

The influence of telework and management controls on the congruence of civil servant objectives

Influence of
telework and
MCSs

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Edicreia Andrade Dos Santos

Department of Accounting, Universidade Federal do Paraná, Curitiba, Brazil

Jonatas Dutra Sallaberry

*Department of Accounting, Federal University of Santa Catarina,
Florianópolis, Brazil and*

Universidad de Murcia, Murcia, Spain, and

Alcindo Cipriano Argolo Mendes

*Department of Accounting, Federal University of Santa Catarina,
Florianópolis, Brazil*

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Abstract

Purpose – The purpose of this study is to analyze the influence of telework and management control systems (MCSs) on the congruence of civil servant objectives in the Brazilian justice system.

Design/methodology/approach – To this end, the authors have carried out a survey with 468 employees of the Ministério Público Federal (Federal Public Ministry), whose data were analyzed using structural equation modeling.

Findings – Among the main results are the perceived efficiency of telework, and the finding that action and personnel controls are positively related to the congruence of objectives. However, the moderating relationship of the MCSs presented individual characteristics. Action controls showed no evidence of moderating the relationship between the perceived efficiency of telework and congruence of objectives. However, personnel controls showed a significant and negative relationship, that is, more intense personnel controls in telework weakened the congruence of individual objectives with those of the organization.

Practical implications – This study contributes to practice by identifying barriers and facilitators in organizational telework programs and also spotting how controls can be planned for their activities.

Originality/value – The authors' research evaluates the effect of MCSs on the relationship between the perceived efficiency of telework and the congruence of employee objectives, considering that the telework regime is in its initial phase of implementation in public entities, but this has been intensified by the restrictions imposed by the coronavirus disease 2019 (COVID-19) pandemic.

Keywords Management control systems, Perceived efficiency of telecommuting, Working from home, Work environment

Paper type Research paper

1. Introduction

There have been several repercussions of the coronavirus disease 2019 (COVID-19) pandemic – not only biomedical and epidemiological, but also social, economic, political,



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cultural, and historical effects and impacts (Ribeiro, Sallaberry, Santos & Tavares, 2020). To promote healthcare during this pandemic period, among the various developments in the work environment, one of them has been the adoption of remote work. Remote work is also known as home office, working at home, virtual work, virtual office or telecommuting (Gajendran & Harrison, 2007; Groen, Van Triest, Coers & Wtenweerde, 2018; Haubrich & Froehlich, 2020).

Telework represents work outside the premises of the affiliated organization with the aid of information and communication technologies (ICTs) (Law no. 13467/2017). This type of work employs different practices from traditional ones and facilitates greater autonomy, flexibility and opportunities for teleworkers (Haubrich & Froehlich, 2020). The adoption of telework is a trend in both the public and private spheres. In the Brazilian public sphere – and the justice system in particular – before Resolution CNJ No. 227/2016, this work regime was already being used in agencies such as the Superior Labor Court, which has regulated telework since 2012. With the coming of the pandemic, telework became imperative for the continuity of public services in many different agencies, even in those that were still testing its implementation or were still reluctant to adopt it.

The implementation of telework involves several challenges and benefits, both for organizations and civil servants (Rocha & Amador, 2018). Among the challenges is the difficulty in controlling the workers and the loss of their integration and bonding with the organization (Rocha & Amador, 2018). This reflects the need to rethink, for example, the organization's management control systems (MCSs), which group all the control instruments used by managers to ensure the congruence of decisions and subordinate behavior to organizational strategies and objectives (Merchant & Van der Stede, 2017). MCSs are designed and implemented in organizations to align employees with organizational goals (goal congruence) according to pre-established standards and plans (Merchant & Otley, 2007; Merchant & Van der Stede, 2017; Malmi & Brown, 2008).

Congruence of objectives in the management literature is understood to be the matching of the interests of individuals with those of the organization, and this reflects various aspects such as a sense of fairness, worker stability, effectiveness in the organizational environment, feelings of belonging, turnover reduction, task performance, etc. (Supeli & Creed, 2014; Klein & Colauto, 2020). The lack of congruence between individual and organizational goals can be considered a classic agency problem that substantially interferes with the design, symbolism and acceptance of MCSs, triggering a series of questions that deserve theoretical and empirical discussion (Klein & Colauto, 2020).

