



The effect of collectivism-based organisational culture on employee commitment in public organisations

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ABSTRACT

In the context of public organisations, this research explores the effect that a collectivism-based organizational culture may have on employee commitment (EC) from a triple perspective - affective, normative, and continuance. A sample of 214 employees of public organisations in Spain was used, and the data were analysed through the Structural Equation Model (SEM). The findings show that the prevalence of collectivism in public organisations favours higher levels of employees' commitment. Such commitment can be seen in the employees' intention to remain in the organisation to provide their services or their emotional attachment. The following research contributes to expanding upon HRM-literature in several ways. First, it assumes a broader view of social exchange theory, highlighting EC's importance when planning HRM in the public sector. Second, it considers the cultural environment (i.e., collectivism-based organisational culture) of public entities as determinants of pro-commitment policies or policies governing public employees.

1. Introduction

Since the end of the last century, new public management theories and policies have demanded increasingly efficient public services [1]. Generally, the influence of modern society—with its demands for quality public services, growing diversity in the workforce, rapid technological advances, political instability, and legislative amendments, etc.—gives rise to demands for profound changes within the management of public organisations [2–4]. These demands, which do not necessarily coincide with the private sector [5], represent an important change for public organisations [6,7] and a legitimate challenge for human resource management (HRM) of public organisations [6]. For example, the increasing globalisation of economies and diversity within the workplace has led to an increased interest from experts and researchers regarding the effects of cultural differences on employees [8, 9]. However, most of the current research concerning public organisations does not consider the *organisation's culture* (OC) as a conditioning of HRM [10]. In fact, among recent literature, OC is frequently absent as a factor of study. This makes it difficult to pinpoint arguments that discuss the functioning of public organisations, and therefore even more difficult to pinpoint arguments that comment on its connection to employee commitment [6].

Changes in public organisations are not easy to manage due to (among other things) employee alienation from work, lack of motivation, perceived ambiguity of objectives, risk aversion, and reluctant acceptance of poor public service [11]. Nonetheless, recent studies claim [12,13] that the concept of the public employee as an “obstacle to change” has been largely overcome by proactive attitudes of self-improvement and ingenuity to make organisational changes successful [14,15]. Likewise, the idea of bureaucracy as an inherent part of public organisations and a source of rigidity for employment seems to have been overcome [16]. Moreover, some research shows that the new role of the public employee as a motor for change defines a new trend in modern public organisations [1] in which employees' commitment (EC) takes on special significance [17,18]. These are some of the contextual factors that must be considered when analysing public organisation-EC, among which OC appears to play a special role.

Among the OC-dimensions most used for these studies, those of [19] present a frame of reference highly accepted by the scientific community. Especially in this context, the differences between *individualism* and *collectivism* is of special significance due to its effects on EC [20]. Organisational commitment-EC is understood as a state in which an employee identifies with a specific organisation, its goals, and the desire to belong to the organisation [21]. In addition, the importance of EC also

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lies in the relationship between the employee and their job performance, their relationships with other employees [22], and their relationship with the organisation's objectives [23].

Although there is currently some consensus among researchers [24] on the need to consider the influence of organisational culture on HRM studies. For our research the OC-dimension utilized is individualism-collectivism on EC, because few studies include it in their models, even when it is studied in the context of public organisations. However, it has been shown that OC plays a fundamental role as a determinant of the level of commitment of employees towards the organisations in which they work [25,26] p. 29). In particular, the IC dimension has proven to be a conditioning cultural component of employee commitment. The prevalence of collectivist culture has become equated with higher levels of trust and motivation, as well as with a greater psychological sense of teamwork [27]. In this regard [28], concluded that collectivist culture may be the driving force for behaviours that enable employee commitment. Therefore, in a public HRM context, the research attempts to answer the following question:

Does the predominant level of individualism-collectivism in public organisations affect its employees' commitment? And if so, how does it affect them?

Thus, this research contributes to the increasing theoretical knowledge surrounding the relationship between the level of collectivism in public organisations and their employees' commitment. This research benefits managers in these organisations in particular, since they are interested in improving the level of employee participation and employee permanence in their departments or administrative areas. The relationship studied may support public entities when facing new challenges, as this is related to improving the performance and quality of public services.

A sample of 213 public organisations in southern Spain was analysed using structural equations modelling-AMOS to achieve the above objective. The aim is to analyse and, where appropriate, ascertain the effects caused by the cultural dimension of individualism versus collectivism on the commitment of public employees and how these effects are produced.

