

Churn in human resources: private sector vs. public sector

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Abstract

This qualitative research was carried out in Portugal and analyzed the probability of churn in human resources in the private and public sectors. This research seeks to contribute to developing a theme little explored, offering an empirical study, and increasing the literature. Data was collected through a questionnaire from 594 respondents from various public and private organizations operating in different sectors. The TwoStep Clusters statistical analysis was performed, identifying two clusters of workers with different levels of satisfaction and motivation: workers with a higher probability of staying in the organization (Cluster 1) and workers at risk of churning (Cluster 2).

KEYWORDS: Churn in human resources. Business sector. Public sector. Private sector and public sector. Churning rate.

Article submitted on December 22, 2021 and accepted on December 08, 2022.

[Translated version] Note: All quotes in English translated by this article's translator.

DOI: <https://doi.org/10.12660/rgplp.v21n3.2022.85188>

Churning de recursos humanos: setor privado versus setor público

Resumo

O presente estudo, realizado em Portugal, segue uma abordagem quantitativa, com o objetivo de analisar a probabilidade de ocorrência de *churning* de recursos humanos no setor privado e no setor público. Esta pesquisa sobre o *churning* de recursos humanos visa contribuir para o desenvolvimento de um tema ainda pouco explorado, por meio do incremento da literatura sobre o assunto e do aumento de estudos empíricos. Como método de coleta de dados, recorreu-se à aplicação de questionários, que pautaram uma amostra de 619 indivíduos de várias organizações (privadas e públicas), assim como de vários setores, dos quais apenas 594 foram considerados válidos. Procedeu-se à análise estatística TwoStep Clusters, por meio da qual obteve-se a identificação de dois *clusters* de trabalhadores com diferenciados níveis de satisfação e motivação: trabalhadores com maior probabilidade de permanecer na organização (*Cluster 1*) e trabalhadores em risco de *churning* (*Cluster 2*).

PALAVRAS-CHAVE: *Churning* de recursos humanos. Setor de atividade. Setor público. Setor privado. Taxa de *churning*.

Churning de recursos humanos: sector privado contra sector público

Resumen

El presente estudio, realizado en Portugal, sigue un enfoque cuantitativo, con el objetivo de analizar la probabilidad de ocurrencia de *churning* de recursos humanos en los sectores privado y público. Este estudio sobre el *churning* de recursos humanos se propone contribuir al desarrollo de un tema aún poco explorado mediante el incremento de la literatura y de los estudios empíricos. Como método de recogida de datos, se aplicaron cuestionarios, con una muestra de 619 encuestados de diversas organizaciones (privadas y públicas) de diversos sectores de actividad, de los cuales solo 594 se consideraron válidos. Se realizó el análisis estadístico TwoStep Clusters, que dio como resultado la identificación de 2 *clusters* de trabajadores con diferentes niveles de satisfacción y motivación. Trabajadores más propensos a permanecer en la organización (*Cluster 1*) y los trabajadores en riesgo de *churning* (*Cluster 2*).

PALABRAS CLAVE: *Churning* de recursos humanos. Sector de actividad. Sector público. Sector privado. Tasa de *churning*.

INTRODUCTION

In recent decades, global governments have reshaped policies and restructured organisations with a focus on the occurrence of churn, which highlights some weaknesses and instabilities (NORRIS and ADAM, 2017), although the short-term costs pertaining to instability are often significant, the long-term costs derived from institutional churning are substantially higher.

In this way, the churning and paradigm shifts in policies and personnel generate an unstable state, confronted between competing models, cultures and identities, which leads to policy gaps, opens the door to systematic corruption and uncertainty, giving rise to New Public Management (NPM), which specifically appeals to the old model of public administration, which has been blamed for churning as the main factor giving rise to instability, leading to the erosion of public ethics. Instability resulting from repeated changes in policy (churn), which become a major obstacle to building a professional sense of common purpose in public service. However, the attempt to obtain quick solutions has diverted attention from fundamental priorities, particularly the deficit in skills and professionalism, which affects all elements of the public service and generates the unnecessary occurrence of churning in senior positions in the civil service, which gives rise to reduced confidence in leadership and weakens the motivation of civil servants and citizens' trust in the state (MPOFANA and RUITERS, 2019).

According to Cleary and Reeves (2009), the churning rate of civil service organisations is due to the opportunity for employees to reach strategic positions in the short term, however, the state sector does not offer any incentive (compensation) in career advancement strategies, making it very unlikely that these employees will remain in these positions in the long term, with the perspective that these strategies will be put into practice. We stress that, in the public sector, churn occurs internally, i.e. between departments.

As for the private sector, taking into account the human resources churn, we note that it refers mainly to voluntary departures of key employees (talents) as being the most problematic for organisations. We have chosen to adopt the premise of the definition of talents, because of its enormous complexity of definitions, the employees considered as an asset to the organisation, who contribute with a good performance towards the company's objectives (COLLINGS and MELLAHI, 2009).

