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Intention to quit among IT workers

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*Master in Business Administration*

Supervisor:

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BUSINESS  
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## **Abstract**

High turnover is a dilemma for organizations since it entails direct and indirect costs. Due to the apparent scarcity of qualified employees in information technology (IT) companies, a challenge like an employee turnover may significantly affect the IT sector. Data was collected from IT professionals working for IT companies (developers, consultants, architects etc). Through this study it is possible to identify the existence of a mediator role of teamwork between employer branding and turnover the intentions We may say that while managing employer branding of a company, teamwork behaviors should be considered when relating EP to turnover intentions. For IT companies a solid employer branding strategy aligned with teamwork behaviors may reduce the turnover intentions.

**Keywords:** *Turnover, social exchange theory, teamwork, openness to change, employer branding*

## INTRODUCTION

The growth and success of any organization remain dependent on its personnel. The employees are the ones responsible for achieving the organization's results. And one of the biggest challenges that organizations face is the departure of their employees, defined as turnover (Li et al., 2021). Employee turnover has been a theme explored in various fields, particularly in human resources management.

High turnover is a dilemma for organizations since it entails direct and indirect costs. Abbasi and Hollman (2008) describe turnover as problematic since they make high recruitment, screening, and hiring investments. Due to the apparent scarcity of qualified employees in information technology (IT) companies, a challenge like employee turnover may significantly affect the IT sector.

In Portugal, turnover levels have been increasing, much associated with the stabilization of the economy and consequently the labor market. Turnover is that variable of research that is although very common but acquires a lot of significant importance to be studied again in a new perspective and answering the questions in a new domain (, Moquin et al., 2019). Other studies contend that employees with higher levels of social capital and human capital are more motivated and have more opportunities to leave their current position and find a better job elsewhere (Moynihan and Pandey, 2008). This study aims to explore the impact of different turnover intention predictors such as job satisfaction, openness toward organizational change, teamwork, and employer branding.

According to Moquin et al. (2019) IT industry has one of the highest turnover rates which raises concerns regarding employee development and retention, therefore, it is critical to investigate the factors contributing to an employee's withdrawal to ensure the organization's development and long-term sustainability.

## **LITERATURE REVIEW**

### **Organizational Turnover**

Employee retention is a significant concern, as losing an employee means losing organizational expertise, (Dess & Shaw, 2001). When an employee quits, this turnover can negatively affect the team itself. Due to such consequences, employee turnover has been a study theme for academics and practitioners (Yankeelov et al., 2008).

Organizations are legitimately interested in avoiding unexpected or undesired turnover to protect social capital and organizational knowledge and lower the consequent turnover-related investments (Allen et al., 2010). Employees are the most critical and unique resource for gaining a competitive edge in an enterprise (Cardy & Lengnick-Hall, 2011). Therefore, employee retention has become one of the primary considerations for most organizations (Milman & Dickson, 2014).

According to Harvey (2013), globalization and growing competition among organizations have resulted in a “war for talent.”. However, at the end of the 20th century, numerous pressure and attraction factors were identified, along with the compatibility of employees with their work environment. In recent studies, greater emphasis is being placed on environmental and non-organizational factors, such as work-life and family life balance (Presbitero et al., 2015), the reputation of the organization (Harvey et al., 2015), and organizational prestige (Carmeli & Freund, 2009). Different research contributed and define turnover as: according to March and Simon’s (1958) theory of organizational equilibrium, only decisions to remain working in an organization are an element of the harmony between the standard utilities of the promptings offered by the organization and the commitments anticipated from the person. Blau (1960) proposes Social Exchange Theory as a framework for understanding how worker’s perceptions of security may prompt expected outcomes. According to Ngo-Henha (2018), the theory asserts that the social principles and standards are



the component of reciprocity between two sections, like a group of guidelines. Considering the IT literature, Ahuja et al. (2007), recurring to Social Exchange Theory, clarifies that for regular IT professionals, social cooperation may alleviate the impacts of remuneration fairness. The perception of remuneration fairness is highly correlated with turnover intention. Moquin et al. (2019) applied the Psychological Contract theory to IT turnover and tested their theory by distinguishing factors related to neglected assumptions that impact IT Turnover and psychological contract breach (PCB) that impact turnover expectations.