1.1. Background and hypotheses

1.1.1. Individualism and collectivism (IC)

The theoretical basis for hypothesising the impact of social culture has to do with the fact that when people arrive to work, they bring along a set of habits and social norms that will require a certain level of adjustment to the organisation's habits and norms [29]. Therefore, OC provides general guidelines and predisposition towards the work effort that could affect organisational results. Cultural values affect managers and other members of the organisation who, consciously or unconsciously, have chosen to accept them [30]; although, not all aspects of organisational culture are equally relevant or beneficial to performance [31]. Their effects can be predicted using Hofstede's dimensions [19, 32]. Since cultural values are multidimensional, it is appropriate to select those related to the commitment of public employees.

[19] introduced IC as a cultural variable in a business management context, understood as two extremes of the same variable. Individualism, simply put, can be understood as an orientation towards oneself, as an autonomous individual. In contrast, collectivism refers to a state in which an individual's identity is immersed in society, in general, or in the group to which they belong [19]. A key feature of this concept is the emphasis on individual versus collective goals. In fact, in organisations based on a culture of collectivism as opposed to individualism, employees are expected to prioritise group goals rather than their own [33, 34]. From this perspective, public organisations need to strengthen the stability of their employees.

[35] argue that the predominance of individualistic cultures is related to achieving personal goals and allows for the pursuance of innovation, stating that individuals tend to be conformists in collectivist

cultures. However [36], found a positive relationship between the level of collectivism in self-directed or self-managed teams and their level of commitment. In any case, there is a significant consensus among scholars as they affirm that the IC is a relevant cultural variable for the study of employees' commitment to their organisations [20,37,38]. According to Ref. [39], it is urgent to consider OC dimensions when studying their employees' performance, since the models used are defective otherwise. As OC guides the behaviour of the organization members, acting as an important role in their level of commitment in both private and public organisations [40–43].

For example [41], in their study on public organisations, found that the culture of organisations has both direct and indirect effects on both their strategies and the behaviour of their employees. Along the same vein [44], found that the dominant culture in public organisations affects the behaviour of their employees, as is the case in the private sector, and ends up seriously conditioning the results expected by their leaders. Furthermore, studies such as those of [45] showed the effects of cultural dimensions, such as how IC has an influence on the level of public employees' commitment, which is in line with the results obtained in the private sector [26,34,46].

1.1.2. IC in public organisations

Considering the importance of contextual factors in HRM (e.g., IC), it is considered crucial to use *contingency theory* as the main framework of study [47] which focuses on the adjustment of contextual factors. This is due to the organisations' need to adapt to their environment by paying attention to the economic, technological or political particularities that may arise [48,49]. Thus, in the study of employee performance, sociological, historical or economic factors must be considered and the different types of organisations (public or private) that differentiate them [37,49,50].

In the public sector, IC may present advantages and disadvantages specific to the public sector that should be noted. In fact, individualism often translates into meritocracy and individual potential, while collectivism has been associated with favouritism in the form of nepotism and clientelism [51]. Similarly, collectivism-based organisational culture (COC) has been associated with higher corporate social responsibility levels [52]. Alternatively, the relationship between IC and employees' commitment has also been a key topic of study [53,54]. A positive relationship between a COC and commitment could be expected, since collectivism defends trust, loyalty, and commitment [55]. Collectivism tends to be based on moral rather than contractual concerns, and situations could conflict with the principles of transparency and meritocracy that should prevail in public organisations [54].

In public organisations, recognition depends on the objectives and merits accomplished by individuals. In fact, it has been shown that as the level of individualism in an organisation increases, its effect on employee commitment increases as well [56]. In their long-term economic growth study [35], rate the IC variable as the most important from an economic and statistically robust perspective. From an IC perspective and in public organisations, this research focuses on a collectivism-based organisational culture as a factor determining of EC.

1.1.3. Employee commitment -hypotheses

[21] defines organisational commitment as a state in which an employee identifies with a specific organisation, its goals, and desires, to maintain their membership. Such commitment is related to the intensity of an employee's involvement and identification with the organisation [57]. According to Ref. [58], the central interest of commitment lies in its positive relationship with an individuals' work performance.

However, organisational commitment as a one-dimensional concept seems to be outdated, as shown by researchers [59], who proposed a three-component commitment model as a basis for comparisons between cultures. These components are *affective commitment* (AC), *normative commitment* (CN), and *continuance commitment* (CC). These components' basis is found in the different effects and implications they

possess in work behaviour [60]. They are strongly associated with job performance and organisational behaviour [43,59]. The three-component commitment model appears to be an appropriate measure for analysing the relationships between organisational culture and commitment [8]. Therefore, Fig. 1 summarises the hypotheses to be tested.