Although churning follows two approaches - voluntary churning and involuntary churning - in this article, we focus on voluntary churning because it is considered the most problematic for organizations, due to the costs that arise from the voluntary departure of talents to competing organizations, given that all the investment made is considered lost and value is invested in the replacement that the company will have to make to supply the exit occurred (ILMAKUNNAS and MALIRANTA, 2005). In this sense and because it is a multifaceted concept, it was understood that the definition of churning as the excess turnover of talent (DUHAUTOIS, GILLES and PETIT, 2016), to which are associated the costs with replacements arising from these exits, which derive from workflows and the flow of workers (BURGESS, LANE and STEVENS, 2000).

In view of the above, the focus of this article is to understand the different concepts of churning, as well as its causes in the context of the public and private sectors, and, through statistical analysis, to understand the places where churning is more likely to occur, which sectors are more affected, the level of education of the employees who voluntarily leave the organisation, and the gender of these employees.

This research is aimed to analyse the probability of occurrence of human resources churning between the public and private sectors. To facilitate the response to the general objective of this study, three specific objectives were defined: a) to analyse which are the sectors are most affected by churning; b) what is the sociographic categorisation of employees and c) the professional characterisation of employees.

THEORETICAL REFERENCE

The impact of human resource churning in the private versus public sector

Despite its relevant pertinence in the area of human resources, churning is still a little explored theme, either through theoretical or empirical studies in Portugal. Thus, the interest in contributing to the growth of the literature and demystifying a theme of difficult definition and enormous complexity regarding its operationalization in human resources management arises (PIRROLAS and CORREIA, 2021, 2022c).

Considering the multiplicity of definitions attributed by various authors, in this article, the definition of human resources churning was premised on the costs resulting from the replacements of human resources who left the organization voluntarily. Although churning is related to turnover, having it as the main focus of employee turnover, this concept is primarily aimed at the costs associated with the replacements of workers derived from voluntary departures, i.e., churning is only associated with the costs of hiring arising from replacements (PIRROLAS and CORREIA, 2022).

Considering that the basis for the success of organizations lies in their human resources, human resources (HR) professionals have to invest in employee retention, through the creation of strategic measures (PIRROLAS and CORREIA, 2022). Retaining employees starts at a very early stage of recruitment (CHANDRASEKARA, 2020), since retention is considered the ability that the company has to motivate its employees so that they remain in the company for a long period of time, this being a fundamental strategy of human resource managers, with a view to the success of the organization (DESHWAL, 2015).

“Knowing what types of people are most attracted to public sector careers is an important step in recruiting and retaining new public servants” (LYONS, DUXBURY and HIGGINS, 2014:605).

The nature and extent of differences between public and private sector organisations have long made academic debate centered on the structural differences between public and private organisations, and there is also a long-standing interest in the differences between public and private sector employees (LYONS, DUXBURY and HIGGINS, 2014).

Career choice is seen as the result of a rational and self-interested choice by job applicants between a public sector company and a private sector company, with the aim of obtaining maximum rewards by satisfying their professional and personal needs (PERRY and WISE, 1990; ARGYRIADES, 2003).

In a study conducted by Gambi and Brassill (2020) between 2006 and 2008 to analyse the perspective and dynamics of human resource churning in the public sector, considering several areas of the public sector, such as education, health, justice, defence and local government, it was

possible to conclude that the churning rate is higher in private sector companies than in public sector companies. However, it was found that in both sectors, churning occurred at a higher percentage in times of economic stability as compared to times of recession. Considering that churning has a pro-cyclical effect, it is the public sector that is less affected by economic cycles, since it records a lower rate of human resource churning.

Although it was in the education and health sector that the highest percentages of churning were found in relation to the other sectors under study, their percentage remains well below that observed in the private sector.

In light of the above, the following chapter presents the causes and characteristics of human resource churning in these two sectors, so as to allow for a better comparison in relation to the variables under study.

Organisational commitment: evidence from the public and private sectors

Regarding the definition of organizational commitment, although the first definition was developed by Kahn (1990), currently, there is still no consensus on the concept of organizational commitment (BAILEY et al., 2017), however, the literature points to three types of commitment: a) affective; b) continuance and c) normative. Affective commitment is related to the worker's emotional attachment, identification and involvement in the organization; continuance commitment consists of the awareness of the costs associated with leaving the organization (MEYER and ALLEN, 1991) and the normative commitment represents an obligation to remain in the organization (MEYER et al., 2002).

Organisational commitment has been the subject of debate in recent years, with relevance in the literature in the 2010s because of increasing evidence on the construct and its positive relationship with individual job performance (BAILEY et al., 2017), customer satisfaction, productivity and profit (SHUCK, 2011).