The telework literature has received substantial attention, particularly regarding the impact of telework arrangements on individuals, including their social relationships, work-family conflicts, job satisfaction, organizational commitment, job performance, etc. (Groen *et al.*, 2018). However, its effects on individual congruence of objectives with the organization and how MCSs can enhance or mitigate these effects have not been observed. From this perspective, this study aims to investigate whether the perceived efficiency of telecommuting positively affects the congruence of objectives of civil servants and their organizations, and whether this can be improved by MCSs. Action and personnel controls are emphasized because they are more task-oriented and also considered to be lighter mechanisms, such as training and task directions, rather than more rigid mechanisms which place a greater emphasis on goals, performance indicators and results (Truss, Gratton, Hope-Hailey, McGovern & Stiles, 1997).

To accomplish this objective, we have conducted a survey of 468 federal civil servants in the Brazilian justice system, who because of the pandemic have been working in a remote environment. This research was motivated by the fact that although the control over teleworkers can be exercised with greater emphasis on ICTs, in most cases, the autonomy of work increases and, therefore, a better understanding of the application of MCSs is relevant. Moreover, MCSs can also amplify shadow aspects such as work intensification and increased

stress, which can negatively affect an individual's well-being, confidence and engagement (Truss *et al.*, 1997; Peters, Lighthart, Bardoel & Poutsma, 2016).

The findings of this study contribute in terms of several empirical and theoretical aspects. From an empirical perspective, it contributes by providing civil servants with useful information in identifying barriers and facilitators in organizational telework programs (West, 2017; Rocha & Amador, 2018), and also in relation to how controls can be applied to their activities and/or how to create greater organizational identification so as not to diminish their integration and bonding with the organization (Rocha & Amador, 2018). It can also contribute to a better understanding of which aspects of telework can help more significantly in the organizational transition from the traditional environment to the information age, because this kind of adaptation depends a lot on the ability of managers to guide, design, and implement new telework procedures and policies (Haddadi & Ghafari, 2012). In terms of the management literature, this article contributes by addressing the consequences of management controls and the effects of telework on the public sector. It is noteworthy that our sample characterizes this relevant segment – the justice system – which at the individual level can be found in all democracies (Sallaberry, Santos, Bortoluzzi & Lunkes, 2021).

2. Theoretical framework

2.1 Teleworking and congruence of objectives

For telecommuting, also known as telework, remote work or home office (Gajendran & Harrison, 2007; Groen *et al.*, 2018), ICTs have been essential, because they allow access to more robust management information systems with the use of mechanisms for controls and decision-making, such as business intelligence (Lyytinen, Nickerson & King, 2021). They facilitate the processes of collecting, storing, accessing and analyzing data, and help managers control decisions and how employees carry out their activities with greater accuracy (Lyytinen *et al.*, 2021). The use of ICTs has enabled new forms of work, both independent (work using digital platforms such as digital media production, transportation and delivery services, online sales, service delivery, etc.) and dependent (work done in person and remotely under someone's supervision).

Telework has social, personal and organizational benefits (Haddadi & Ghafari, 2012; Shekarchizadeh, Ghasemi, Tadi, Soltani & Nili, 2015). Among the social benefits, we can name savings in terms of gasoline consumption, which improves traffic and air pollution, reduces the congestion of urban roads, and reduces accidents, rural migration and discrimination. As for personal benefits, there is reduced travel time and cost, better work–life balance, flexible work schedules, increased productivity and more jobs for people with disabilities. Regarding organizational benefits, they include cost reduction and increased productivity, reduced overhead, greater retention of talented employees and the dissemination of information (Shekarchizadeh *et al.*, 2015).

The telework literature has been substantially developed in recent years, particularly in terms of its impact on individuals, including their social relationships, work–family conflicts, job satisfaction, organizational commitment and job performance (Gajendran & Harrison, 2007; Richardson & McKenna, 2014). However, little research has been conducted regarding telecommuting performance (West, 2017). Therefore, this study seeks to understand whether perceived telework efficiency, defined as the overall performance and productivity of individuals working from home or remote locations (West, 2017), affects personal and organizational congruence of objectives.

The congruence between personal and organizational goals directly affects the attitudes and behaviors of individuals toward an organization, and also promotes satisfaction, commitment, increased performance and reduced turnover (Klein & Colauto, 2020). Goal congruence is affected by positive feelings on the part of civil servants in terms of their

perception of their fit with their work environment (Kristof-Brown, Zimmerman, & Johnson, 2005). Therefore, we propose that the greater the level of perceived efficiency of telecommuting by the civil servant, the greater the congruence will be between the individual goals and the organization's goals. Thus, we present the following hypothesis:

- H1. Perceived efficiency of telework positively affects a civil servant's congruence of objectives with an organization.