Interest in the effects of cultural differences on employee commitment has increased in the last decade due to the globalisation of the economy and the increasing cultural diversity within the workplace [8], in both private and public organisations [61]; K; [62,63]. This interest in the effects of OC has been particularly strong in two primary cultural dimensions: IC and power distance [13,31], although the interest in IC is higher [64]. Organisations with a predominance of collectivist cultures (i.e., IC) exhibit more cooperative behaviours than individualist ones. They tend to be more flexible in responding to employee behaviour, and consider their contributions in favour of common goals – this has been linked to EC [65,66].

The arguments mentioned above relate to the social exchange theory (SET), which determines the social mechanisms in which individuals establish reciprocal relationships [67]. SET states that exchanges between peers, or between superiors and subordinates, generate commitments between them [68–70]. In fact, pro-commitment policies are tied to greater employee integration and satisfaction [71], favoured identification with their team, decreased perception of injustice, and strengthened trust among the team’s members [72]. [62,63], in a study conducted in multiple countries on public employment systems, found a positive relationship between the level of commitment and the selection method to recruit employees. In any case, all outcomes are directly related to improvements in satisfaction and performance of employees [73].

Other studies have shown that the level of IC can influence employees’ commitment, although public organisations demand in-depth research [10,24] since they are organisations that usually have a strong presence of standards and controls. Previous studies [13,74,75] reveal the importance of adequately managing staff in the public sector, particularly because of the effects that this has on public employees’ commitment. However, studies such as those of [6] maintain that EC has not been sufficiently studied.

1.1.3.1. Affective commitment. Affective commitment (AC) represents a positive relationship between the individual and the organisation for which they work, whereby the individual develops the willingness to help both other workers in the organisation and the organisation as a whole [76]. It is an emotional bond that involves the employees taking on the organisation’s objectives as their own [77]. In the affective component of commitment, the individual’s identification with the organisation’s values and objectives, their loyalty, and the desire to remain in the organisation are the focus points. Therefore, the subject works hard for the good of the organisation [77,78]. According to

Ref. [79], this type of commitment – the individual’s desire to remain voluntarily in the organisation – stands out, cushioning the negative impact of work stressors on the health and well-being of employees (e.g., Ref. [80]. In addition [43], in their public sector study in Australia, showed that an innovative atmosphere in public organisations has positive effects on the affective behaviour of public employees. Due to the importance of social ties and group goals, commitment of this nature (i.e., AC) is even more common in environments with predominant collectivism-based organisational cultures [81]. Due to link has not been sufficiently demonstrated in public organisations, so the following hypothesis is proposed:

H1. A collectivism-based organisational culture in an organisation could increase public employees’ affective commitment to their organisations.

1.1.3.2. Normative commitment. Normative commitment (NC) suggests that committed individuals remain in the organisation because they believe that it is morally right to do so [82] considering themselves debtors of the organisation [79] and therefore maintaining an attitude of gratitude towards their organisations [25,78]. This commitment occurs due to the set of normative pressures internalised by the individual to behave in accordance with the organisation’s objectives [79]. Since the organisational culture reflects the set of values and patterns that determine what is right to do in the organisation, it necessarily intervenes in the development of NC [82]. [62,63,83] confirmed the NC construct as being part of a multi-dimensional commitment concept, reflecting the individual’s feeling of moral duty to stay in the organisation and their feeling of indebtedness towards it. These effects lead them to believe more strongly in the idea that they shouldn’t leave the organisation and should develop their career within it. From the AC perspective, committed individuals maintain an attitude of gratitude towards the organisation and remain with the organisation [78] p. 58) [84] found a positive relationship between the level of collectivism and normative commitment. However, this type of link has not been sufficiently studied in the public sector [62,63]. Moreover [62,63], found a positive relationship between certain recruitment systems and the normative commitment of public employees. In this sense, public employees tend to stay in the same organisation throughout their entire career. A high level of internal homogeneity of employees, in terms of both training and professional experience, seems to lead to a certain degree of affinity among them [85]. Therefore, the long-term relationship involved in these civil service systems, as in the case of Spain, leads to employees feeling a sense of loyalty towards their organisations and, consequently, the willingness to continue working in them [62,63]. Thus, a second hypothesis is proposed:

H2. A collectivism-based organisational culture in an organisation could increase the public employees’ normative commitment with their organisations.