Comparing the existence and relevance of this construct between the public and private sectors, it is possible to state that there are significant differences in the determinants of commitment (BORST et al., 2019; FLETCHER et al., 2019). In terms of policies and practices that generate commitment between the two sectors, these act differently, that is, with regard to variable remuneration as a factor that influences commitment, it is positively associated with performance, but the same does not occur in the public sector (BRYSON, FORTH and STOKES, 2017).

Taking into account this difference as a determinant of organizational commitment, it is necessary to take into account the cultural and organizational characteristics in which workers are inserted, making it necessary to identify specific factors of influence, as well as the ways in which organizational commitment is experienced (FLETCHER et al., 2019), taking into account the particularities of social and organizational contexts. However, the risk of generalizing the evidence between the public and private sectors and the adoption of management policies and practices that do not work may bring effects contrary to what was predicted (FLETCHER et al., 2019).

Causes and characteristics of human resource churning in the private and public sector (evidence from empirical studies)

Through the literature on the occurrence of human resource churning, two empirical studies considered relevant to this research were analysed: a study by Kerr (2018), in South Africa, and another prepared by Burgess, Lane and Stevens (2000), in Maryland (USA). The main results presented considered geographical location, company size, activity sector and wages as the most relevant dimensions. A study conducted by Kerr (2018) in companies in southern Africa, between 2011 and 2014, presented results that showed that the percentage of churning flows is related to the size of the organisation, with an occurrence of 54% to 58% of the flow of workers annually, which comprises a minimum ratio of 34% in small companies and a maximum of 73% in large ones.

On the other hand, Burgess, Lane and Stevens (2000), in their study conducted in Maryland between 1986 and 1994, found that the highest percentage of churning occurs in smaller companies (45%), in those with less than 20 employees, and that in large companies the percentage of churning is lower (10.5%).

Another factor leading to the occurrence of churning analysed by the authors is related to the sector of activity of the organization. Through a study conducted in Maryland, they estimated that, on average, 70% of churning flows occur in service companies and 62%, in industrial companies (manufacturing). In this sense, considering the results obtained in the study conducted by Kerr (2018) in South Africa, churning flows differ substantially by industry, thus, a low percentage (13%) was observed in public administration, electricity, gas and water sector; on the other hand, a high percentage of churning (58%) was found in industries (manufacturing), 49% in service sector companies (personal and household) and 43% in the trade sector (clothing and footwear). Another factor that collaborates with human resource churning is salary: companies that pay higher salaries have a low percentage of churning compared to organisations that pay low salaries. In this context, Burgess, Lane and Stevens (2000) found a substantial wage variation depending on the sector of activity, which affects the occurrence of churning: high percentage in companies in the service sector (93%), domestic services (79%) and in the restaurant and hotel sector (72%), and a lower percentage in the public administration sector (20%), mining sector (35%) and electricity, gas, and water sector (37%).

Still in the context of wage differences as a cause of churning, it should be noted that the public sector has the lowest percentage of churning: 6.8% in public administration and 13% in the education and hospital sectors. On the other hand, with regard to the private sector, higher percentages were found: 15% in the mining sector, 35% in the construction sector, 34% in the agriculture and fishing sector and 31% in the restaurant and hotel sector (KERR, 2018).

The justification for the differences in view of the geographical location in which companies are located is due to the fact that companies located in large cities or developed countries have a greater chance of achieving success by the greater capacity for innovation, attraction of the best human resources, constant confrontation with the competitiveness in the face of competition in the perspective of having the need to innovate, attract and retain their best human resources. An organization with this capacity has a reduced churning rate, which allows it to contribute to the evolution of economic development (FINDEISEN and SUDEKUM, 2008; PIRROLAS and CORREIA, 2021).

In the activity sector in which there is human resources churning this is due to the fact that working conditions, namely, salary conditions, benefit package review, career plan, organizational policies, work environment and type of leadership differ from sector to sector, leading workers to seek better professional conditions in order to achieve their personal goals and needs (PIRROLAS and CORREIA, 2021).

Regarding salary as a driving factor of human resources churning, Ilmakunnas and Maliranta (2005), through a study on the main causes of churning, found that these were related, above all, to salary conditions. According to the authors, workers value companies that would recognise their performance and skills through good salaries, thus contributing to a decrease in the churning rate.

METHODOLOGICAL PROCEDURE

Based on the theoretical framework and in accordance with the objectives presented above, this empirical study opted for a quantitative research, with data collection method by questionnaire, during the period between June and September 2021.

The application of the mentioned questionnaires was carried out through the social network LinkedIn Corporation, since it is a professional social network, which allowed reaching a greater number of workers from various sectors, which otherwise would not have been possible due to travel costs and lack of availability on the part of the researchers.