Telework has transformed traditional forms of work, primarily because of its ability to disengage work activity from the physical constraints imposed by offices and factories where employees are physically present in the workplace and where there is co-location of managers and colleagues who exert a disciplinary force on workers' conduct (Sewell & Taskin, 2015). The essence of telecommuting is providing flexibility to workers without affecting the organization as a whole, but when managers allow employees to telecommute, they can often use existing management controls and apply them differently to telecommuters and face-to-face workers, using different levels of emphasis (Groen *et al.*, 2018).

2.2 Management controls systems, telework and the congruence of objectives

The management literature has presented distinct definitions of an MCS (Merchant & Otley, 2007; Merchant & Van der Stede, 2017; Malmi & Brown, 2008). Due to the lack of consensus on a single definition, the interpretation of research findings has been problematic (Malmi & Brown, 2008). The first definition of an MCS was provided by Anthony (1965), according to whom management control is the process by which managers ensure that resources are obtained and used effectively to achieve organizational objectives.

Due to the limited nature of the definition, which separates management control from strategic control and operational control, several other authors have made contributions. Flamholtz (1983), for example, emphasizes the behavioral aspect of an MCS with the argument that it can be understood as a set of actions or developed activities which are capable of influencing, probabilistically, individuals to behave in a way that leads to the achievement and congruence of organizational objectives.

The behavioral view is also supported by Merchant and Van der Stede (2017), and they also argue that the need for management control exists due to three main reasons: a lack of direction, motivational problems and personal constraints. To address these issues, the authors propose the control object framework, which divides control practices into four groups – personnel, action, results and cultural – being the first two of which our emphasis in this study.

Merchant and Van der Stede (2017) argue that personnel controls aim to control or motivate individuals on their own for three purposes (helping employees understand organizational expectations, ensuring employees have the necessary skills and enabling self-monitoring). These purposes are ensured by the implementation of personnel controls, through the selection and placement of employees, training, work projects and the providing of the necessary resources. The goal of implementing this type of control is to make the best fit between the individual and the organization and assist in achieving the congruence of individual objectives with those of the organization (Merchant & Van der Stede, 2017).

Action controls consist of behavioral constraints (physical and administrative), accountability for actions (work rules, policies, procedures and codes of conduct) and approval in advance (direct supervision and budget reviews), which are designed and used to motivate specific actions taken within the company (Malmi & Brown, 2008). In other words, action controls directly control the behavior of employees by ensuring that they perform (or do not perform) certain actions that are known to be beneficial (harmful) to the organization (Merchant & Van der Stede, 2017).

In this study, we seek to verify the effects of action and personnel controls on civil servants when they perform telework activities. The telecommuting literature claims that managers

may deal with the challenge of not being able to monitor the actions of telecommuting individuals by placing more emphasis on production controls (Truss *et al.*, 1997; Groen *et al.*, 2018). This is justified by the fact that when direct monitoring of individuals is not possible, output (or outcome) controls become more important due to the greater emphasis on goals, performance indicators and results (Ouchi, 1979; Truss *et al.*, 1997; Eisenhardt, 1985). However, it has been proposed that action and personnel controls are also important, and that their use is expected to help streamline work procedures and align the divergent interests of agents and principals to achieve congruence of objectives.

In all types of organizations, people must be motivated to focus on organizational goals. Individuals make daily decisions that may be consistent with organizational goals or not (Flamholtz, 1996). Thus, according to the arguments of Flamholtz (1996), it is expected that MCSs help individuals focus on achieving the organization’s goals, and thus create goal congruence as proposed in our second hypothesis as follows:

H2. The effect of the perceived efficiency of telework on civil servant congruence of objectives is moderated by (a) action and (b) personnel controls.

Based on what has been described and the highlighted hypotheses, the theoretical model proposed for this study is displayed in Figure 1.

According to Handy (1995), manager reliance on teleworkers needs to be limited. Telework needs to be integrated with the organization’s MCSs, that is, the key human resource management practices designed to manage workforce behavior in the most efficient and effective manner. Thus, the use of controls is expected to streamline work procedures and align the divergent interests of employees and their superiors to achieve congruence of objectives. After demonstrating the theoretical relationships of our research model, we will then describe the methodological procedures adopted for the operationalization of this study.