1.1.3.3. Continuance commitment. Continuance commitment (CC), also called instrumental commitment, has also been positively linked to a predominance of collectivism-based organisational cultures over individualist ones [19,53,86] CC stems from the idea that an individual remains in the organisation because of the rewards received and ponders the pros and cons of leaving the organisation [78,87]. There is a rational process of analysis in which the employee evaluates the benefits obtained in the organisation and the consequences should they choose to leave. CC is a kind of commitment whereby the employee reflects on the various alternatives for them to invest their effort, evaluating the cost of each of them and how they will benefit the employee’s future in terms of working time, level of effort, economic benefits, etc. As a result, individuals remain in the organisation because they need to, or because it is more beneficial to them than leaving [78,88]. Some researchers [89] have shown that once employees make the decision to stay in the

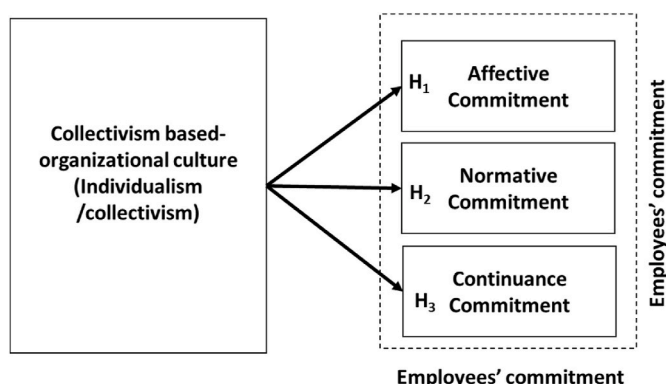


Fig. 1. Research model.

organisation, as a result of CC, they show a positive attitude towards performance and the quality of the work delivered. The level of collectivism (i.e., COC) has also been positively linked to CC's level [31,53]. It can be perceived that, for the public employee, the benefits of job stability and other characteristics of labour and functional relations within the public sector (which differ significantly from the private sector) should be considered [61]. [90] found that CC is greater in public organisations than in private ones. Furthermore [62,63], other studies show that taking measures such as creating pension funds for employees or implementing good healthcare or job stability systems boosts the level of CC, as it makes employees more likely to stay in the organisation and increases their loyalty towards the organisation, thus helping to achieve the latter's objectives. Therefore, a third hypothesis is proposed:

H3. A collectivism-based organisational culture in an organisation could increase public employees' continuance commitment with their organisations.

2. Method

2.1. Study design and setting

In Spain, unfortunately, there is no dataset indicating the number of public organisations in the country (*study population*). Due to this fact, the Spanish government calculates the public sector's size by using employment figures instead of the number of public organisations. Thus, it was impossible to obtain an exact number to estimate the study population. For this reason, we used a *convenience sample*, which is common and well accepted in the HRM field [13,91].

In this research, a self-administered questionnaire was used. The surveys were collected in two ways: a) Public employees were contacted by email and they were invited to participate in the study. That email contained information about the study and an Excel document

containing the survey (in Spanish). The letter of invitation indicated the anonymity of the responses, assuring that the information received will be used on a global scale and never at an individual level. b) Public employees were contacted in person at their place of work. In this case, participants received the survey (a printed Excel document) by hand.

The above-mentioned procedure for collecting the data is very well accepted in the HRM field. In fact, many researchers [43,62,63,92] consider that it would not be necessary to ask participants to complete an enormous informed consent. Due to the data obtained by the researchers was collected in a manner that it would never be possible to know the identities of the managers surveyed either directly or indirectly.

The survey was carried out in Southern Spain from February to July 2018. A total of 214 valid surveys were received, of which 184 came from email invitations and others (30) from the printed version. An ANOVA analysis revealed that there were no significant differences between the two ways in which the data was collected, that is, between printed surveys and email surveys.

This research was focused on exploring if a collectivism-based organisational culture of public organisation employees relates to their commitment to their organisations, which has not yet been properly investigated. Therefore, for a public employee to be considered as a subject of study, they were required to meet the following requirements:

- a) Be responsible for leading a group of employees (i.e., a manager)
- b) Be a public employee. Since Spanish public organisations include many politicians and public employees, politician employees are designated by one of the political parties. Therefore, they are given their job not based on their merits but because they are part of a political party.
- c) Have a minimum of five years working for the organisation, regardless of the contractual relationship (permanent or temporary).

Table 1
Descriptive statistics of the sample.