Considering the resource-based view theory Nho-Henha (2018) concludes that IT employees stay in their present positions if they feel that they are esteemed and viewed as exceptional and a scant asset that supports the success of their company. Otherwise, they start to be more receptive to the idea of turnover.

Abii (2013) claims that Herzberg's Two-Factor Motivation-Hygiene theory applies to turnover in IT. This theory uncovers that there are two sets of variables in an association: those that contribute to job satisfaction, such as recognition, achievement, exciting work, increased responsibility, and those that contribute to job dissatisfaction, such as hygiene factors that include incompetent managers, threats to status, and others.

According to Chan et al. (2010), employee turnover is a serious dilemma, particularly in human resources management. Meeting fundamental requirements and providing a decent working environment, good wages, and other benefits is quite costly for any organization.

According to Glebbeek & Bax (2004) all companies aim to boost productivity and decrease turnover to become more lucrative, n the other hand, the high turnover wreaks havoc on the business regarding direct and indirect costs. Direct costs refer to recruitment, selection, guidance, workshop, and training expenses for new employees. In contrast, indirect costs refer to expense on education, condensed self-confidence, pressure on existing employees, and the collapse of social capital. In addition, frequent turnover of employees can jeopardize

organizational objectives

Allen et al. (2010) claim that managers generally believe that employees quit earning higher salaries. The authors refer that the relationship between salary and turnover has grown stronger. Griffeth et al. (2000) suggest that wages have a significant impact on the decisions to quit. These factors include rewards in addition to payments (e.g., training or promotion opportunities, bonuses, and non-one-off benefits). Other predictors include employment characteristics, leadership, climate, and organizational support. Many managers believe that turnover is mainly due to dissatisfaction with the work itself or low wages. Others may be due to toxic work climates or a lack of support from the organization.

Although the effects of turnover are not always detrimental; however, turnover still has negative consequences (Morris & Hodgins, 2000). According to Evans (2001), employee turnover can prove to be beneficial since it causes change. According to the research conducted by Cascio (2000), the company's total cost of turnover could range from around 93% to 200% of the employee's annual salary. However, Taylor (2002) believes that these costs vary depending on the type of function. Whether this person can be replaced rapidly while maintaining acceptable production levels, the expenses may be lower. Otherwise, DeLong (2004) contends that the departure of employees may also result in the loss of fundamental skills for the organization. The constant search for a highly attractive employer branding may be associated with the costs of turnover and the corporate mobilization to manage it.

According to McKew (2015), the best employees tend to be at the top of the pay wage spectrum. However, if these employees leave the company, it can provide an opportunity to reduce investments in salaries, filling the position with an employee with a lower salary or not replacing the employee and distributing their work among the other employees.

### **Turnover in the IT Sector**

There is evidence that the IT industry has been addressed with factors that cause labor instability

(Moquin et al., 2019). The turnover within the IT industry appears to be constant since turnover continues to be an issue despite decades of studies on the subject. There appears to be a resignation culture within the entire profession (Lo, 2013).

The IT industry is dominated by unpredictable market dynamics that affect labor supply and demand (Moquin et al., 2019). Moreover, this profession needs constant transformation and training to respond to rapid technological changes (Moquin et al., 2019). IT turnover is problematic due to the shortage of professionals in the area. In parallel, the IT sector continues to grow (Miller, 2016). The industry's competitiveness is well-known for its rapid expansion and demand.

According to the literature on IT turnover, the situation is generally considered to be dreadful, most articles are based on the premise that IT staff turnover is detrimental and needs to be prevented (Lo, 2013). According to Lo (2013) despite several studies on turnover in IT companies and recommendations to organizations on how to retain their employees, the overall turnover trend of IT professionals remains high. Many consumers have voiced a need for additional study on IT turnover, however, much of the literature continues to conduct similar studies using the same constructs. Academics, management, and IT professionals have investigated factors influencing employee turnover to comprehend such challenges.

The authors Zaza et al. (2016) updated the Joseph et al, meta-analytical research by uncovering the explanation of some IT Turnover studies from previous researchers.

