

Churning of human resources: A proposal for a theoretical-methodological model

Churning de recursos humanos: Proposta de um modelo teórico-metodológico

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To cite this paper: Pirrolas, O. A. C., & Correia, P. M. A. R. (2023). Churning of human resources: A proposal for a theoretical-methodological model. *Revista de Administração Mackenzie*, 24(5), 1–28. <https://doi.org/10.1590/1678-6971/eRAMG230256.en>



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Abstract

Purpose: This article presents the results of qualitative research performed through the semi-structured interviews to elaborate a theoretical-methodological human resources churning model that will allow to statistically describe the relations of interdependence between the selected variables, to analyze their impact, and to test hypotheses in future studies.

Originality/value: The relevance of this study lies in the opportunity to contribute to the development of such an intricate, unexplored topic, with scarcely available literature and empirical studies, providing the elaboration of an interview script as an instrument for data collection that facilitates future studies. Churning of human resources (excess of turnover) is solely related to the replacement of workers who voluntarily choose to leave organizations (Burgess et al., 2000).

Design/methodology/approach: This study follows a qualitative approach. The process of data collection consisted of developing a semi-structured interview guide to gather information through the performance of 20 interviews.

Findings: Through the analysis of the results, it was possible to ascertain that the more favorable churning dimensions are, the greater the retention of workers in organizations. Thus, the elaboration and application of strategic measures by organizations become relevant for the retention of the most experienced and qualified workers in order to avoid high costs with new hiring, which are a direct result of such replacements (churning).

Keywords: churning of human resources, interviews, theoretical-methodological model, churning dimensions, strategic measures

Resumo

Objetivo: O presente artigo apresenta os resultados de uma pesquisa qualitativa através da realização de entrevistas semiestruturadas, com o objetivo de elaborar um modelo teórico-metodológico do *churning* de recursos humanos, que permita em estudo futuro descrever estatisticamente as relações de interdependência entre as variáveis selecionadas, analisar o seu impacto e testar hipóteses.

Originalidade/valor: A pertinência sobre o estudo desta temática recai sobre a oportunidade de contribuir para o desenvolvimento de um tema muito complexo, pouco explorado, com pouca literatura e poucos estudos empíricos, proporcionando como instrumento de recolha de dados a elaboração de um guião de entrevista que facilite estudos futuros. O *churning* de recursos humanos (excesso de *turnover*) está relacionado apenas com as substituições de trabalhadores que saíram voluntariamente da organização (Burgess et al., 2000).

Design/metodologia/abordagem: Trata-se de estudo com uma abordagem qualitativa. O processo de recolha de dados consistiu na elaboração de um guião de 20 entrevistas semiestruturadas.

Resultados: Através da análise dos resultados, foi possível constatar que quanto mais favoráveis forem as dimensões do *churning*, mais favorável será a retenção de trabalhadores nas organizações, pelo que se tornam pertinentes a criação e aplicação de medidas estratégicas por parte das organizações com o intuito de reter os trabalhadores mais experientes e qualificados, de forma a evitar custos elevados com novas contratações, resultantes de substituições (*churning*).

Palavras-chave: *churning* de recursos humanos, entrevistas, modelo teórico-metodológico, dimensões do *churning*, medidas estratégicas

INTRODUCTION

The voluntary exits of talents from organizations are a widespread problem within the labor market as, every year, a substantial amount of the labor force starts working for a new employer, leaving their old job behind (Kerr, 2018).

Churning of human resources is defined as the excess of turnover (Burgess et al., 2001), and it is considered an excess of turnover the difference between labor flows from people who voluntarily choose to leave the organization and the resulting need to recruit substitutes (Wynen & Kleizen, 2017). Despite the fact the concept of turnover and churning relate to each other, these are two distinct concepts. While turnover is related to the entrances and exits of workers, churning is solely related to needed substitutions so as to face the voluntary exits of workers (Kadeřábková & Maleček, 2015).

Therefore, the retention of the most qualified and experienced workers has been one of the main concerns for the organizations, since the voluntary exits of their best employees (in order to work for competitors) cause substantial costs to the organization of origin when there is a need to hire new people to face said exits (a process known as churning), in addition to the time spent with professional training for substitutes to be able to reach the same levels of experience and performance in comparison to the ones presented by the workers who had left.

Thus, the relevance of operationalizing a forecasting model for organizations to predict and prevent future voluntary exits arises.

In this context, there is a need for managers of human resources to develop research with the intention of perceiving the reasons that lead to the intention or the decision of a worker to leave the organization and to, afterward, act through the implementation of preventive measures to reduce the costs stemming from churning (Moulana et al., 2020; Duhautois et al., 2016).

Based on the foregoing considerations, this article theoretically describes the results obtained through semi-structured interviews, aiming to elaborate a theoretical-methodological model of churning of human resources, which would allow a future study, by resorting to statistical analysis, to describe the interdependent relationships established between the selected variables, analyze their impact, and test its hypotheses.

THEORETICAL REFERENCE

Churning of human resources

The economic theory explains *labor* churning based on models of voluntary resignations or of *matching*... Voluntary resignations often occur in periods of economic prosperity and low unemployment rates, causing an inverse relationship between churning and unemployment (Orellano et al., 2009, p. 136).

The subject of churning is usually addressed regarding clients, mainly in information technology (IT) companies, the banking sector, insurance companies etc. This specific approach to *churn* is usually addressed in the literature, both theoretically and through empirical studies. In this respect, the theme regarding the churning of human resources arises as a relevant subject to the present article – a similar yet distinct process in comparison to the former (Saradhi & Palshikar, 2010).