3. Methodological procedures

3.1 Sample selection

The research sample consists of 468 respondents who are civil servants in the Public Ministry, selected from a group of 4,000 randomly selected contacts. To validate the required sample size and statistical power, we considered the total effect of five predictor variables (perceived efficiency of telework, action controls, personnel controls and their corresponding moderation of these controls) on the dependent variable congruence of objectives.

The validation of the sample size was calculated with a median effect (F^2) of 0.15 and a test power of 95%, corresponding to the significance level of 5%, which requires a minimum sample greater than 138 valid answers resulting from the application of the G*Power software (Faul, Erdfelder, Buchner & Lang, 2009; Hair, Hult, Ringle & Sarstedt, 2016). Table 1 highlights the descriptive analysis of the respondent data.

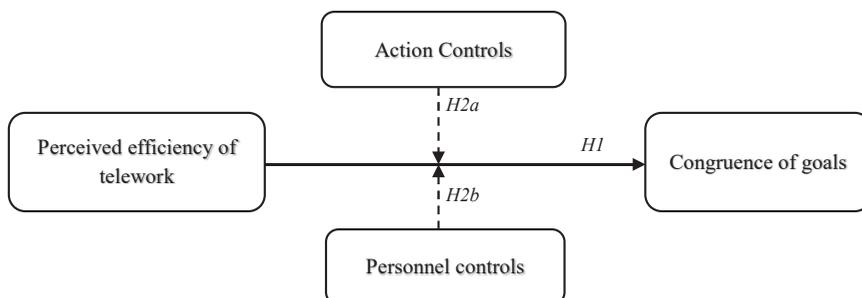


Figure 1. Research conceptual model

It can be observed from the demographic data that the sample is mostly female (51.70%), and most of the respondents, 303 of them, have master's or PhD degrees. It is also noteworthy that 303 of the civil servants have technical career positions. In addition, we should mention that these civil servants are at an average age of 43 years and have an average of 12 years of experience in the system of justice.

3.2 Collection instrument

The collection instrument was developed from the literature related to our theoretical framework, using variable indicators already validated in the literature for the perceived efficiency of telework (Haddadi & Ghafari, 2012; West, 2017), the congruence of objectives (Supeli & Creed, 2014), and action and personnel controls (Merchant & Van der Stede, 2017). Table 2 presents our research constructs and the respective assertions that support them.

The research instrument was applied using the SurveyMonkey® application, which was sent directly to the email addresses of the sample individuals from January to March of 2021. The instrument also included questions about other sample control variables, such as gender, education, training and time in the organization.

In response to the assertions, the respondents were asked to assign values of intensity to their perceptions using a Likert scale format ranging from strongly disagree to strongly agree. It is noteworthy that before the research instrument was applied to the respondents, back-translation and pre-testing procedures were performed to provide external validation.

3.3 Data analysis procedures

Data analysis was performed using the structural equation modeling (SEM) technique estimated from partial least squares (PLS), using the SmartPLS v.3.3 software. This technique makes it possible to estimate a series of separate but interdependent multiple regression equations simultaneously by specifying a structural model (Hair et al., 2016). The moderator variables were tested using the standardized two-phase method. Validation was performed by using bootstrapping PLS analyses with biases corrected and accelerated (BCa), and significance of 0.05 in a two-tailed test.

4. Analysis and discussion of the results

4.1 Measurement model

To evaluate the validity of the research constructs, discriminant and convergent validity were observed. The analysis of discriminant validity identified satisfactory indicators in the Fornell–Larcker matrix, with the highest loads occurring with the corresponding variables.

In the resulting convergent validity analysis, the average variance extracted (AVE), the composite reliability (CR) and Cronbach's alpha presented satisfactory coefficients, respectively, starting at 0.5, 0.7 and 0.7 (Fornell & Larcker, 1981) as shown in Table 3, after the exclusion of a perceived efficiency of telework indicator (PET2).