The research on IT turnover has investigated communication, personality, job satisfaction, salary, promotion, and organizational contribution (Moquin et al., 2016). The research from Moore et al. (2016) pointed out that practical commitment, perceived job alternatives, and job satisfaction contributed to turnover intention. The authors also found that the psychological futility of voice, and the disbelief of speaking were significant predictors of turnover intention.

More recently, several studies have been developed to explore the causes of turnover in IT, including the PCB (Moquin. et al., 2019). Harden et al. (2018) also found that organizational commitment revealed a negative relationship to leave an employee in the IT sector. In the literature, organizational commitment is seen as a central psychological construct representing an individual's loyalty and attachment to the organization. Another approach on IT's turnover, which is currently ongoing, is exploring five distinct types of fit: a) person-person, b) person-vocation, c) person-organization, d) person-group, and e) person-job. The study aims to explore the five individual fits with turnover in the IT sector (Oehlhorn et al., 2020).

Moquin et al. (2019) identify four precedents for PCB and a moderator (autonomy) that substantially influence the intention to quit the IT industry. Turnover is more probable when expectations for emotional dissonance, compensation, supervisor support, and work exhaustion are not satisfied. Lin's (2020) study discovered that passion plays a crucial moderating role in developing career commitment. In the formation of turnover intention in the IT sector. Employees with more significant career commitments are more likely to stay in the company than quit (Lin, 2020).

### **Theory and Research Model**

This study proposes a framework based on the Social Exchange Theory (Blau, 1960) to study the predictors of turnover intention. It also employs the resource-based view theory (Nho-Henha, 2018). In our presented model turnover intentions are influenced by five variables.

### **The Intention of Turnover and Turnover**

Turnover is closely dependent on the individual's intention to quit, i.e., the actual act of the turnover is inextricably linked. It is defined as a cognitive process in which one contemplates resigning from work. Otherwise, it is a collaborator's unexpressed plan (intention) to leave the job within a certain period (Lambert & Hogan, 2009). Several researchers have found that the

intention to quit is one of the most immediate determinants of actual turnover behavior (Bluedorn, 1982; Igarria & Greenhaus, 1992; Mobley et al., 1979).

### **Main Limitations in the Measurement of Organizational Turnover**

The researchers Hyland and Jackson (2006) highlight three fundamental aspects that condition the measurement of organizational turnover: 1) the difficulty in measuring the actual turnover, to the extent that employees, from the moment of their departure, will hardly be available to conduct exit interviews, or questionnaires for this purpose; 2) the measurement of current turnover through the intention of exit raises some questions in the literature, since this relationship, although it is systematically reported in the investigation as being positive, does not represent a perfect correlation between the two constructs; 3) Hyland and Jackson (2006) also mention Steel's (2002) work, which claims that organizational turnover models developed over the years have not effectively addressed the decision-making process inherent to an individual's departure from the organization.

### **CONCEPTUAL MODEL AND RESEARCH HYPOTHESIS**

This current investigation attributes turnover intention as a dependent variable. It explores the impact of work-related variables on this intention. Although more recent studies, such as Cohen et al. (2016), show that the link between turnover intentions and actual turnover is positive although weak.

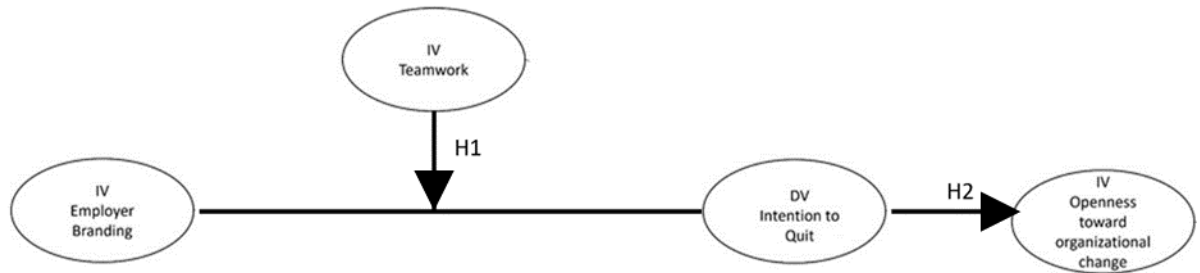
#### ***Hypotheses of the study***

So, from all the above, we propose that the following hypotheses be tested:

H1: When there's teamwork it works as a positive moderator between employer branding and intention to quit

H2: The intention to quit is positively related to the openness towards organizational change

Figure 1. Hypothesized model



### **Teamwork**

IT employees are indicating a need to focus more on improving teamwork to increase satisfaction (Moro, 2020). It is mandatory for IT industries that team members work together (Liu, 2015)

An example seen often in high-tech industries is that team members work as part of an interdependent team to promote discussion, collaboration, and information sharing. Low levels of teamwork can increase turnover intentions and can damage project completions, system upgrades, morale, teamwork, workloads, and group stress levels (Longenecker, 2003). In addition, the authors found that 33 % of the 211 U.S.-based IT managers surveyed identified that being part of a team of co-workers was a crucial factor contributing to the reasons they stay at their companies.

### ***Employer Branding***

One of the mechanisms is becoming the “employer of choice” and developing employer branding strategies. According to Joo & Mclean (2006) employer branding is for best employers so, building a reputation as a great environment to work in can result in long-term business success.

The role of employer brand has become more critical to deal with the changing

expectations of the twenty-first-century workforce entering the workplace (Rosethorn, 2009). Ambler and Barrow (1996) first coined the term “employer branding” and defined it as the group of benefits provided by the employer. Unique employment experience offered by the employing company helps attract and retain talent and build trust (Burke et al., 2006).

### ***Openness Toward Organizational Change***

An unfolding model can explain the relationship between resistance to change and employees’ turnover (Lee et al., 1999). One of the most significant challenges that IT managers encounter is adapting to rapid change. IT managers must cope with frequent changes in technology platforms and programming languages and they must be able to implement them (Straub et al., 2001)

Openness to change is found to directly negatively impact turnover intentions (Chawla, 2004). Wanberg and Banas (2000) discovered that openness to change before a significant reorganization was positively related to job satisfaction and negatively related to turnover intentions until 14 months later. Sinval et al., (2021) found openness toward organizational change to be negatively correlated with burnout, and positively correlated with work engagement, and job satisfaction.

## METHOD

- **Sampling and data collection**

The target population of this study was the IT sector, with 222 valid respondents. To conduct the study, the target population was identified. The sample was collected from IT professionals working for IT companies (developers, consultants, software architects, etc.). The reason to target this population was the tech industry turnover rate stands at 13.2% and is higher than in any other business sector (Li et al., 2021).

The sample considers 179 male respondents and 49 female respondents, with 2 groups (0 = “female”; 1 = “male”). The academic level includes 7 variable groups, which are 15 respondents with 12 grades, 8 respondents with a techno-pedagogical course, 8 respondents with a bachelor, 83 respondents with a licentiate degree, 32 respondents with at least a post-graduation, 72 respondents with at least a masters degree and 4 respondents with a Ph.D. degree. The below table (Table 1) describes the turnover intention with respect to age. N is the total number of samples correspond to different element of age variable. 5 individual belongs to age group of 18-24, similarly 65, 105, 38 and 9 individuals belong to age group of 25-34, 35-44, 45-54 and >55 respectively. Data is 100% valid and there is no missing value corresponds to different age groups.

- **Measures and constructs**

In this study, four psychometric instruments were applied.

- **Employer Branding**



To measure employer branding, an instrument with 20 items was used. The instrument was adapted from Ito et., al (2013) EB instrument. These 20 items are divided into six dimensions, namely: satisfaction with pay (3 items), which points to aspects in the economic aspect such as wages and benefits. The second dimension relates to flexibility (3 items) which points to flexible aspects of work, such as worktime. The third dimension is security (3 items) which relates to security on the continuity of the job within the organization. The fourth dimension is development of opportunities (4 items) which is related with themes such as training, development and working tools. The fifth dimension is promotion (3 items) which points to the career progression aspects of the job. And the sixth dimension is people factors, which points to people interaction and people-organization interaction aspects.