The *customer churn* is a notorious problem, given that the loss of a client affects revenues and the company's reputation and that the acquisition of new clients is a difficult process. The *churn* of human resources is a similar process but not quite the same. The process of churning human resources is associated with the consequences stemming from the excess of voluntary exits, consisting of the difference between labor flows and workflows (Burgess et al., 2000).

To calculate the churn rate, Burgess et al. (2000) refer to calculation formulas resulting from the sum of hirings (H) (substitutions) and separations (S) (voluntary exits/resignations) on the total amount of employees (ΣE) of the organization.

In this sense, the churn flow (CF) is defined by the following calculation formula:

$$CF = WF - JF / \Sigma E \times 100\%$$

The churn rate consists of the difference between workers flow (WF) (hirings + separations) and job flows (JF) (a shift in the number of workers employed), followed by the calculation formulas below:

WF = H + S → Workers flow = hirings + separations

JF = H - S → Job flow = hirings - separations

C = WF - JF → Churning = workers flow - job flow

Notwithstanding their similarities, the *phenomenon* of churning and turnover can be differentiated through the following calculation formula to determine the index of turnover. These calculations allow us to measure the indices of exits from an organization in relation to the dimension of the workforce (Chiavenato, 2014).

Chiavenato (2014) refers that the most used formula regards the number of people who leave the organization during a certain period in relation to the average number of existing workers. However, the author mentions that this formula only works in relation to exits. It does not consider the entrances of workers in the organization.

Consequently:

$$\text{Index of turnover} = \text{amount of exits} / \text{average of total workers}$$

According to a study carried out by Flórez et al. (2017), in which the behavior of the labor market flow in Colombia was explored, the authors considered that the factors that give rise to voluntary exits are related to the dimension of the companies, activity sectors, and the economic situation.

Flórez et al. (2017) mention that smaller companies present a higher churn rate (excess of workers flows in relation to job flows). When taking into consideration activity sectors, the authors claim that the highest churn rate is found in the construction industry. On the other hand, the sector with the lowest churn rates is the manufacturing industry.

Nevertheless, the authors believe that the main contributing factor to the occurrence of churning is the economic situation faced at a given time. There is a tendency for a rise in the churn rate when the economy presents higher levels of productivity, which, in turn, eases the reallocation process of workers who look for better wages and more attractive working conditions (Flórez et al., 2017).

However, Flórez et al. (2017) also state that during periods of economic rebounds, organizations tend to look for more competent and qualified workers to improve and/or strengthen their workforce. Having identified the economy as one of the main factors for the occurrence of churning within an organization, Burgess et al. (2000) relate the role of economic cycles as an opportunity for organizations to renew their human resources, *i.e.*, during an economic downturn, employers have a chance to lay off less productive workers, taking advantage of the fact there is a reduction in productivity. Consequently, when in periods of economic upturn, organizations become able to hire new workers, more competent and experienced, leading to the mitigation of the risk of churning in the future.

However, this can be a countercyclical process. The authors argue that hiring new personnel during a period of economic downturn presents a lower margin of error compared to a period of economic upturn. In periods of economic growth, as there are many options available for the workforce selection, this can make proper selection difficult. Therefore, in most cases, churning can be considered a countercyclical process (organizations tend to hire more personnel in periods of recession and decrease hiring in periods of economic expansion).

In addition to the economic and social factors mentioned, other factors have a great influence on the churning of human resources. A study performed in Finland between 1988 and 1997 by Ilmakunnas and Maliranta (2005) regarding the churning rate during three different economic periods (expansion, recession, and recovery) found that, during the expansion period, the percentage of employee departures increased by 36%, during the recession period, the percentage of departures decreased to 22%, and during the recovery period, the percentage of departures increased by 40%.

After the analysis, it was found that the main causes for churning were mainly related to wages since workers sought employment in companies that would compensate them for their knowledge and skills. Other causes were related to age, academic qualifications, gender, type of employment, and activity sector (Ilmakunnas & Maliranta, 2005).

In this context, Saradhi and Palshikar (2010) state that some causes of churning are related to labor conditions, such as conflicts with leadership and/or colleagues, lack of recognition, lack of benefits, low wages, and poor working conditions. On the other hand, there are also positive aspects related to the increase in job availability in the economy, as it makes it possible for workers to find better working conditions.

Costs of churning of human resources

In the past 20 years, technological innovation, increasing international competitiveness, structural reforms, and deep economic recessions have largely contributed to the reallocation of jobs on a massive scale. This reallocation is associated with negative impacts on productivity, influencing the growth of organizations.

On the basis of the foregoing considerations, this problem, that is, churning, arouses the need to operationalize its main causes within organizations through the elaboration of preventive plans related to unexpected departures and improve the process of recruitment procedures, given that

this is a crucial phase for selecting the right candidate for the intended position and also to improve monitoring and professional training of new employees, which could induce a reduction in the possibility of the occurrence of churning (Patias et al., 2015; Burgess et al., 2000, 2001).

Conversely, Patias et al. (2015) state that, although churning is related to economic cycles, it is also a paradox when, during a certain period of economic recovery, the number of hirings increases despite the high number of voluntary exits from an organization, evidencing the existence of a high churning rate, that is, despite the fact there is an increase in job vacancies in periods of economic expansion, that is also when the highest churning rates occur.

In turn, the authors state that even considering that the costs resulting from churning are oftentimes complex and high, some organizations can take advantage of this period to enhance their financial stability by replacing not-so-efficient workers with more experienced and qualified employees, who will perform better.