Organisation Characteristics						
CODE	Variables	N	Minimum	Maximum	Mean	Std. Deviation
ORCH1	Number of employees	214	4	2,700,000	18,161	185,592
ORCH2	Sectors	N	%			
	Education	32	15			
	Employment	9	4.2			
	Central government	20	9.3			
	Health	20	9.3			
	Justice	5	2.3			
	Local government	46	21.5			
	Ports services	4	1.9			
	Postal services	3	1.4			
	Regional government	62	29			
	Security	8	3.7			
	Social services	2	0.9			
	Transports	2	0.9			
	Public TV	1	0.5			
	Total	214	100			
Employees' Characteristics						
CODE	Variables	N	Mean			
ECH1	Employees' age	214	49.7			
ECH2	Employees' Seniority	214	19			
ECH3	Employees' Contract	N	%			
	Temporal	49	23			
	Permanent	164	77			
ECH4	Gender	N	%			
	Female	127	59			
	Male	87	41			
ECH5	Position	N	%			
	Director	32	15			
	Mid-manager	81	38			
	Senior-manager	101	47			

Table 2
The measurement model and CFA evaluation.

Constructs	N	Codes	λ	α	AVE	CR	KMO	X ²
<i>Individualism/Collectivism</i>	214	CO1	0.824	0.888	0.551	0.858	0.846	610.40(df10)
		CO2	0.844					
		CO3	0.711					
		CO4	0.714					
		CO5	0.592					
		CO6	Removed					
<i>Affective commitment</i>	214	COM1	0.783	0.898	0.623	0.868	0.803	527.14(df6)
		COM2	0.813					
		COM3	0.730					
		COM4	0.827					
<i>Normative commitment</i>	214	NOR1	Removed	0.832	0.696	0.820	0.500	216.14(df1)
		NOR2	0.776					
		NOR3	0.889					
<i>Commitment to Continuity (CC)</i>	214	CONT1	0.748	0.639	0.505	0.753	0.608	91.145(df3)
		CONT2	0.671					
		CONT3	0.710					
		CONT4	Removed					
<i>Model fits</i>		X ² (df)		GFI	AGFI	CFI	IFI	RMSEA
<i>Results</i>		88.886***(61)		0.951	0.927	0.984	0.984	0.046
<i>Recommended</i>		P<0.05		0-1	0-1	0-1	0-1	<0.8

Note. N=Sample size; 0(no fit) to 1(perfect fit); λ : factor loadings; α : Cronbach's Alpha; AVE: Average variance extracted; CR: Composite reliability; KMO: Kaiser-Meyer-Olkin; X²: Bartlett's test of sphericity.

In Table 1, the public-service organisations and employee characteristics are shown. It is important to note that most of the organisations are large. They were related particularly to the regional government, which accounts for 29% of the sample. Regarding the respondents' characteristics, most of them were female (59%) with a permanent contract and an average of 19 years of seniority working in public organisations.

2.2. Variables

To measure the employees' commitment variable-construct, Ref. [93] multidimensional model was used. This construct establishes three components or types of commitment: *affective*, *normative*, and *continuance*, as previously described. In this way, it is possible to measure the employees' commitment to the organisation, the employees' satisfaction at work, and the employees' intentions to stay or leave the organisation.

Using the [27]'s individualism-collectivist scale, collectivism-based organizational culture was evaluated. The COC evaluation objective was to know to what extent a high degree of collectivism in public organisations could help increase and maintain the commitment of public employees.

Previous research suggests that both the size of the organization and the age of the employees can affect the commitment of the employees [94,95]. This can be limited by factors other than the collectivism-based organisational culture only. Therefore, the two variables mentioned above were used as control variables of EC. The size of the organization was evaluated using the number of employees working in the organization during the study period. The age of each employee working in the organization during the study period was taken in order to evaluate the factor of age as a whole.

Table 3
SEM's discriminant validity.

	N	I/C	AC	NC	CC	CV
I/C	214	0.743				
AC	214	0.579	0.789			
NC	214	0.584	0.761	0.667		
CC	214	0.320	0.510	0.452	0.711	
CV	214	-0.193	-0.200	-0.180	-0.016	0.901

Note. Bold numbers on the diagonal are the square root of the AVE. Off-diagonal elements are correlations. CV: Control variables.

2.3. Statistical methods

To test the research hypothesis, structural equation modelling (SEM)-AMOS was used as an econometric technique. A SEM model's main advantage is that this method allows working with unobserved variables [96]. As an econometric procedure, SEM has been extensively employed in economics and management disciplines over the years. Important to this case [97], state the advantages of SEM, allowing analysts to explore relationships among different constructs, either independent or dependent.