The choice of a quantitative study was due to the fact that the researchers knew the reality and the context in which churning is most likely to occur, the sample was made up of workers from the private and public sectors. For data analysis, we used the IBM SPSS Statistics 27.

The questionnaire survey comprised a total of 49 questions, including four closed questions on the characterisation of the sample; six on professional characterisation; three associated with the categorisation of organisations and 36 on working conditions.

To quantify the measurement variable referring to the churning of human resources, in which employees from different companies and sectors specified their degree of satisfaction in remaining with the company, of the 36 questions mentioned, interval, numerical, Likert scales were applied with 10 points and anchors at the extremes, in which 1 corresponds to the very low level and 10 corresponds to the very high level.

According to Allen and Wilburn (2002), organisations in which there is no history regarding a certain theme, the option for a scale with a higher number of points ensures that the distribution of results around the average is more diffuse, with a wider distribution, providing greater discriminating power and a more reliable capacity to isolate good and bad performances.

Of the 619 responses obtained, 594 were considered valid, a total obtained because of the large number of missing responses in 25 questionnaires.

To conduct this study, the TwoStep Cluster multivariate data analysis technique was chosen because it enables statistical analysis with the purpose of revealing natural groupings (clusters), based on a set of previously selected variables, and subsequent evaluation of the intrinsic characteristics of each of these groups that otherwise would not be apparent and also because it is a method applicable to samples of any size (CORREIA, 2012).

In order to categorise the participants, the following sociographic variables were used: age; gender; marital status and eolarity. For the professional definition, the following variables were considered: role; seniority in the organisation; contractual relationship; type of organisation; activity sector and organisation size. Regarding the probability of occurrence of churning, the following variables were found: salary; satisfaction with facilities and benefits; satisfaction with supervisors and colleagues; salary as a decisive factor for remaining in the organisation; desire to leave the organisation; opportunity for progression; opportunity for training; feeling of personal fulfilment; overall satisfaction with the organisation; frequency of new job proposals; and the possibility of leaving the organisation due to the time spent commuting to work.

The questionnaires were applied online, through social networks, in order to cover the largest number of workers from various companies and sectors, in order to check what differences exist between the private and public sectors.

Boxes 1, 2 and 3 present all the variables used in the questionnaire, which made it possible to obtain the necessary global information on the subject of the churning of human resources between the private and public sectors. For a better understanding, the categorical boxes (Box 1 and Box 2) were divided: Box 1 allows a better understanding of the variables used for the sociographic characterization of the workers, Box 2, a clearer understanding of the variables used for the professional characterization of the workers; Box 3 shows the possible variables that led to the occurrence of human resource churning.

BOX 1

Categorical variables designed to analyse the sociographic characteristics of the workers

Variable	Category	%
Sex	Man	48,8
	Woman	50,7
Marital status	Married/cohabiting	61,7
	Divorced	11,1
	Single	26,5
	Widower(a)	0,3
Academic qualifications	3rd Elementary School, 9th Grade	6,9
	Secondary Education, now 12th grade	33,3
	Higher Education	59,1

Source: Elaborated by the authors based on data obtained through the questionnaire.

BOX 2**Categorical variables designed to analyse the professional characterisation of the workers**

Variable	Category	%
Function	Administrative	11
	Head	13,7
	Direction	9,9
	Operational	23,,9
	Technician	40,9
Seniority in the organisation	Less than 2 years	19,4
	From 2 to 10 years	34,6
	From 11 to 20 years	16,6
	over 20 years	29,1
Contractual bond	Fixed-term contract	13,3
	Uncertain contract	8,6
	Contract without term	66,2
	Other	7,1
Type of organisation	Multinational company	45,1
	National company	37
	Public administration institution	15,7
	Solidarity organization (IPSS, NGO, other)	1,8
Activity sector	Agriculture	1,1
	Accommodation and restaurants	1,1
	Financial Activities	3,6
	Commerce	3,9
	Construction and public works	1,8
	Education	4,7
	Electricity, gas and water supply	0,8
	Industry	31,5
	Fishing	16
	Health and Social Work	4,8
	Business Services	9,5
	Transports and communications	2,6
Other activities	17,9	

Continue

Variable	Category	%
Size of organisation	< 10 employees	6,8
	10 a 50 employees	12,1
	50 a 250 employees	10,3
	> 250 employees	70,1

Source: Elaborated by the authors based on data obtained through the questionnaire.

With the results obtained, it was possible to make the sociographic categorization of the workers in the study (Box 1), in which it was found that, of the 594 workers, 50.7% are women and 48.8% are men; as for marital status, it was found that a majority were married (61.7%) and have a higher level of education (59.1%).

As shown in Box 2, in terms of professional classification of the workers in the study, it was found that most functions performed by them were of technical level (40.9%), with an average working term in the organization of 2 to 10 years (34.6%). This research also showed that the participants with a contractual bond without term (66.2%), belonged mostly to the private sector (83.90%) in industrial organizations (31.5%) and multinational companies (45.1%) of large size (70.1%).