Nonetheless, it should be noted that regardless of the context of the occurrence of churning, the costs related to churning are composed of three elements: costs with exits, costs with new hires, and costs with additional professional training.

Exit costs include exit interviews, time spent by the interviewer and the interviewee, costs related to closing bank accounts and compensations resulting from these exits, costs related to the loss of productivity, and costs associated with the increase in overtime by the other employees in order to get the work done.

The associated costs from new hirings involve costs attributed to the substitution of employees who departed, that is, with the processes of recruitment, selection, and training of new workers, including time spent in selection interviews, selection tests, costs of medical appointments. Besides, the costs stemming from the needed training also include the costs of the elaboration of a training plan or program involving materials, installations, equipment, and instructors. Transitioning to a new job implies that a more experienced co-worker will dedicate time to help a newcomer better adapt to their new functions.

Furthermore, overhead costs are also associated with the market image and the ability to attract new talents.

Despite all this investment, if the employee decides to leave the organization, that will also mean they will take all the experience and knowledge acquired by them to a new company, thus generating financial losses for the organization of origin (Pirrolas & Correia, 2021).

Human resources retention strategies

Moreira et al. (2018) refer that, in the recent years, it has been possible to witness fast economic, social, cultural, and technological transformations, making it appropriate for organizations to reorganize their structures, rethink adopted policies and work procedures, readjust working conditions and retain their most talented human resources within the organization. The authors state that the retention of human resources implies the capacity an organization has to attract and keep hold of its more experienced and competent professionals in order to guarantee its growth and contribute to the increase and quality of productivity.

Zhao et al. (2018) state that hiring the right person for the right vacancy is the initial process enabling the maximization of employees' productivity levels, thus minimizing the company's costs. It is a corporate optimization process. Furthermore, the level of satisfaction and loyalty have a direct impact on the permanence of an employee and the occurrence of churning.

Therefore, the authors state that it is crucial to consider the need to have control over voluntary exits, interactions between employees (through the implementation of a dynamic model of optimization of human resources based on a method that allows describing its influence and the relationships established between colleagues and managers), behaviors, performance levels, and the readjustment of recruitment strategies to optimize the human resources and reduce the possibility of churning.

In addition to the aforementioned, organizations should promote churning simulators based on inquiries in order to evaluate employees' levels of satisfaction, apply performance evaluation interviews to assess performance, commitment, and loyalty to the organization and adopt monitoring methods to evaluate individual and collective behaviors so that, through the results gathered, organizations can amend less desirable factors aiming at making sure employees remain in the organization (Zhao et al., 2018).

Saradhi and Palshikar (2010) report that a human resources churning model aims to identify which human resources are the most valuable for the organization and design improvement plans through the application of retention strategies.

According to a case study performed by Saradhi and Palshikar (2010) with IT companies, the importance of operationalizing strategic human resources retention plans is crucial for the following reasons: difficulties in finding suitable substitutes (especially when addressing the loss of well-experienced, highly-skilled employees); the time, effort, and money spent in

new recruitment processes; loss of productivity and delays in ongoing projects (which can cause dissatisfaction among workers and clients); the time spent with training etc. The authors also state that the tax on churning can increase by 12 to 15% annually.

Saradhi and Palshikar (2010) refer that the main causes of churning are related to the fact that workers can find better working conditions, more attractive salaries, better benefits and facilities, and companies in better locations and have more opportunities of career progression, better leadership roles, among others.

Regardless of the reasons for the decision to depart from an organization, organizations should inquire about the reasons why employees leave in exit interviews. Even though exit interviews supply great information to improve potential corporate weaknesses, Saradhi and Palshikar (2010) refer that the implementation of predictive models of churning of human resources is important so as to understand and anticipate causes of said departures, adopt strategies and retention plans, and improve recruitment plans and team management.

Predictive models of churning of human resources are elaborated so as to accurately identify the possibility of the occurrence of churning by focusing on the most talented human resources, that is, employees considered assets of the company. Therefore, it would be more beneficial for organizations to keep said employees so as to avoid generating costs with new hires, as not all workers present the same level of performance. Workers who demonstrate excellence and have specialized know-how are considered talents, and organizations should make an effort to retain them (Saradhi & Palshikar, 2010).

On the basis of the foregoing considerations, it is possible to predict that when addressing a psychological breach of contract, this also has an impact on the occurrence of churning. A psychological contract surmises the reduction of insecurities by minimizing uncertainties resulting from non-clarified omissions or ambiguities (Chambel & Fontinha, 2009); guiding behaviors of individuals in regards to duties and compensations between both parties, adjusting behaviors in relation to the evaluation methods performed (Leiria et al., 2006); and the promotion of a feeling of personal influence, triggering a feeling that these individuals can actively and decisively influence their own destinies so to fulfill their obligations (Leiria et al., 2006).

Through the psychological contract, individuals change their institutional needs, norms, or practices, that is, they expand their acceptance and influence areas (Correia & Mainardes, 2010).

RESEARCH METHOD

The present research follows a qualitative, cross-sectional approach, having as its specific purpose the elaboration of a theoretical-methodological model of churning for the management of human resources.

The methodological procedures of this article were divided into three stages. The first stage consisted of a literature review to allow us to define theories and concepts about the churning of human resources, enabling us to make the division of the selected dimensions into categories and subcategories to elaborate a semi-structured interview script. The second stage consisted of the retraction of data from the conducted research through the performance of semi-structured interviews with directors of human resources. We opted for this group of professionals, because they have relevant information about this subject, which would not be possible to retrieve otherwise. The third and final stage consisted of the analysis of the obtained data.