Most of the research studies that use SEM usually follow a two-phase approach. In the primary phase, the measurement model (MM) was evaluated, while the second phase saw that the structural model (SM) was estimated [97,98]. The convergent validity (CV) and discriminant validity (DV) of this SEM measurement model was assessed by confirmatory factor analysis (CFA).

CFA was tested using the software IBM-SPSS, and AMOS statistic 22.0. First, CFA examined individual item reliability by examining the standardised loadings (λ). CFA recommends that each item's scale must go beyond 0.50 when studies are applied to a different context or in exploratory studies like this.

In Table 2, a summary of the reliability of the constructs, such as Cronbach Alpha (α), Composite reliability (CR) and the average variance

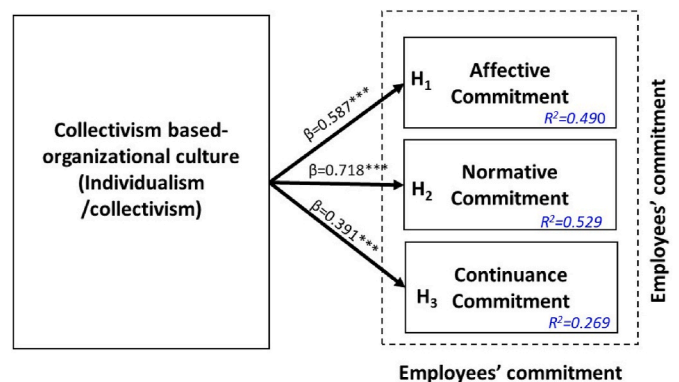


Fig. 2. Sem results.

Note. For a better understanding of the results, control variables and covariances of the commitment constructs were omitted in Fig. 2. See Table 4 for more details regarding the results.

Table 4
Structural model results.

Hypothesis	Effects	β	$\epsilon 0$	T-values	Support	R2
(H ₁) IC→CA	+	0.587	0.093	6.288 ***	Yes	0.490
(H ₂) IC →CN	+	0.718	0.106	6.743 ***	Yes	0.529
(H ₃) IC→CC	+	0.391	0.123	3.191 ***	Yes	0.269
<i>Control Variables</i>						
CV→CA	-	0.126	0.075	4.279 ***		
CV→CN	-	0.109	0.084	0.194		
CV→CC	+	0.405	0.095	0.56		
N	214					
Model fit	$\chi^2(\text{df})$	GFI	AGFI	CFI	IFI	RMSEA
Results	88.886***(61)	0.951	0.927	0.984	0.984	0.046
Recommended	$P < 0.05$	0-1	0-1	0-1	0-1	<0.8

Note. N=Sample size; For 0-1: 0(no fit) to 1(perfect fit).

extracted (AVE) is represented [99]. In comparison, both the Kaiser-Meyer-Olkin test (KMO) and Bartlett's sphericity test (χ^2) presented fair acceptance values for this assessment (see Table 2). Thus, in Table 2, both CFA results and SEM's goodness-of-fit (GOF) can be observed [97,98], which suggests an appropriate GOF for this SEM.

Concerning discriminant validity (DV) of the SEM, these results (Table 3) indicate that each variable is different, and therefore, DV also exists. Furthermore, for the previous SEM-MM analysis, descriptive statistics and an assessment of normality for every construct item (see them in Appendix A) were provided. Thus, their normality was evaluated by using both Kurtosis and Skewness' critical region (CR). Figures suggest that the full indicators show values lower than the set criteria of 1.0 for Kurtosis and Skewness.

The econometric analysis of a SEM measurement model is concluded once the research model's validity and reliability are shown. Thus, it is possible to move to the second phase, the structural model (SM) evaluation¹ [13,98].

The structural model (Fig. 2) was assayed using the estimation of path coefficients and the explained variance (R^2) of dependent constructs, that is, the relationships between IC and commitment. The SM results are provided in Table 4. The SEM results showed a good fit (e.g., GFI = 0.951; CFI = 0.984 and RMSEA = 0.046). Thus, the significance of the parameter estimates was assessed using t-values.

3. Results

3.1. COC and affective commitment

Results suggest (see Table 4 and Fig. 2) that a high level of collectivism in organisations, in other words, a collectivism-based organisational culture increases the affective commitment of public employees ($B = 0.587, p < 0.001$). The effects have been particularly high in employees' concern and interest in the fate of their organisation ($\lambda = 0.827$), followed by their emotional attachment to it ($\lambda = 0.783$), and the identification of the organisation's problems as their own ($\lambda = 0.730$) with a significant weight placed in public employees' commitment to their organisations ($\lambda = 0.783$). Therefore, hypothesis 1 (H₁) can be confirmed with these results.

