexts characterized by effective change leadership and low formalization. Although we measured proactive behavior in a more general manner (i.e. not specifically in response to change), our results can add to these insights by further specifying conditions under which civil servants are most likely to respond proactively in a context of organizational change. Specifically, our findings indicate that having a history of frequent and impactful change will hinder civil servant's capacity to respond proactively and

act as second-order change agents. At the same time, Ahmad's (2020) insights suggest that effective change leadership may buffer the negative impact of frequent change on proactivity.

While we have not explored the mediating impact of factors such as leadership and change management, previous public management studies found that certain types of leadership can be effective in reducing employee resistance to change and can help promote active work attitudes (e.g., Ancarani et al., 2020). Transformational leadership, for instance, has been recognized as effective in the public sector for promoting proactive work behavior (Strauss et al., 2009) and related attitudes such as work engagement (Ancarani et al., 2020) and innovative behavior (Hansen & Pihl-Thingvad, 2019). By inspiring and motivating employees through a shared vision, transformational leaders encourage them to go beyond their formal job requirements and take initiative (Strauss et al., 2009). Transformational leadership can thus help create an environment that fosters innovation and proactive problem-solving. In addition, servant leadership, which emphasizes leaders' role of serving the needs of their employees, was also found to facilitate employee proactivity in the public sector (Mostafa & El-Motalib; 2019). By supporting and empowering employees, servant leaders create a sense of ownership and responsibility that encourages proactive work behavior (Luo & Zheng, 2018). Based on these insights, future research may examine if these leadership styles can mitigate the detrimental effect of past change experiences on civil servant proactivity. Besides leadership, factors such as social support, workplace climate and culture may also serve as important resources that can boost civil servants' ability to overcome the turbulence of changes and still behave proactively (cf. Franken et al., 2022). We therefore conclude that change should not necessarily be avoided, but that efforts should be made to pace change whenever possible. This also implies that short-term political interests should be more actively balanced with those of the administration. By



creating resource-rich work environments, public organizations can help their employees cope with a constantly changing work environment.

Finally, the paper demonstrates the added value of conducting longitudinal survey research for studying public organizations. Many theories and phenomena of interest to scholars of public organizations are dynamic in nature, but this substantial interest is not always matched by research methods which are often cross-sectional in nature. Despite this methodological strength, our article suffers from some limitations which should be addressed. A first limitation relates to our measurement of past changes experienced. This measurement was adapted from Rafferty and Griffin (2006), asking respondents about the overall frequency and impact of changes they experienced over the past years. This measure covers two of Rafferty and Griffin's four original dimensions but does not cover change-related uncertainty or the extent to which change was planned. However, extant literature agrees that frequent change will usually be accompanied with considerable uncertainty for employees, even if change initiatives are strategically well planned by management (Bordia et al., 2004). Rafferty and Griffin also note that "when change occurs very frequently, individuals are likely to feel fatigued by change and experience an increase in anxiety due to the unpredictability of change in that setting (2006, p.1155)." Hence, we believe that our items that measure the overall frequency of change implicitly also capture part of the uncertainty aspect of change. Furthermore, we should note that our measurement of change does not capture the valence or substantive fit of changes with employee values. Hence, we do not know whether respondents think positively or negatively about these changes on a substantive level. Kiefer et al. (2015), already found that not all change is experienced negatively by civil servants, and that innovation-related change may even have positive effects on their work engagement. Since an accumulation of changes with a negative valence may be more detrimental to civil servant work attitudes, future research can focus on

discerning the effects of different types of organizational change on civil servant proactivity. Another limitation concerns the generalizability of our results. Since data have been collected from one government agency in Belgium, it remains unclear to what extent our findings can be generalized across different contexts. However, since the underlying mechanism of resource depletion is psychological in nature, we may expect to find similar results in different settings. Future research should examine if our results hold across different policy domains, regions, cultures, and governmental levels.

## **6. End notes**

1. A common approach to increase representativeness of a sample exists in calculating and using weights based on specific population characteristics. Yet, when estimating causal effects (in our case the effect of perceived changes on proactivity), the question whether to weigh data is extremely complex (see also Solon, Haider, Wooldridge, 2013). The use of weights is strongly supported when the sampling probabilities vary endogenously (sampling probabilities are correlated with the error term in the regression). However, if they vary exogenously, and thus purely on explanatory variables, weighting is unnecessary and even harmful for precision (Wooldridge, 1999; Solon, Haider, Wooldridge, 2013). We notice variations in our explanatory variables but are unable to detect if the sampling probabilities also vary endogenously. Moreover, if we would add weights, we are only able to construct weights based on official statistics which relate to observable characteristics (e.g., gender, age, education...). Even if the sampling probabilities vary endogenously, the weights would not be able to solve this issue (see for more information regarding this topic; Wooldridge, 2002 and Fitzgerald, Gottschalk, and Moffitt, 1998). Consequently, the use of weights would, in our case, only offer a false sense of representativeness. Due to the limited representativeness of our sample, caution is needed when drawing causal inferences.