Participants

The sample has comprised the convenience of 20 directors of human resources working in Portuguese private-sector companies and from several activity sectors, whose contacts were acquired through LinkedIn. Given the specificity of the present subject and that it is still a little explored topic, our intention was to broaden this theoretical domain by deepening the subject to ensure greater consistency.

All performed interviews were conducted online and lasted approximately 40 to 50 minutes.

The option for this method allowed us access to a larger number of companies of different activity sectors in Portugal, which would not be possible otherwise due to constraints in availability on the part of the authors.

Instrument

As for the data collection tool used, semi-structured interviews were performed, as this is an instrument that allows the researchers to grasp interviewees' own angle of understanding and interpretation, in their own language and in a real-time context (Quivy & Campenhoudt, 2017).

The previously mentioned interviews were based on an interview script composed of six blocks:

- Blocks I to VI correspond to presentations, objectives, confidentiality, and acknowledgments.
- Block II corresponds to workers' typology. Through open-ended questions, it was possible to perceive the profile of workers who had decided to leave the organizations in terms of age, gender, civil state, and academic qualifications, as well as to understand functions performed and seniority.
- Block III concerns voluntary exits from organizations in order to identify the reasons that led to the decision, as well as to understand the impact these exits have on productivity.
- Block IV and V were related to the costs associated with new hiring to replace said workers and related to the strategic measures for the retention of human resources.

Analysis techniques

Following Bardin's guidelines (2011), data retrieved from the interviews were recorded, transcribed, and analyzed through content analysis. We resorted to the method of content analysis to classify and categorize all content types, reducing its characteristics to key elements (Carlomagno & Rocha, 2016). According to Bardin (2011), content analysis is a set of communication analysis techniques, using systematic and objective procedures of a description of substance aiming to deduct knowledge related to conditions of production by resorting to pointers (quantitative or others).

In order to guide this content analysis, a table with the following columns was designed: thematic unit, category, recording unit, and context unit regarding the respective sources (participant 1 to participant 20). In accordance with Bardin (2011), this allows classifying answers through thematic analysis, that is, counting one or more subjects or items of significance in a previously determined coding unit.

The content analysis of the transcriptions of each category and sub-category took into consideration the theoretical framework of this research, based on 1. the operational definitions of the constructs from the theoretical-methodological model of churning of human resources and 2. the selection of the most relevant variables for each construct, based on results retrieved from the conducted interviews.

Having performed this analysis, it was possible to define the most relevant dimensions for the elaboration of the theoretical-methodological model to empirically test it and statistically analyze it in future studies.

DATA ANALYSIS AND DISCUSSION OF THE THEORETICAL-METHODOLOGICAL MODEL OF CHURNING OF HUMAN RESOURCES

In this section, the theoretical-methodological model is presented considering the following premises: 1. the selection and definition of variables that will constitute the proposed model having as reference the reviewed literature and data obtained empirically through the performed interviews; 2. the transposition of the reality of organizations in regards to the problematic of churning through the retraction of the data; and 3. the adoption of the referred parsimony criterion for the inclusion or exclusion of variables to represent the proposed model.

This model is solely represented by latent variables, which, according to Hair et al. (2014), are variables that cannot be measured or directly observed.

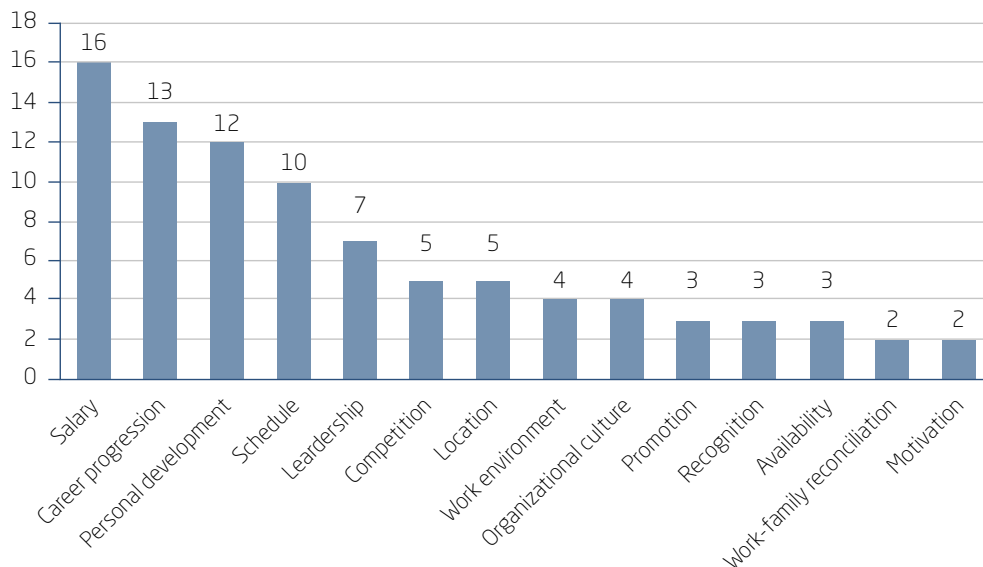
Constructs of the theoretical-methodological churning model

Considering the results retrieved from the content analysis and taking into consideration the principle of parsimony, the constructs of the churning dimensions were grouped. Personal development and promotion were grouped into a construct named progression. Availability and work-family reconciliation were grouped into a construct named schedule. Another construct, costs of churning, grouped professional training, recruitment, changeover time, autonomy time, reception and integration, cumulative costs, and final accounts. Retention strategies of human resources grouped benefits, socialization programs, exit interviews, recognition, career plan, organizational policies, performance evaluations, working conditions, compensation/remuneration package, work environment, relationship with managers/leaders, prevention plans, and negotiation opportunities.