These items are scored on a 5-point Likert-type scale (1- “Not relevant”, 2 – “Little relevance”, 3 – “Neutral”, 4 – “Some relevance”, 5 – “Extremely relevant”).

### **Intention to Quit — IQS-5**

Intention to Quit instrument was adapted from the Wayne et al, (1997) instrument. The instrument has 5 items, and these items are scored on a 7-point Likert-type scale either for the moment in that the subjects are already in the organization (1- “I completely disagree” to 7 – “I completely agree”).

### **Openness toward Organizational Change Scale (OTOCS)**

Openness Toward Organizational Change Scale was used in its adaptation to Portuguese (Sinval et al., 2021). The instrument has 5 items, and these items are scored on a 5-point agreement scale (1- “Reduced amplitude” to 5 – “Large amplitude”).

### **Teamwork**

Teamwork instrument was adapted from Mathieu and Marks (Unpublished MS, 1998). The instrument has 5 pairs of items, and the participants must pick one of the two sentences that is most related to his/her behavior on teamwork. The chosen sentence is labeled with 1 and the other one is labeled with 0.

- **Procedures**

A cross-sectional study was conducted, using a convenience sampling (non-probability). Sociodemographic data was collected and the selected psychometric instruments were applied. All the data from this study were collected through a survey via the Alchemer survey-platform. And the survey was distributed via social media networks. Only IT professionals were considered as valid participants.

Data were collected between July 2021. It was guaranteed the anonymity of the identification of the participants, as well as the confidentiality of all answers. The electronic informed consent form was presented at the first moment and only after acceptance of the same, is that the questions of the study itself were continued. In the presentation of the study, the contact details of the person responsible for the study were provided so that the participants had the possibility to clarify any type of doubt.

- **Data Analysis**

To conduct the statistical analysis the program R ) was used. To estimate the results R packages were used. For the descriptive analysis the SPSS was also used to interpret the results.

To gather evidence about the originally proposed dimensionality of the measurement models, was used a confirmatory factor analysis (CFA). Estimates above .95 are considered acceptable for NFI, TLI, and CFI, whereas estimates smaller than 5 are considered acceptable for  $\chi^2/df$  (Hu & Bentler, 1999). Values below .08 are expected for SRMR and RMSEA (Byrne, 2010).

According to Hair et al., (2019) satisfactory validity for AVE is assumed  $\geq .5$ . Considering the evidence of reliability of the first-order factors values of  $\alpha_{ordinal}$  and  $\omega \geq .7$  are considered indicative of acceptable reliability (Jorgensen et al., 2021). While second order had different estimates for internal consistency.

# RESULTS

## **Measurement Model: Validity Evidence Based on Internal Structure**

Based on what is considered the main reference in terms of evidence of validity of psychometric instruments concerns, Standards for Educational and Psychological Testing (American Educational Research Association et al., 2014), validity evidence based for the four instruments. In this document validity is seen as a one-dimensional concept, but it can be analyzed for five different types of sources of validity evidence (Sireci & Padilla, 2014). These are evidence of validity based on: internal structure, content, based in the consequences of the tests, in the relationships with other variables, and in the response process. In this study will only evaluate the validity evidence based on the internal structure. This source of validity evidence is in turn divided into three types: measure invariance, reliability and dimensionality (Rios & Wells, 2014). Of these three, only the invariance of the measure will not be tested, as the instrument is not expected to work differently in different groups that will be compared. Reliability, in turn, pays attention to the accuracy of measures. While the dimensionality focuses on the instrument structure *vis-à-vis* the items and expected dimensions based on its original structure. The measurement model contains all latent variables with their indicators. Only correlations paths are drawn between latent variables, no direct effects are tested. This study will only evaluate the validity evidence based on the internal structure.

### **Items' distributional properties**

The distributional properties of the model's indicators (two OTOCS item, and one IQS item already recoded) are presented in the following table. Various summary measures, a histogram,

kurtosis ( $Ku$ ), and skewness ( $Sk$ ) for each of items are presented. The psychometric sensitivity and distributional properties of the items were analyzed with this information. Values of  $|kz| < 7$  and  $|sk| < 3$  were indicative of absence of severe violations of the univariate normality that would recommend against the use of structural equation modeling (Finney & DiStefano, 2013; Marôco, 2021).