¹ Considering the difficulties in obtaining more than one informant per organisation, many researchers believe that this could generate the common method variance (CMV) problem. In our case, to ensure that we would not run into this problem, the Harman single factor test was applied. This test revealed that the total variance explained by a single factor did not even reach 20%, therefore confirming the independence of the constructs. Additionally, the multicollinearity of the constructs was evaluated. The results of this analysis showed that the highest value was 2.21, well below the accepted limit of 5 FIV.

3.2. COC and normative commitment

Similarly, and in response to H₂, a high level of collectivism (i.e., COC) has been associated with greater normative commitment from public employees ($B = 0.718, p < 0.001$), which supports this hypothesis. Specifically, its effects can be observed as a high sense of employee loyalty to the organisation ($\lambda = 0.776$), understanding employee needs, organisational objectives and values, and employees' identification with said objectives and values ($\lambda = 0.889$). On the contrary, the existence of a "moral debt" on the employees' part towards the organisation has not shown its effectiveness in this relationship (unacceptable levels).

3.3. COC and continuance commitment

Regarding H₃ results indicate that a collectivism-based organisational culture in public organisations is related to continuance commitment from their employees, and thus these findings support this hypothesis ($B = 0.391, p < 0.001$). Specifically, employees say that they remain in the organisation because they know that they would lose various benefits by leaving ($\lambda = 0.748$). They also report that they are aware leaving would mean losing various opportunities for their professional development ($\lambda = 0.710$). Furthermore, employees remaining with public organisations are also due to the implementation of some compensation plan based on the organization's future success ($\lambda = 0.671$).

Among the elements that help develop a collectivism-based organisational culture in the Spanish public organisations is the group's success, which is more important than individual success ($\lambda = 0.844$). The well-being of the group has proven to be more important than individual rewards ($\lambda = 0.824$), and it is essential that the employees are accepted within their workgroups ($\lambda = 0.714$) or that common objectives preside over individual ones ($\lambda = 0.711$). Although to a lesser extent, it is also important is the managers' loyalty and support to their collaborators ($\lambda = 0.592$).

In short, based on the HRM public organisation context, these results are consistent with previous studies conducted in the private sector [8, 65,81] and with the theoretical support provided by SET, as it supports the social mechanisms through which employees establish reciprocal relations and relations with their organisation [67-70].

4. Discussion

Although the private sector is gradually incorporating management and leadership studies that include cultural factors, that is, organisational culture, there is little evidence in public management. This study revealed that public servants feel more committed to public organisations in which norms of conduct, rules and shared objectives proliferate, and where a collectivism-based organisational culture prevails over an individualist one. This reduces turnover or flight to other administrative areas and strengthens their sense of achievement and ingenuity and

their sense of belonging and duty to the organisation. The findings allow a response to the questions initially raised:

Does the predominant level of individualism-collectivism in public organisations affect its employees' commitment? And if so, how does it affect them?

Firstly, it was established that public organisations with predominantly collectivist cultures (i.e., a COC) could benefit from their employees' commitment to a greater extent as opposed to if individualist cultures prevailed, such as previous studies in the private sector [65] and the main theoretical reference, SET, have indicated [67–70]. Based on this, an adequate implementation and management of OC will allow organisations to face the current challenges affecting public organisations. Specifically, the results show the importance of promoting group rewards, employees' feeling a sense of belonging in their work teams, and achieving common goals when promoting employees' level of commitment in each form (AC, NC and CC).

5. Limitations

It should be noted that, like most studies, this research also has limitations related to the sample. Given the difficulties in obtaining the composition of the statistical universe that makes up the Spanish public administration, this study sample was obtained for *convenience reasons*. Another variable is related to the sectional nature of the study and the fact that it was carried out in only one country, Spain, and therefore the findings may not be generalised to other countries whose public employment systems are different than that of the Spanish system.

6. Conclusions

Considering affective commitment, a collectivism-based organisational culture enhances the desire to remain with the organisation and, evidently, increases an employees' attachment to it. With this knowledge, it could be considered that this commitment favours the well-being of public servants. At the same time, employees' identification with the problems of their organisation is strengthened in the same way as previous studies in the private sector [78,79,81].