The aggregation of variables contained in Table 1 resulted from the repetition of characteristics or similar meanings during the content analysis, which is presented in figures 1, 2, and 3 for a better understanding of the selected variables (Y axis).

Figure 1 indicates the main churning dimensions mentioned by the participants, that is, the main causes that led to the decision to voluntarily leave an organization, from which 80% of the participants said wage was the main cause for exiting “[...] an increase in their salary, let’s say, if someone was to offer EUR 100.00 to 150.00 more, that would be enough for them to be willing to leave [...]” (Participant 2).

Figure 1
Churning dimensions



Source: Elaborated by the authors.

It was followed by career progression, with 65% of participants referring to it as another main cause for choosing to leave the organization “[...] what makes them want to leave is the inexistence of a career plan... People look for professional challenges in the course of their careers... and, of course... if that amounts to a raise in salary, all the better [...]” (Participant 13).

Personal development was mentioned by 60% of participants “[...] they will want to acquire new skills... cultures... to grow professionally” (Participant 1). Yet another cause pointed out for the occurrence of exits was related to salary, which was mentioned by 50% of participants “[...] the healthcare sector is a continuous work, that is, 24 hours per day, it is not a 9 to 6 job, a Monday to Friday job. It is made of shifts... It is burdensome [...]” (Participant 4).

Leadership was mentioned by 35% of survey respondents as another relevant reason for said exits: “[...] one of the main reasons amounting to employees’ decision to leave is oftentimes related to their leaders, therefore, people are not abandoning organizations, they want to leave their leaders behind [...]” (Participant 19).

Twenty-five percent of the participants referred to competition and location as reasons for leaving organizations:

[...] we have a problem... competition... And when people are not motivated, if not aligned with the company, and a better opportunity appears to them, and better conditions are offered [...] (Participant 13).

[...] in cases in which people need to travel 100 km to come to work every day, they will eventually want to find another job... One closer to home, to their family [...] (Participant 5).

Twenty percent of the participants also referred to the work environment as another main cause for leaving: “[...] this work environment is not easy to cope with, at all... It is stressful. Meeting deadlines in such a short time is difficult [...]” (Participant 1).

The organizational culture is

[...] the main reason for these exits... it usually relates to cultural problems. People are not able to identify themselves with the organizational culture... These tend to be very strict... Or because people are not able to identify with the organization and how it is structured [...] (Participant 17).

Promotion was referred to by 15% of the respondents: “[...] change usually implies professional ascension, maybe quicker in other companies but, in here, at X, progression is probably slower” (Participant 2).

Regarding recognition:

[...] employees obviously enjoy being acknowledged, a pat on the back... But people also look for monetary recognition... People enjoy when recognition is translated into some sort of financial situation by the end of the year, either a bonus, a promotion (Participant 2).

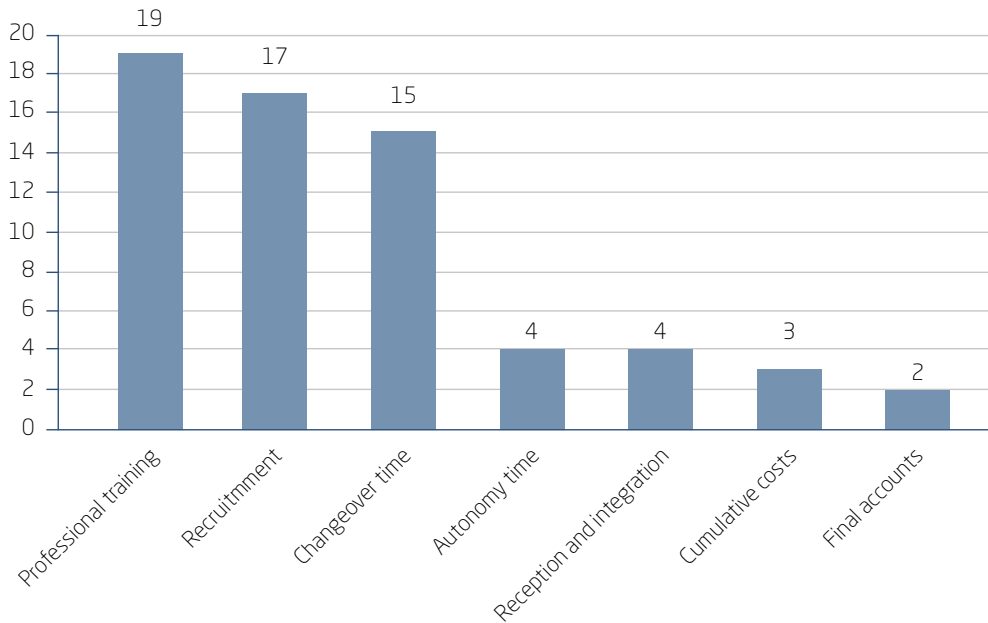
Availability is another decisive factor for leaving the organization “[...] it depends on the workload... The extent to which they must be available [...]” (Participant 7).

Ten percent of the participants mentioned work-family reconciliation “[...] it is usually harder for women... to work three shifts in a row when they have children [...]” (Participant 5).

And also motivation: “[...] people leave... They seek other challenges... That can motivate them and make them feel more integrated [...]” (Participant 10).

According to Dolatabadi and Keynia (2017), voluntary churning is a problem for organizations due to the loss of competent workers and all costs associated with it. A description on the basis of the interpretations of the respondents concerning the main costs of churning is presented below.