BOX 3

Quantitative variables designed to understand the eventuality of churning occurring

Category	N	Median	Average
Age	581	42	41,93
Satisfaction with supervisors and colleagues	538	8	7,08
Salary as a decisive factor for remaining in the organisation	553	7	6,23
Desire to leave the organisation due to remuneration	568	4	4,35
Opportunity for progression	563	4	4,57
Training opportunity	560	5	5,19
Frequency of new job proposals	567	3	3,95
Search for new opportunities outside the organisation	567	4	4,47
Possibility of leaving the organisation due to the time spent due to location	580	3	3,72

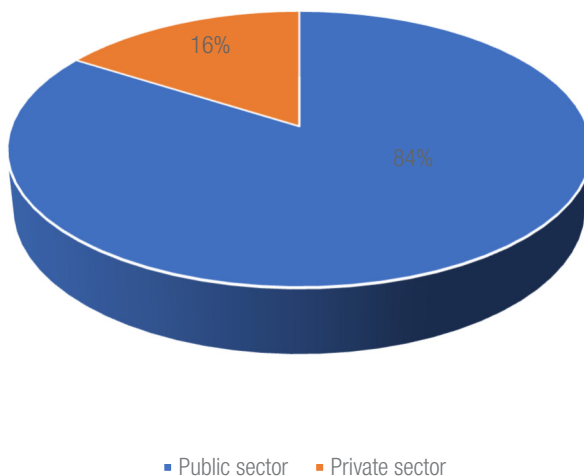
Source: Elaborated by the authors based on data obtained through the questionnaire.

Considering the quantitative variables previously presented in Box 3, it was possible to analyse that, in terms of age, workers are, on average, 41,93 years old; satisfaction with supervisors and colleagues is 7,08 years, on average; salary as a decisive factor for remaining in the organisation is, on average, 6,23 years; the opportunity for training, 5,19 years on average; the opportunity for progression, 4,57 years; the search for new opportunities outside the organisation, 4,35 years; the

frequency of new job proposals, 3,95 years; and the possibility of leaving the organisation due to length of commute, 3,72 years.

GRAPH 1

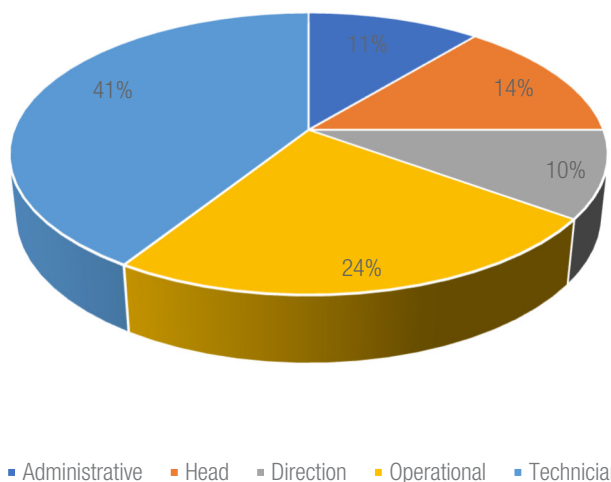
Churning human resources private versus public sector



Source: Elaborated by the authors based on data obtained through the questionnaire.

GRAPH 2

Churning human resources by function



Source: Elaborated by the authors based on data obtained through the questionnaire.

By making use of Graphs 1 and 2, it can be verified that 84% of the respondents belong to private sector organizations and that only 16% make up public sector organizations, and the function most performed by the workers are technical function (41%).

Taking into account the 594 valid answers, of which 84% correspond to workers from the private sector and 16% to workers from the public sector, in order to analyse the quantitative variables under study, presented later with the variable type of organisation (private sector and public sector), they were crossed.

As previously mentioned, a 10 points Likert scale was applied with anchors at the extremes, with 1 corresponds to the lowest level and 10 corresponding to the highest level. To proceed to the level of data analysis and results, the compression of the scale into four distinct groups was used: from 1 to 3 points - very low level; more than 3 to 5 points - low level; more than 5 to 8 points - high level; more than 8 to 10 points - very high level.

In view of the above and proceeding with the analysis, regarding satisfaction with facilities and benefits, in the global context, a high level was verified, so that 18,35% correspond to workers from the private sector and 4,4%, from the public sector. With regard to satisfaction with management and colleagues, in the global context, a high level was also confirmed, with 18,35% of the workers belonging to the private sector and 2,9%, to the public sector. Considering salary as a decisive factor for remaining in the organization, globally, a high level was observed, with 15,49% of the respondents linked to the private sector and 2,2%, to the public sector.