Additionally, public organisations with a prevalence of collectivist cultures (e.g., a COC) favour and reinforce the moral conviction of their workers who consider that staying in their organisation is the right thing to do, while identifying with their organisational values and remaining loyal to the organisation [78,82].

From a calculating or instrumental perspective [53], in the process of analysis carried out by the public employees, cultures with collectivist dominance-COC favour continuance in the organisation, compared to a greater desire to leave the organisation when an individualist culture prevails. Among the actions that favour the desire to remain with the organisation, it was discovered that opportunities for professional

development and the existence of compensation relate to organisational results.

Generally, the changes and challenges that administrations and public companies wish to undertake in the medium and long term must contemplate creating human resource policies that favour group or collective rewards over individual ones, the promotion of leaders who bring groups or teams together, and the predominance of common objectives over individual ones.

Moreover, in this study, we did not take into account Weberian bureaucracy structures and their role in shaping public policies, their implementation and socio-economic results, nor did we take into account the degree of external influence beyond the normative and continuity components that have been discussed [100,101]; Kohei [102]. However, the information obtained from the public officials that we surveyed offers a reliable measure for studying the research model proposed. In this regard, it may be beneficial for subsequent studies to focus on the multiple influences arising from the environment.

This research also has clear implications for the managers of public organisations. One of them is related to the fact that public administration managers and directors can encourage their dependants to feel more committed to these organisations. Reducing turnover levels or flight to other administrative areas due to detachment or convenience, strengthening their sense of achievement and ingenuity, and their feeling of belonging and duty to the organisation are key. Likewise, it must be made clear that this type of "strength" among employees, based on collective rather than individual factors, can be a good ally for achieving their administrative unit's objectives insofar as it can count on a true and invaluable ally: the committed employee.

Another implication of HRM here is whether the policymakers in the different administrative units and public companies wish to undertake changes and/or new projects in the medium and long term. These managers must consider actions that favour group or collective rewards (both economic and non-economic) over individual ones, the promotion of leaders who bring groups or teams together, and the predominance of common objectives over individual ones.

As for future endeavours of research, this study suggests that other cultural variables could help understand public employees' commitment better. Among the many variables, promotion systems, work flexibility, or remuneration systems could be included.

Data availability

The full study's data can be downloaded from Mendeley Data. doi: 10.17632/bkdbyx8z9w.1.1.

Triguero-Sánchez, Rafael; Peña-Vinces, Jesús; Ferreira, João (2022), "The Effect of Collectivism-Based Organisational Culture on Employee Commitment in Public Organisations", Mendeley Data, V1, doi: 10.17632/bkdbyx8z9w.1.1.

Appendix A

Assessment of Normality

Variable	Min	max	skew	c.r.	kurtosis	c.r.
CV	-1872	3899	0.755	4512	0.936	2794
IC	-2748	1719	-0.581	-3471	-0.409	-1223
ACOM	-3262	2487	-0.247	-1472	-0.499	-1491
CCOM	-3300	3354	-0.289	-1725	-0.626	-1870
NCOM	-3235	2744	-0.134	-.803	-0.790	-2360
Multivariate					4623	4041

Appendix B

Constructs' Items

Collectivism-based Organisational Culture - IC

Code	1 = Strongly disagree 7 = Strongly agree
CO1	In our organisation, group well-being is more important than individual rewards
CO2	Group success is more important than individual success
CO3	It is very important that employees are accepted within the working groups
CO4	In our organisation, employees achieve their personal goals keeping in mind the best interest of the group
CO5	Bosses are usually loyal and supportive of the group, even if individual goals are affected
CO6	In our organisation, individuals are expected to give up their personal goals if asked

Employees' Commitment

Code	Affective commitment (1 absolutely disagree; 7 absolutely agree)
Comi1	Employees seem to be highly committed to the organisation
Comi2	Employees seem to be emotionally attached to this organisation
Comi3	Employees seem to perceive the organisation's problems as their own
Comi4	Employees really do care about the fate of their organisation
Continuance commitment	
Cont1	Employees stay in the organisation because they are aware that, by leaving the company, they would lose the general benefits and seniority accumulated until then
Cont2	Employees stay in the organisation because some kind of compensation scheme was implemented based on the organisation's future success
Cont3	Employees stay in the organisation because they are aware that, by leaving the company, they would lose an opportunity for professional development
Cont4	Employees have invested too much of themselves in this organisation to consider going elsewhere
Normative commitment	
Nor1	Most people owe a lot to the organisation
Nor2	People feel a high sense of loyalty to the organisation
Nor3	Employees know, understand and identify with the needs, objectives and values of the company

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