Figure 2
Costs of churning



Source: Elaborated by the authors.

Taking into consideration costs associated with churning, that is, costs stemming from substitutions of workers who voluntarily chose to leave organizations, it was found that 95% of participants considered that these were associated with vocational training.

[...] when speaking about technical training... these tend to be very expensive, averaging 100€/per hour... With certificates... [it] would be well above 1000€. Training initiatives regarding *soft skills* are around 25€... What we do in order to render it is to put at least five people to attend it... These types of training initiatives last a minimum of 25 hours (Participant 14).

According to 85% of the respondents, the second highest cost was linked to recruitment processes:

[...] recruitment procedures can cost around 1800€ to 1700€, including the publication of a contract notice, selection, report, references. Later, this will be translated into costs regarding working time spent by a *partner*, who will have to spend one hour conducting an interview with this person... Another working hour lost. There is a need to have a manager vested in this process... Consequently, this person will also produce less for the time spent training the new employee. There will be a need to build a team ready to assist them, and these employees will have their work performances interrupted due to this... So, ultimately, substitution processes have an average cost of 2000€ [...] (Participant 10).

Seventy-five percent of the participants stated it was regarding the time needed to replace workers who decided to leave:

[...] the period of adaptation... When entering a new company, this person does not have the know-how of the company, does not know the culture, its clients, methodologies... Therefore, there is this whole *onboarding* process that needs to be made [...] (Participant 2).

Twenty percent of the participants affirmed it was regarding the time needed to gain self-sufficiency and autonomy: “[...] to reach the desired level of autonomy, one needs six to eight months, plus training, plus monitoring... Usually the *onsite* training period is around six months [...]” (Participant 3).

Welcoming and integration processes amount to high costs:

[...] the integration process is more time-consuming, to get to know the team, its dynamics, policies, and procedures... It takes at least six months for someone to feel integrated given that these employees will have to pass by several departments... In the case of a receptionist, an assistant... it is a quicker process... One month and they are already integrated. Regarding the former, one would only be entirely integrated after one to six months or so (Participant 4).

Fifteen percent of the participants mentioned cumulative costs:

[...] we have cumulative costs... People can have lunch and resort to public transportation for free... consumables... administrative costs

related to registration of certified vocational training... a course of mechanical locksmithing for 12 people, for example, costs approximately EUR 40,000.00 or so (Participant 1).

Ten percent mentioned costs associated with final accounts and costs related to offboarding processes:

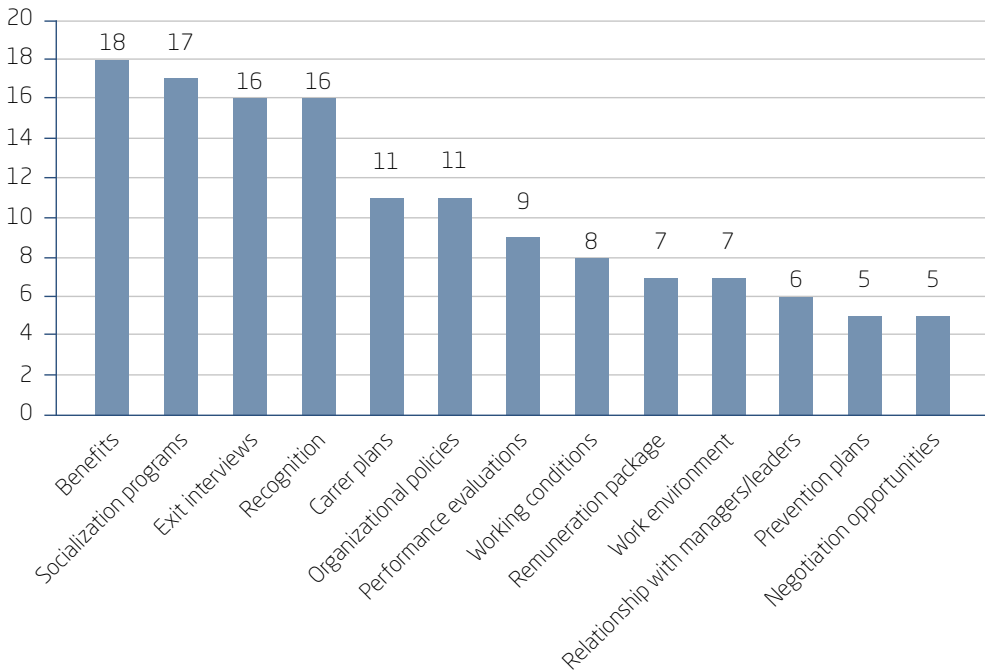
[...] exit costs... all costs associated with unfinished tasks... the offboarding of some, the entry of others... the need to pay for extra hours to another worker to assure that the work is done... All of it is burdensome... Making sure work is up to date takes so many hours. It is a huge workload. Not to mention the costs with vocational training. Multinational companies, for example, provide vocational training at their headquarters, this implies additional traveling expenses, costs related to accommodation... high costs! (Participant 17).

One of the main concerns of organizations is related to the retention of employees with specific skills. When these employees leave, the organization lose all its investment in recruitment and selection processes, vocational training, socialization strategies, and readjustments in work teams to integrate new workers, who may leave the organization at a given time. In this context, the retention of workers is defined as the capacity organizations have to keep specific people through the implementation of strategic measures so that workers feel motivated and satisfied with their work and the company, ruling out the idea of leaving the organization (Steil et al., 2016). Taking that into consideration, we tried to understand which were the adopted strategies for the retention of human resources by resorting to the answers provided by the participants in the conducted interviews.