As for the desire to leave the organisation because of remuneration, a very low level was observed in the global context, of which 15,49% correspond to workers from the private sector and 3,2%, from the public sector. As for the opportunities for professional progression, the study presented a very low level, with 19,2% of the workers submitted to the private sector and 3,5%, to the public sector.

With regard to satisfaction with the training they receive, in the global context, a low level was also indicated, with 12,46% corresponding to workers from the private sector and 2% from the public sector. Regarding personal fulfillment with the function they occupy in the organisation, globally, a high level was found, with 14,31% corresponding to workers from the private sector and 3,2%, from the public sector. As for the search for new opportunities outside the organisation, globally, the scale presents a very low level, with 20,37% corresponding to workers from the private sector and 3,9%, from the public sector. Finally, in relation to the possibility of changing organization due to the difficulty of dislocation to the workplace, a very low level was verified, with 24,58% corresponding to workers from the private sector and 4,4%, from the public sector.

FINDINGS AND ANALYSIS

Of the 49 variables designed for the questionnaire survey, in the TwoStep Cluster analysis, six quantitative variables were considered referring to the factors that lead to the churning of human resources, taking into consideration their valuation by workers (N = 594).

The TwoStep Cluster analysis organised the workers into two clusters, where it is possible to observe, in Box 4 and Graph 3, the median evaluations of the variables considered as research model. In addition to the global median perceptions concerning each variable, it is also possible to note the difference obtained by the TwoStep Cluster analysis with regard to the median evaluations attributed by the workers belonging to each of the clusters in their answers to the questionnaire (Graph 3).

BOX 4

Clusters of workers identified with higher and lower probability for churning to occur

	Career development	Global satisfaction with the organisation	Training opportunity	Feeling of personal achievement	Satisfaction with supervisors and colleagues	Satisfaction with facilities/benefits
Global (Median)	4,99	6,99	5	6,99	7	8
Cluster 1 - Workers more likely to stay in the organisation	7	8,01	8	8,01	8,02	8,99
Cluster 2 - Workers at risk of churning	2	4,99	2,99	4,98	6,01	6,99

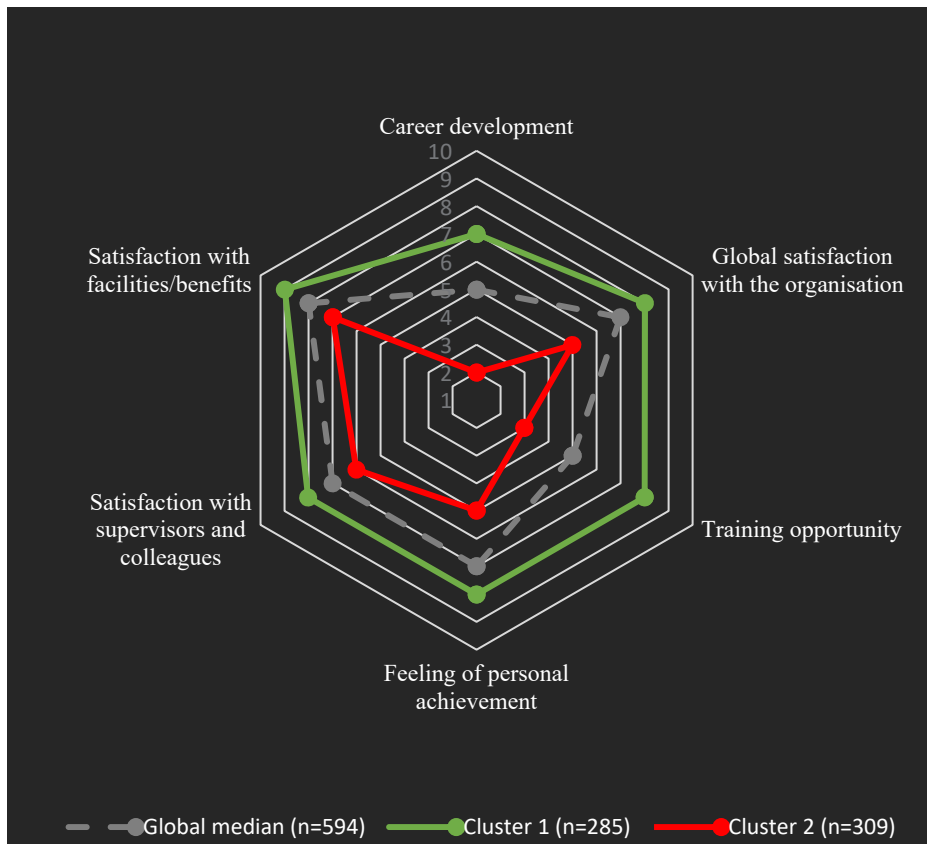
Source: Elaborated by the authors based on data obtained through the questionnaire.