Table 1: Descriptive statistics with histogram

Item	$N_{missing}$	$M$	$SD$	$Min$	$p_{25}$	$Mdn$	$p_{75}$	$Max$	Histogram	$SEM$	$CV$	$Mode$	$sk$	$ku$
OTOCS														
Item 1	0	3.08	1.24	1	2.00	3	4.00	5		0.08	0.40	2	0.06	-1.04
Item 2	0	3.27	1.32	1	2.00	3	4.00	5		0.09	0.40	5	-0.18	-1.15
Item 3	0	3.28	1.30	1	2.00	3	4.00	5		0.09	0.40	4	-0.24	-1.08
Item 4	0	3.17	1.29	1	2.00	3	4.00	5		0.09	0.41	3	-0.05	-1.08
Item 5	0	3.38	1.30	1	2.00	4	4.75	5		0.09	0.38	4	-0.27	-1.15
Teamwork measure														
Item 1	0	0.92	0.27	0	1.00	1	1.00	1		0.02	0.29	1	-3.23	8.36
Item 2	0	0.95	0.23	0	1.00	1	1.00	1		0.02	0.24	1	-4.00	13.90
Item 3	0	0.83	0.37	0	1.00	1	1.00	1		0.03	0.45	1	-1.81	1.25
Item 4	0	0.85	0.36	0	1.00	1	1.00	1		0.02	0.43	1	-1.95	1.78
Item 5	0	0.86	0.34	0	1.00	1	1.00	1		0.02	0.40	1	-2.16	2.64
IQS-5														
Item 1	0	3.75	1.68	1	2.00	4	5.00	7		0.11	0.45	4	-0.01	-0.79
Item 2	0	3.43	1.58	1	2.00	4	5.00	7		0.11	0.46	4	0.05	-0.83
Item 3	0	3.67	1.53	1	2.25	4	5.00	7		0.10	0.42	4	-0.10	-0.54
Item 4	0	3.46	1.56	1	2.00	4	4.00	7		0.10	0.45	4	0.05	-0.73
Item 5	0	3.59	1.55	1	2.00	4	5.00	7		0.10	0.43	4	0.03	-0.70
EBS														
Item 1	0	3.77	0.86	1	3.00	4	4.00	5		0.06	0.23	4	-0.54	0.00
Item 2	0	3.50	0.92	1	3.00	4	4.00	5		0.06	0.26	4	-0.39	0.15
Item 3	0	3.62	0.98	1	3.00	4	4.00	5		0.07	0.27	4	-0.46	-0.33
Item 4	0	3.98	1.01	1	3.00	4	5.00	5		0.07	0.25	4	-0.94	0.40
Item 5	0	4.14	0.90	1	4.00	4	5.00	5		0.06	0.22	4	-1.29	1.99
Item 6	0	4.09	0.97	1	4.00	4	5.00	5		0.07	0.24	4	-1.21	1.23
Item 7	0	3.95	0.92	1	3.00	4	5.00	5		0.06	0.23	4	-0.76	0.18
Item 8	0	3.63	1.03	1	3.00	4	4.00	5		0.07	0.28	4	-0.54	-0.25
Item 9	0	3.56	1.14	1	3.00	4	4.00	5		0.08	0.32	4	-0.59	-0.38
Item 10	0	3.99	0.79	1	4.00	4	4.00	5		0.05	0.20	4	-1.03	2.05
Item 11	0	4.17	0.83	1	4.00	4	5.00	5		0.06	0.20	4	-1.28	2.33
Item 12	0	4.01	0.93	1	4.00	4	5.00	5		0.06	0.23	4	-0.99	0.90
Item 13	0	3.73	1.00	1	3.00	4	4.00	5		0.07	0.27	4	-0.50	-0.34
Item 14	0	4.09	1.02	1	4.00	4	5.00	5		0.07	0.25	5	-1.06	0.55
Item 15	0	3.46	1.01	1	3.00	4	4.00	5		0.07	0.29	4	-0.45	-0.07
Item 16	0	4.07	0.96	1	4.00	4	5.00	5		0.06	0.24	4	-1.17	1.31
Item 17	0	3.97	0.91	1	3.25	4	5.00	5		0.06	0.23	4	-0.98	1.32
Item 18	0	4.36	0.85	1	4.00	5	5.00	5		0.06	0.20	5	-1.38	1.74
Item 19	0	4.11	1.08	1	4.00	4	5.00	5		0.07	0.26	5	-1.27	1.02
Item 20	0	3.98	0.89	1	4.00	4	5.00	5		0.06	0.22	4	-1.07	1.60