Regarding strategic measures adopted by organizations aiming to hold back their talents, it was found that 90% of participants said they would grant benefits to workers:

[...] there is the training component... People can enroll themselves in all vocational training courses available. We provide for health insurance... food allowance (in cards), life insurance... retirement plans... Depending on the functions performed and career level, we also provide a car (tolls, fuel, and maintenance included). We have an endless amount of protocols... a flexible system of benefits in which the employee can choose their desired benefits [...] (Participant 16).

Figure 3
Human resources retention strategies



Source: Elaborated by the authors.

Eighty-five percent of the participants valued socialization programs to promote retention of workers

[...] we have a Christmas lunch, we give Christmas gifts to our employees' children. We hire a circus... We have annual *team-building* activities... the celebration of Saint Martin, which coincides with our company's anniversary... In sum, we do have some events" (Participant 8).

Eighty percent of the participants mentioned exit interviews as a way to retrieve information regarding aspects that could be improved:

[...] we perform interviews to try to perceive what were the reasons behind such exits. I find it helpful to hear the statements of people that decided to leave, of teams, of managers... It is a way to get to know organizations on a deeper level... People tend to speak their minds when leaving [...] (Participant 17).

Regarding recognition, “we work on a goal-driven basis, by objectives... When said objectives are achieved, we reward productivity and attendance with bonuses...” (Participant 5).

Considering all previously mentioned statements and after performing the content analysis, by adopting the principle of parsimony, we have grouped all related variables into a single construct, resulting in the selection of the constructs presented in Table 1, which is an integral part of the theoretical-methodological human resources churning model.

Table 1
Operational definitions of the constructs of the theoretical-methodological human resources churning model

Operational definition	Sources
Salary: Monetary reward for the work performed, considered an essential factor to keep an employee in the organization.	Milkovich et al. (2013) and Pitts et al. (2011)
Career progression: Opportunities for career and personal development, which increase the commitment of employees, resulting in their retention.	Horwitz et al. (2003) and Kroon and Freese (2013)
Schedule/working hours: Working hours have an influence on retention strategies by intervening in the balance between the employee’s personal and professional life, promoting flexibility and allowing for better management of the workload and breaks during working hours.	Kamalaveni et al. (2019)
Leadership: The ability leaders have to inspire, guide, and treat workers in an unbiased manner. This type of leadership has a great impact on the retention of workers within organizations, given that the increase in staff turnover is sometimes due to a disequilibrium in the relationship between managers and employees. Leaders must promote motivation, well-being, and organizational effectiveness.	Miranda et al. (2016), Kamalaveni et al. (2019), and Alkhawaja (2017)
Competition: The increased competition regarding talented workers has led organizations to review their relationship strategies with employees, aiming to attract, motivate, and retain the workforce that can ensure the success of companies.	Miranda et al. (2016)
Location: The place where an organization is located can be factor for attracting and retaining employees. On the contrary, it can also determine the exit of employees.	Saradhi and Palshikar (2010) and Dolatabadi and Keynia (2017)
Work environment: The environment where people work can influence their performance. It can be the reason for one’s exit. However, a good work environment is propitious for the retention of workers.	Rosberg et al. (2004) and Horwitz et al. (2003)

(continues)

Table 1 (conclusion)***Operational definitions of the constructs of the theoretical-methodological human resources churning model***

Operational definition	Sources
Recognition: The recognition given to workers for the work performed is an imperative factor for their retention. A simple acknowledgment boosts motivation, and commitment increases productivity and feelings of loyalty. Workers want to hear that their work is being supervised, recognized, and appreciated.	Rahman et al. (2020)
Motivation: It can be defined as a set of factors that influence, intensify, organize, and guide human behavior at the level of personal character, personal development, work characteristics, and the organization itself. It is the feeling in relation to the work performed, which is related to the organization's management processes and work environment.	Miranda et al. (2016) and Rahimić et al. (2012)
Churning: The excess of <i>turnover</i> related to inflows, outflows, and job flows. Costs associated with the overflow of reallocations of workers due to voluntary departures.	Burgess et al. (2000) and Flórez et al. (2017)
Human resources retention strategies: The capacity an organization has to retain its workers in the organization.	Steil et al. (2016)