Table 1. Respondent data

Gender	Qty	(%)	Education	Qty	(%)	Career	Qty	(%)
Female	242	51.7	High school or technical	18	3.85	Technician	303	64.74
Male	224	47.9	University degree	147	31.41	Analyst	127	27.14
I prefer not to answer	2	0.4	Postgraduate	273	58.33	Commissioned and Request	38	8.12
Total	468	100	Master and doctor	30	6.41	Total	468	100

Variable	Item
Perceived efficiency of telework	PET1 – Telework increases productivity
	PET2 – Telework provides more recruiting options
	PET3 – Telework creates problems for working hours
	PET4 – It is difficult to guarantee the safety and health of teleworkers
	PET5 – The organization has tasks, processes and means suitable for telework
Congruence of objectives	COB1 – There is a similarity between the collective goals of the organization and my personal objectives
	COB2 – The goals I set for myself are congruent with those of the organization
	COB3 – I feel that I managed to achieve the goals that the organization had for me
	COB4 – I feel that I was able to contribute to my organization achieving its objectives
Action controls	AC1 – In the organization, superiors monitor the steps necessary to achieve subordinates’ performance objectives
	AC2 – In the organization, policies and procedure manuals define the flow of telework processes
	AC3 – Superiors define the priority steps for teleworking
	AC4 – In the organization, there is a definition on the priority tasks in telework
	AC5 – In the organization, superiors evaluate the established routines
	AC6 – The control systems allow the monitoring of activities carried out in telework
Personal controls	PC1 – Much effort was made to adjust the training process to include telework servers
	PC2 – The organization’s employees receive several opportunities to expand their skills
	PC3 – The organization’s employees are carefully selected and trained, so that they are adequate to the values and norms
	PC4 – Training and development activities for the organization’s employees are considered very important
	PC5 – Employees have the opportunity to exchange working units depending on their abilities

Table 2.
Research instrument

Constructs	Alfa	Fiab	AVE	R ²	Fornell-Larcker panel			
					COB	PET	AC	PC
COB – Congruence of objectives	0.826	0.885	0.658	0.41	0.811			
PET – Perceived efficiency of telework	0.740	0.834	0.557		0.559	0.746		
AC – Action controls	0.887	0.915	0.643		0.444	0.484	0.802	
PC – Personnel controls	0.806	0.865	0.564		0.406	0.350	0.581	0.751

Table 3.
Model validities

Satisfactory CR and Cronbach’s alpha indicators, starting at 0.7, indicate that the sample is theoretically free of bias and that the data collection instrument used in our research is reliable (Hair *et al.*, 2016). The verification of the latent variables of the model, which according to Fornell and Larcker (1981) is confirmed when the value of the square root of the AVE is greater than the absolute values of the correlations with the other latent variables, also met these criteria.

4.2 Structural model

Structural model analysis makes it possible to statistically validate the relationships among the constructs and the connections built according to the structure of a theoretical path

diagram (Hair *et al.*, 2016). To assess the validity of the structural model, we analyzed the effect sizes (F^2) and Pearson's coefficients of determination (R^2) using the PLS algorithm; the size and significance of the path coefficients (P -value) using the bootstrapping technique; and the predictive relevance (Q^2) in the blindfolding procedure (Hair *et al.*, 2016).

In bootstrapping, subsamples were created with observations randomly drawn (and replaced) from the original dataset, which were then used to estimate the PLS path model. In this case, 3,000 different subsamples (N) were generated, as recommended by Hair *et al.* (2016), with pairwise deletions for the omissions. The results are presented in Table 4.

The F^2 indicator is a measure that evaluates whether there is a substantial impact on the dependent construct when an independent construct is omitted from the model. Considering the values for F^2 suggested by Hair *et al.* (2016), values greater than 0.005 are sought to measure the effects of the model. Pearson's determination coefficient (R^2) indicates the explanatory capacity of the model, i.e. the influence of the explanatory variables on the dependent variable, which in this study shows that the model explains 41 % of the variation in individual congruence of objectives.

Table 4 reveals the path coefficients related to the research hypotheses, which are tested and validated using the student test and their p -values. The application of the model together with the moderation function aims to identify relationships that may strengthen or weaken the relationship between the independent variable (perceived efficiency of telework) and the dependent variable (congruence of objectives), through the application of the MCSs (Bido & Silva, 2019).

Q^2 , the Stone–Geisser indicator (Geisser, 1974; Stone, 1974), is a predictive relevance criterion, taken from blindfolding – a sample reuse technique that systematically excludes data points and provides a prediction of their original values. The Q^2 criterion highlights how close the model comes to what is expected of it in predicting the set of dependent variables, requiring a value greater than zero, while a perfect model would have an index equal to 1 (Hair *et al.*, 2016). The Q^2 criterion is validated as shown in Table 4.