Box 4 presupposes, based on the results obtained, what may be expected in terms of inequalities concerning workers' levels of motivation and expectations as to their remaining in or leaving the organisations. In particular, we highlight the association that may be established between the group of workers who tend to decrease the churning rate (Cluster 1) and the group of workers who tend to increase the churning rate (Cluster 2). Of the variables mentioned in Box 4, greater satisfaction in remaining in the organisation was found to contribute to the decrease in the churning rate in Cluster 1, because of a higher median in all variables compared to their overall median. The following were noted: career development (median 7); global satisfaction with the organisation (median 8,01); training opportunity (median 8); feeling of personal achievement (median 8,01), satisfaction with supervisors and colleagues (median 8,02) and satisfaction with facilities and benefits (median 8,99).

Cluster 2 presents a lower median compared to the global median, in which lower satisfaction with staying in the organisation is observed, contributing to an increase in the churning rate, in addition to career progression (median 2); global satisfaction with the organisation (median 4,99); training opportunity (median 2,99); feeling of personal achievement (median 4,98), satisfaction with supervisors and colleagues (median 6,01) and satisfaction with facilities and benefits (median 6,99).

GRAPH 3

Comparative graph of the medians of the variables for the various clusters and for all the respondents



Source: Elaborated by the authors based on data obtained through the questionnaire.

Cluster 1 (composed by 285 observations, which corresponds to 47,98% of the total) is made up of workers who are more likely to remain in the organisation; it is a group of workers that are a majority made up of men; with a median age of 49 years; married or living in a stable union; with higher education; holding management positions in multinational companies in the industrial sector with more than 250 workers; with an open-ended contract; remaining in the organisation between 2 and 10 years and earning between €2,300 and €2,600.

Cluster 2 (composed by 309 observations, corresponding to 52.2% of the total) is made up of workers who are more likely to leave the organisation; it is a group of workers that are a majority made up of women; with a median age of 37 years; single; with higher education; carrying out administrative functions in social organisations (IPSS, NGOs etc.) in the health and social action sector; with a size of 50 to 250 workers; they remain in the organisation between 11 and 20 years and enjoy a salary between 700€ and 1,000€.

DISCUSSION OF FINDINGS

This study aimed to analyse the probability of occurrence of human resource churning in the private and public sectors. It aimed at analysing the level of satisfaction with the working conditions in the organisations where they work, namely the satisfaction with their supervisors and colleagues; the salary as a decisive factor for remaining in the organisation; the desire to leave the organisation due to the remuneration; the opportunity for progression; the opportunity for training; the frequency of new job proposals; the interest in seeking new opportunities outside the organisation; and the possibility of leaving the organisation due to the time spent traveling.

Given the scarcity of literature on the subject in the public sector and considering the results obtained, in which it was concluded that the private sector is where churning occurs most, it was possible to give more relevance to the private sector in the literature.

However, by analysing the existing literature, it was possible to contextualize the issue, in this study, of the differences between churning in the private and in the public sector, considering the analysis of two empirical studies, as well as to verify the distribution of workers across the various sectors; the influence that the size of their respective organisation exerts on the decision of workers to stay or leave them; the impact of geographical location, as it is in large cities that there are more job offers, due to the high number of companies, but where there is a higher rate of churning of human resources, due to the greater ease of changing jobs in search of better offers.

In this study, we concluded that the main causes that lead workers to change jobs are related to the lack of a good working environment; satisfaction with bosses and colleagues; salary as a decisive factor for staying in the organisation; lack of training, as well as the lack of opportunities for career advancement; the fact that the competition offers better working conditions and the time lost in commuting to work.

To corroborate the results obtained with the statistical analysis of the literature analysed, it was possible to find, through a study conducted by Gambi and Brassill (2020), that it is in private sector companies that the churning rate is higher, and this finding is the result of the cultural and organisational characteristics applied in each sector, as well as the influence that human resource management policies and practices exert in each of these sectors (FLETCHER et al., 2019).

In turn, other factors are decisive in indicating that it is in the private sector that a higher percentage of churning occurs, factors related to salary conditions, stability, the size of the organisation and the sector of activity to which the company belongs (BURGESS, LANE and STEVENS, 2000).

As the largest economic activity is centered in cities, and these are considered the main drivers of a society's growth, economic changes have an influence on changing organisational structures, as well as on the whole process of growth and development, both of the organisation and of all its teams (FINDEISEN and SUDEKUM, 2008).

In view of the above, Findeisen and Sudekum (2008) state that the occurrence of churning is more frequent in large cities, in organisations that rapidly increase and/or decrease their size according to the level of productivity, causing a significant long-term impact on the society in which it is inserted.