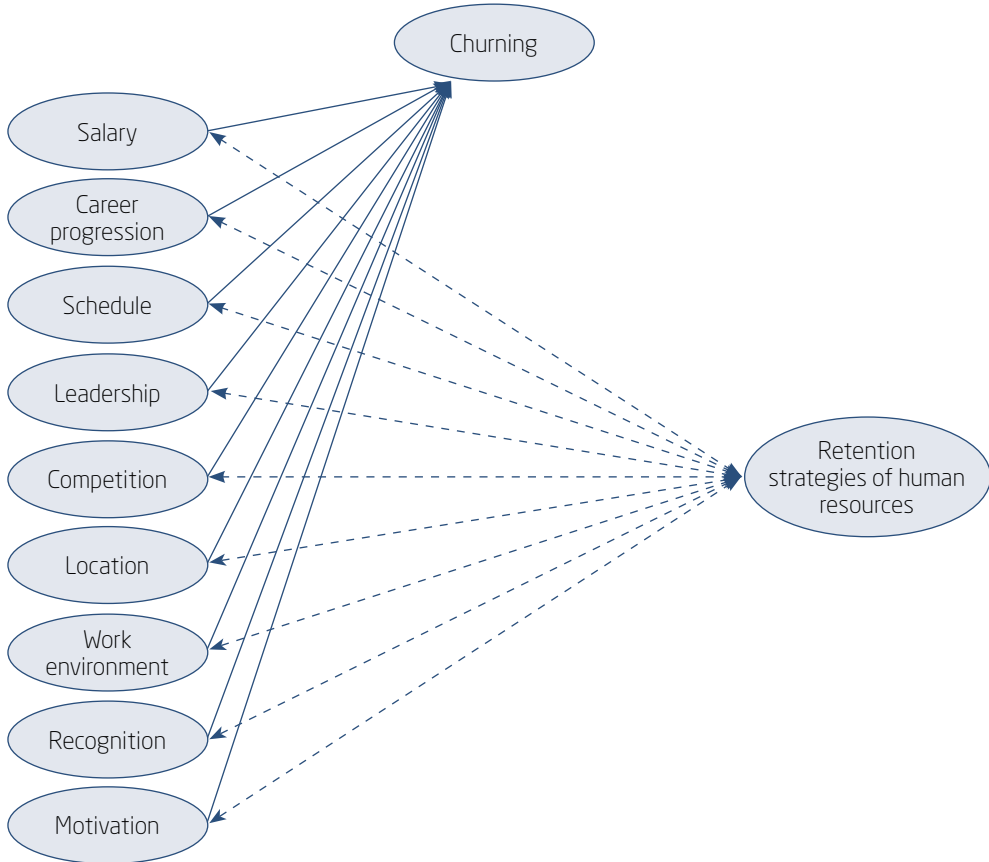
Source: Elaborated by the authors.

Theoretical-methodological human resources churning model

Having defined the dimensions, Figure 1 presents the proposed theoretical-methodological human resources churning model aiming to empirically test it and statistically analyze it in a future study. In this model, only variables that cannot be directly measured or observed are contemplated (Hair et al., 2014). In addition to the preliminarily defined dimensions, other variables – from the data retrieved from the conducted interviews and their respective analysis – not previously considered relevant in the literature were included in this model.

Figure 4

Theoretical-methodological human resources churning model



Source: Elaborated by the authors.

In this model, the arguments were based on the literature review and the results obtained through the interviews. On the basis of the foregoing considerations, 1. the less favorable the values of the variables related to the construct of the churning dimensions are (namely: career progression, schedules, leadership, competition, location, work environment, recognition, and motivation), the lower the percentage of churning; 2. less favorable values of churning will negatively influence the retention of human resources; and 3. more favorable values of variables related to human resources strategies positively influence all churning dimensions and contribute to its reduction.

Considering the graphical depiction of the model, the continuous arrows represent greater certainty of variables exerting a negative impact on the

aforementioned variables; the dashed arrows indicate greater uncertainty due to the fact these depend on the strategies adopted by the organization with the aim of retaining key workers.

CONCLUSIONS AND RECOMMENDATIONS

This qualitative research was produced through literature review and interviews that allowed us to achieve our established general objective, that is, the elaboration of a theoretical-methodological human resources churning model and, finally, to explain the relations established between constructs related to human resources churning to be statistically tested in a future study. Based on the literature reviewed, empirical studies, and results retrieved from the conducted interviews, it was possible to determine that the more favorable the churning dimensions are, the greater the retention of workers in organizations.

By analyzing the variables with greater impact on each one of the themes under study, it was determined that the main cause of churning is related to salary. The salary was identified as the biggest influence on human resources churning by most of the interviewees. Research refers that, although salary is not a decisive factor to guarantee workers' loyalty to the organization (Taylor & Cosenza, 1998), when this is inferior to one's expectations, it can be the main factor influencing the intention of workers to leave (DiMattio et al., 2010; Singh & Loncar, 2010). Steil et al. (2018) also report that salary dissatisfaction has a direct influence on the intention of workers to leave organizations.

With respect to the costs derived from the occurrence of churning, the results demonstrated that the biggest investment of an organization is in vocational training. Kamalaveni et al. (2019) referred that vocational training is a variable that has a negative impact on organizations' profits. It occurs because of the absence of retention measures. Therefore, the investment made in vocational training does not amount to costs, in fact, it adds value. An organization's strategy can be reflected in terms of administration of vocational training, generating growth and ensuring the survival of a company within the labor market (Kamalaveni et al., 2019).

Finally, as for human resources retention strategies, results showed that the variable with the greater impact is related to benefits. Steil et al. (2016) referred that among several decisive organizational factors that have great impact on the retention of human resources, the existence and provision of benefits stood out.

One of the main contributions of this research was the possibility to elaborate an interview script to enable its applicability in future studies, as well as the widespread of a subject still little explored in the literature and empirical studies.

Some limitations arose during the course of this research, namely, the fact that we had to be very meticulous in regards to the selection of categories given that the concept of churning had to be replaced by expressions such as: “excess of voluntary exits”, “costs associated with the exit of workers”, and “costs related to substitutions” as the participants were not acquainted with the former concept, which is still very little applied and explored in Portugal. Another limitation was due to the fact we resorted to open-ended questions, which led to some rambling on the part of the participants in regards to what they were asked. Thus, an intervention was needed on the part of the interviewer to limit the responses.

We propose for future research the development and validation of a questionnaire as a data collection tool based on the variables presented in Figure 4. It is also suggested that this questionnaire be applied to a larger sample, which may correct some limitations since it is a standardized instrument, removing any possibility for open-ended questions. Having made the statistical analysis of the results, it may now be possible to verify that there are more adequate variables to represent reality, that is, those that allow for a better empirical measurement of the construct of churning or the exclusion of variables with less relevant values for the study.

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