Therefore, from the tests performed, we have verified that the theoretical model for this study is valid in its structure of causal relationships, with an explanatory capacity of 41 % in terms of the congruence of the objectives, i.e. a significant part of the alignment of the objectives of the individual with the organization is dependent on the efficiency of telework and management controls. This coefficient represents a slightly moderate effect (Hair *et al.*, 2016), and this is enough to interpret the results. The direct relationship between perceived telecommuting efficiency and congruence of objectives was significant, statistically proving our first hypothesis.

The second research hypothesis seeks to confirm whether the effect of the perceived level of efficiency of telework on the congruence of objectives of civil servants is moderated by (1) action controls and (2) personnel controls. The results indicate that action controls are positively related to congruence of objectives (H2a); however, the moderation on the perceived

Structural relationship	Hypotheses	VIF	F^2	β	T -value	P -value	R^2	Q^2
PET → COB	H1	1.32	0.25	0.435	7.984	0.000***	0.41	0.26
AC → COB		1.75	0.02	0.120	2.229	0.013**		
AC × PET → COB	H2a	1.14	0.02	-0.110	0.732	0.232		
PC → COB		1.53	0.03	0.187	4.282	0.000***		
PC × PET → COB	H2b	1.14	0.04	-0.145	2.923	0.002***		

Note(s): COB = Congruence of objectives, PET = Perceived efficiency of telework, AC = Action controls, PC = Personnel controls
 $N = 468$. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 4.
Effects between
constructs

efficiency of telework was not significant. For H2b, personnel controls show a positive and statistically significant relationship with objective congruence. The moderation effects of personnel controls on the perceived efficiency of telework and congruence of objectives relationship were statistically validated, but with a negative coefficient. This allows us to infer that more intense personnel controls in telework weaken the individual's congruence of objectives with his or her organization.

4.3 Discussion of the results

The first hypothesis of this study was statistically confirmed, demonstrating a positive relationship between efficiency in teleworking and the congruence of objectives as shown in Table 4. This means that when civil servants perceive that their tasks are performed more efficiently, their perception of congruence with the organization's objectives also increases. Klein and Colauto (2020) indicate that this relationship is important to reducing turnover and strengthening the bond between the individual and the organization, in addition to other benefits for the organization.

Merchant and Van der Stede (2017) point out that one of the major problems to be faced in the design of MCSs is their lack of direction towards individuals. This means that, in many cases, the individual does not know exactly what the organization expects from him or her. Interestingly, the results show that there seems to be a greater concern with directing tasks in remote work, that is, civil servants seem to engage more in the definitions and objectives of tasks in the telecommuting regime, which is in line with the findings of other studies such as Peters *et al.* (2016).

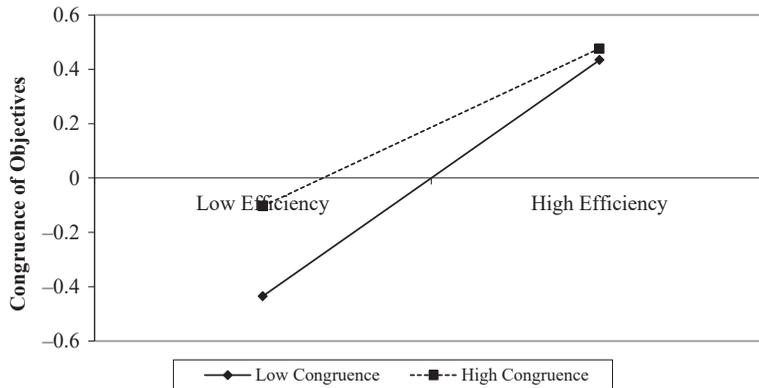
Another important aspect is that, in a telework regime, the perception of good productivity on the part of civil servants makes them feel more in line with organizational objectives. Probably trying to show that it is possible to be efficient in this type of work regime, the individual ends up seeking a better understanding of what the organization really wants from a requested task.

It also should be noted that in telework there is a reduction of conflicts imposed by social relationships in the work environment (Peters *et al.*, 2016), which directs the actions of individuals more towards the goals of the organization rather than towards issues related to their workgroup. This causes civil servants in this work regime to seek greater discipline in terms of their own performance. These results are also in line with Sewell and Taskin (2015) in terms of worker conduct.