Following the principle advocated by Tobler (2003), the geographical area is associated with places/regions that undergo alterations or influences that differ from place to place, at global or regional levels, interfering in economic activity. It is related to population density, that is, the geographic area

exerts a positive or negative impact on the activity sector according to the characteristics of the locality where it is inserted, the profile of the organization and the population that are part of it, being its fundamental adaptation. The ability and viability of organizations to survive and subsist in certain places depend on their ability to innovate in the face of constant economic and social changes (FOSTER, GRIM and HALTIWANGER, 2016).

With regard to the influence that the economic context exerts on the churning of human resources, causing its increase or decrease, in this context, churning also assumes a fundamental role by selecting the most productive organizations, which contribute to the development of the economy, from the least productive organizations, which do not have the capacity to keep up with evolution and end up leaving the labor market. In this case, it is creative churning, that is, the destruction of less productive firms promotes the permanence of organizations with greater productive capacity with the aim of creating economic development (SCHUMPETER, 1976).

CONCLUSIONS, LIMITATIONS AND FUTURE STUDIES

Addressing the issue of human resource churning in the private and public sector is not only pertinent but also complex because of the political and organisational differences that exist in each of these sectors.

In this study, it was decided to classify quantitative data, obtained through a questionnaire, which made it possible to make an overall analysis of the categorical variables (Box 1 and Box 2) and the quantitative variables (Box 3), allowing the sociographic and professional categorization of the workers surveyed.

Through the TwoStep Cluster analysis performed, it was possible to identify two clusters (Box 4 and Graph 3) that made it possible to see which workers were most likely to remain in the organisation (Cluster 1), which contributes to a decrease in the occurrence of human resources churning, and the workers at risk of churning (Cluster 2), which favours an increase in the churning rate.

With the results obtained, it was possible to identify the workers belonging to each of the clusters, where in it was found that men have a greater tendency to remain in the organisation, as they present higher values of satisfaction with working conditions (Cluster 1) compared to women, who are more likely to leave the organisation, in consideration of the lower values with regard to satisfaction with working conditions (Cluster 2).

Considering the sample of 594 participants, there was a large discrepancy between the number of respondents from the private sector and the public sector, which allows us to assume that the sector with a greater tendency for churning to occur is the private sector.

In view of the above, by means of the methodology used and with recourse to the research of literature on the subject, it was possible to reach the previously defined objective: to analyse the probability of occurrence of human resources churning in the private sector and in the public sector. With the help of the analysis carried out, through the sample of each of the sectors, we found that the highest incidence of the probability of occurrence of human resource churning was found in the private sector. By examining the sector most prone to the occurrence of churning and evaluating the variables previously selected and investigated by the Two Step Cluster analysis, namely career progression; overall satisfaction with the organisation; opportunity for training; feeling of personal

achievement; satisfaction with supervisors and colleagues; and satisfaction with facilities/benefits, it was possible to identify two groups of workers: workers most likely to remain in the organisation (Cluster 1) and workers at risk of churning (Cluster 2). After analysing the results, we found that workers belonging to Cluster 1 presented higher mean scores, which allowed us to conclude that they are more likely to stay in the organisation in comparison to workers belonging to Cluster 2, who presented lower mean scores, i.e. the level of satisfaction with the working conditions is higher in Cluster 1.

In as much as the study's limitations are concerned, the application of questionnaires in a generalized manner between the two sectors was considered a limitation, which led to the obtaining of a greater number of replies on the part of the private sector. In future studies, the observance of questionnaires in a more selective manner, directed at the two sectors in separate, was suggested so as to enable the analysis of which respondents belong to each sector, as well as the composition of the fields of activity that make up the private sector and the public sector. Thus, one presumes that data gathering and respective analysis will enable more precise and concrete results in each of these sectors.

As a proposal for future study on the theme, it is suggested, as a research method, to resort to exploratory factor analysis and confirmatory factor analysis, in order to arrive at the causal model that allows for the application of structural equations, assuming that these new results would be relevant and enriching in literary and empirical terms if considered in other Portuguese-speaking countries, by providing the opportunity to make crossings that allow for the comparison of results obtained on the issue under study.

STUDY CONTRIBUTIONS

The study of churning in the private and public sectors contributes to mitigating the scarcity of literature and empirical studies on the subject in human resource management, and its operationalisation is pertinent in order to minimise churning costs.

The importance of its operationalization is due to the fact that it provides for the departure of the best workers, allowing the organization to anticipate and prepare itself through the application of measures and strategic policies, in order to retain these workers in the organization, avoiding unexpected costs with departures and their replacements (PIRROLAS and CORREIA, 2020).

With this study, it was possible to enrich the knowledge of the subject of human resources churning, given its enormous complexity and pertinence, and to understand and corroborate the perception of the reality of human resources churning in organisations, covering various sectors (private and public sectors), so that the reality of the organisational context experienced by companies in these sectors is made visible.

Finally, we can predict that equity in working conditions between the private and the public sector would allow for greater balance in relation to the churning rate, enabling organisations to act in order to minimise its occurrence.

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