## Dimensionality

The measurement model's factor loadings are presented in the following table.

Table 2: Measurement model loadings

	Latent factor								
	OTO C	TW	IQ	Payment	Flexibility	Security	Development	Promotion	People
OTOCS									
Item 1	0.56								
Item 2	0.75								
Item 3	0.67								
Item 4	0.70								
Item 5	0.69								
IQS-5									
Item 1		0.68							
Item 2		0.65							
Item 3		0.67							
Item 4		0.93							
Item 5		0.96							
IQS-5									
Item 1			0.67						
Item 2			0.64						
Item 3			0.85						
Item 4			0.62						
Item 5			0.53						
EBS									
Item 1				0.91					
Item 2				0.75					
Item 3				0.92					
Item 4					0.88				
Item 5					0.90				
Item 6					0.94				
Item 7						0.71			
Item 8						0.88			
Item 9						0.56			
Item 10							0.72		
Item 11							0.95		
Item 12							0.87		
Item 13							0.59		
Item 14								0.97	
Item 15								0.81	
Item 16									0.92
Item 17									0.85
Item 18									0.82
Item 19									0.89
Item 20									0.67

### 2.2.2.2 Gammas ( $\gamma$ )

The measurement model's structural weights (i.e. Employer Branding Scale) are presented in the following table.

Table 3: Measurement model's structural weights

satisfaction_with_pay	0.39
flexibility	0.70
security	0.78
development_opportunities	0.83
promotion	0.87
people_factors	0.94

Related with Employer branding instrument sub-groupshave different weights. Satisfaction with pay rates for 0.39 weight, flexibility scores for 0.70, security scores for 0.78, development opportunities 0.83. And the two highest scores were for promotion with 0.87 and people factors with 0.94.

### 2.2.2.3 Goodness-of-fit

The model presented an excellent fit to the data ( $\chi^2(548) = 888.655$ ;  $p < 0.001$ ;  $CFI = 0.987$ ;  $TLI = 0.986$ ;  $NFI = 0.967$ ;  $SRMR = 0.094$ ;  $RMSEA = 0.053$ ;  $P(RMSEA \leq 0.05) = 0.213$ ;  $90\%CI[0.047; 0.059]$ ) accordingly with the usual cut-off standards (Hu & Bentler, 1999).

### 3. Reliability: Internal consistency

The model's first-order internal consistency estimates are presented in the following table. As for the internal consistency for the first-order factors, it was good, since all were above 0.7.

Table 4: Reliability estimates: First-order

	OTO	TW	IQ	Payment	Flexibility	Security	Development	Promotion	People
$\alpha_{ordinal}$	0.80	0.87	0.79	0.90	0.93	0.76	0.85	0.88	0.91
$\omega$	0.78	0.76	0.78	0.86	0.89	0.72	0.82	0.85	0.89
AVE	0.46	0.62	0.45	0.75	0.83	0.53	0.63	0.80	0.70

Considering the satisfactory validity for AVE was assumed  $\geq .5$ , the model shows unsatisfactory values for openness towards organizational change and intention to quit, all other values are considered with satisfactory validity.

The model's second-order internal consistency estimates are presented in the following table. As for the internal consistency for the second-order factors, it was very good considering the values.