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## 8. Tables and Figures

Table 1. Descriptive statistics

	Overall sample	Past changes	
		Few	Many
N	1420	368	1052
Dependent			
Proactivity, mean (SD)	3.3 (0.6)	3.2 (0.5)	3.3 (0.6)
Independents			
New changes, mean (SD)	5.7 (1.0)	4.6 (0.8)	6.1 (0.7)
Intrinsic motivation, mean (SD)	4.4 (0.7)	4.5 (0.7)	4.4 (0.7)
Gender			
Female	1176 (82.8%)	300 (81.5%)	876 (83.3%)
Male	244 (17.2%)	68 (18.5%)	176 (16.7%)
Age			
≤ 25 years	12 (0.8%)	4 (1.1%)	8 (0.8%)
26 – 30 years	125 (8.8%)	43 (11.7%)	82 (7.8%)
31 – 35 years	169 (11.9%)	70 (19.0%)	99 (9.4%)
36 – 40 years	237 (16.7%)	59 (16.0%)	178 (16.9%)
41 – 45 years	269 (18.9%)	66 (17.9%)	203 (19.3%)
46 – 50 years	182 (12.8%)	43 (11.7%)	139 (13.2%)
51 – 55 years	186 (13.1%)	37 (10.1%)	149 (14.2%)
56 – 60 years	182 (12.8%)	35 (9.5%)	147 (14.0%)
> 60 years	58 (4.1%)	11 (3.0%)	47 (4.5%)
Level			
A	271 (19.1%)	73 (19.8%)	198 (18.8%)
B	1013 (71.3%)	241 (65.5%)	772 (73.4%)
C	108 (7.6%)	39 (10.6%)	69 (6.6%)
D	28 (2.0%)	15 (4.1%)	13 (1.2%)
Tenure			
≤ 5 years	446 (31.4%)	167 (45.4%)	279 (26.5%)
6 – 10 years	174 (12.3%)	42 (11.4%)	132 (12.5%)
11 – 15 years	194 (13.7%)	42 (11.4%)	152 (14.4%)
16 – 20 years	236 (16.6%)	51 (13.9%)	185 (17.6%)
21 – 25 years	145 (10.2%)	30 (8.2%)	115 (10.9%)
26 – 30 years	127 (8.9%)	21 (5.7%)	106 (10.1%)
31 – 35 years	80 (5.6%)	14 (3.8%)	66 (6.3%)
> 35 years	18 (1.3%)	1 (0.3%)	17 (1.6%)
Year			
2021	710 (50.0%)	184 (50.0%)	526 (50.0%)
2022	710 (50.0%)	184 (50.0%)	526 (50.0%)

Table 2. First Difference Estimates

Variables	Proactivity			Chi2
	Overall	Few	Past changes Many	
(diff) New changes	0.121*** (0.0368)	0.223*** (0.0667)	0.0657 (0.0467)	3.73*
(diff) Intrinsic motivation	0.133*** (0.0360)	0.230*** (0.0839)	0.0961** (0.0427)	2.02
(diff) Age	-0.0548** (0.0237)	-0.135*** (0.0431)	-0.0412 (0.0274)	3.35*
(diff) Level	0.658** (0.2903)	1.400*** (0.245)	0.427*** (0.150)	11.46***
(diff) Tenure	0.000824 (0.0154)	0.0120 (0.0444)	0.000762 (0.0203)	0.05
Constant	0.0361 (0.0230)	0.0171 (0.0724)	0.0190 (0.0361)	
Observations	710	184	526	
R-squared	0.0445	0.1289	0.0215	

Note. Standard errors in parentheses  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## 9. Appendix

Table 3. Factor analysis Proactivity, Changes experienced, and Intrinsic motivation

Survey item	Factor Loading
<b>Proactivity</b>	
I come up with ideas to improve the way my tasks are performed.	0.832
I introduce better ways to perform my tasks.	0.826
I come up with creative ideas.	0.711
I raise issues even though I assume that a dispute may arise.	0.596
I make suggestions about how recurring problems can be avoided.	0.724
Eigenvalue	2.759
Cronbach's Alpha (Scale reliability coefficient)	0.843
<b>Changes experienced</b>	
Change occurs frequently in my work context.	0.769
I feel that we are always changing things	0.861
Taken together, the changes of the past three years have had a significant impact on my work.	0.665
I feel that the same things in my immediate work environment are constantly being changed.	0.688
Eigenvalue	2.249
Cronbach's Alpha (Scale reliability coefficient)	0.835
<b>Intrinsic motivation</b>	
Because I enjoy my work. (Q52_1)	0.778
Because the work I do is stimulating. (Q52_2)	0.820
Because the work I do is interesting. (Q52_3)	0.794
Because I find it personally important to dedicate myself to my work. (Q52_4)	0.625
Because committing myself to this work is consistent with my personal values. (Q52_5)	0.559
Eigenvalue	2.612
Cronbach's Alpha (Scale reliability coefficient)	0.836