This study also seeks to verify whether action and personnel management controls (Merchant & Van der Stede, 2017) strengthen the relationship between the perception of efficiency in telework and the congruence of objectives. The results show that, indeed, there is a direct relationship between action and personnel controls and congruence of objectives, and in this case, civil servants perceive that these controls seek to align the tasks performed with organizational goals. However, when the moderating relationship is analyzed, the results indicate that the controls are perceived in different ways by the employees. In the case of personnel controls, the negative relationship indicates that more intense personnel controls in telework weaken the congruence of objectives between the individual and the organization, which indicates a possible limitation to levels of control and efficiency (see Figure 2).

These results also show that low levels of personnel controls, for example, due to lack of training, reduce the perception of efficiency in teleworking and the congruence of objectives. This is an important contribution to the MCS literature because in a telework regime, it is necessary to strengthen training so that the civil servants feel better prepared to perform their tasks without close monitoring by their peers or their immediate boss. This confirms the position of Groen *et al.* (2018) that the more difficult it is to control the actions of employees, the greater the need there is for controls that seek to anticipate problems such as personnel controls.

Figure 2.
Effect on congruence of objectives



On the other hand, the fact that there is no statistical significance of the moderation of action controls may have occurred for the same reason, that is, teleworkers do not perceive these restrictive controls as having any impact on the relationship between the efficiency of telework and the congruence of objectives. This is a very important aspect because, although being considered as important restrictive controls, teleworkers seem to be more resistant to action controls or unaware of them. Within our sample, especially in the core activity of the Public Ministry, civil servants work mainly to meet legal or judicial deadlines which transcend sectorial controls and routines, and therefore they may mitigate the relationships between the moderating variables.

5. Conclusions

This study investigates whether the perceived efficiency of telework positively affects the congruence of objectives from civil servants and their organizations, and whether this can be enhanced by MCSs (through action and personnel controls). This study is timely considering the recent large increase in telework and the lack of specificity in the literature regarding MCSs in this scenario, especially in terms of federal civil servants in justice agencies.

Our results indicate that the main relationship is positive and therefore the greater the perception of efficiency in the tasks performed in telecommuting, the more individuals will consider themselves to be in line with organizational objectives. This debate is important as it sheds light on discussions in the literature about MCS design characteristics in the new work scenario, which has led to even greater complexity in public sector entities. From a practical point of view, it contributes to the eminent concern of public managers regarding the control of civil servants under a telework regime.

As for the effects of these controls, personnel controls are fundamental in aligning actions with organizational purposes, and employees strongly perceive that the less training they have, the more difficult it will be for them to perform tasks efficiently in relation to the desired objectives. On the other hand, it was not possible to verify the effect of action controls, which indicates that teleworking employees may be more resistant to controls with restrictive characteristics. These results make sense, because the feeling of freedom at work is, at least at this time, almost inherent in telework, and action controls can provoke rebellion against constraints on worker freedom and autonomy.

It should be emphasized that we still have a long way to go before we have a better understanding of the role of management controls in public organizations and especially under a telework regime. The literature on MCSs, especially articles based on contingent

factors, recommends that each organization must seek the best configuration and adjustment for its management controls. Moreover, it is undeniable that the changes caused by the pandemic have anticipated and amplified management problems, and this has led to new reflections about management controls. Thus, this study seeks to draw attention to new investigations of issues such as evaluations of individual, collective and organizational performance under a telework regime.

Based on our results and despite the limitations of this study, we can suggest some avenues for future research. Further studies should expand our investigation to other types of controls (results, cultural, etc.), in performance evaluations for public servants in teleworking. An example of this is making pacts in terms of the results of the recent demand management program currently being implemented in public entities. Moreover, future studies can also apply qualitative research to examine this phenomenon in greater depth to better understand results in practice and strengthen theory. Studies can be performed on the types of activities performed by civil servants (middle and/or end activities) as well as their gender, education, distance from home and satisfaction with the work environment, among other factors and behavioral characteristics. The model can also be applied outside of this period of social isolation for comparison purposes. Finally, since this study explores this phenomenon in the public sphere, other studies can compare it with the private sector in other segments to observe similarities and differences.

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Corresponding author

Edicreia Andrade Dos Santos can be contacted at: edicreiaandrade@yahoo.com.br