Table 5: Reliability estimates: Second-order

	Employer Branding
omegaL1	0.87
OmegaL2	0.89
partialOmegaL1	0.96

## 4. Structural Model

### 4.1 Betas ( $\beta$ )

Table 7: Paths Betas

Path ( $Y \leftarrow X$ )	$B$	$SE$	$Z$	$\beta$	p-value	95% $CI$
IQ <- TW	0.003	0.097	0.026	0.003	0.979	]-0.188; 0.193[
IQ <- EB	-0.231	0.147	-1.573	-0.124	0.116	]-0.519; 0.057[
IQ <- Interaction (EB*EB)	-0.286	0.089	-3.204	-0.148	0.001	]-0.462; -0.111[
OTOC <- IQ	0.124	0.072	1.720	0.142	0.085	]-0.017; 0.264[

Table 8: Moderation Paths Betas

Team Work levels	$B$	$SE$	$Z$	p-value
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-1	0.055	0.189	0.292	0.770
0	-0.231	0.147	-1.573	0.116
1	-0.517	0.153	-3.393	0.001

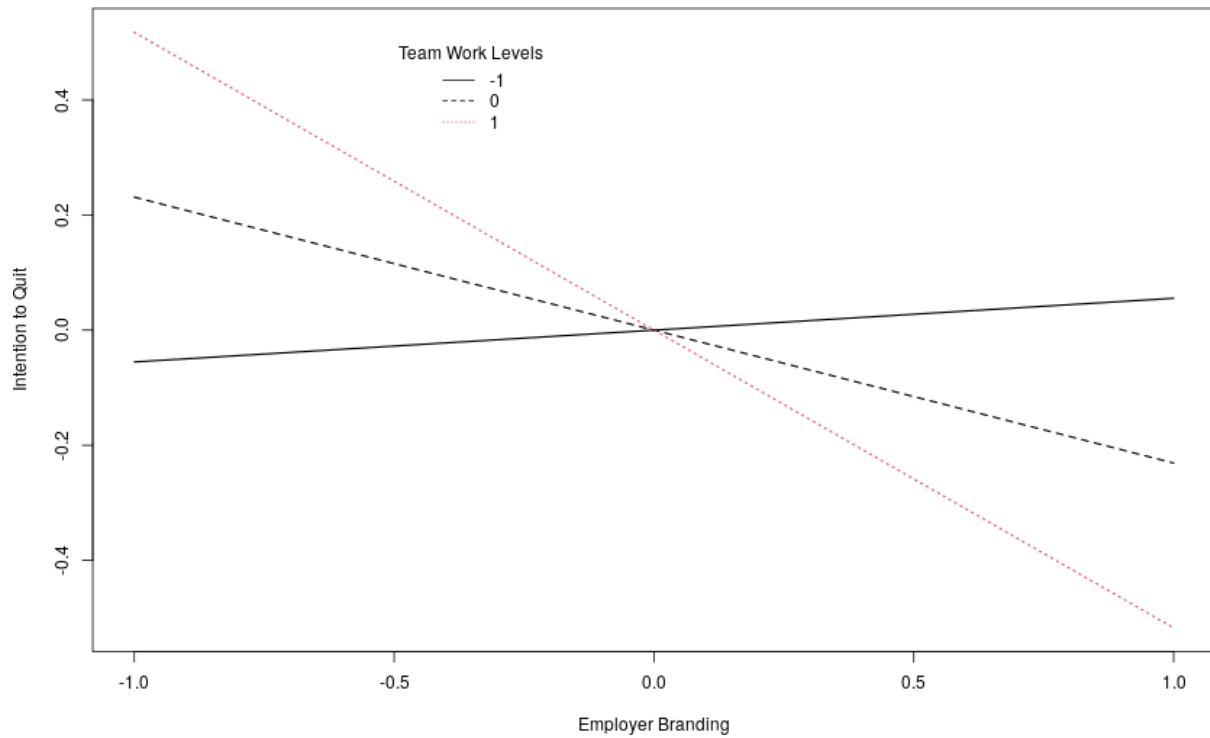


Figure 2: The moderation plot.

#### 4.1.1 Goodness-of-fit

The model presented an acceptable fit to the data ( $\chi^2(653) = 1934.25$ ;  $p < 0.001$ ;  $CFI = 0.95$ ;  $TLI = 0.95$ ;  $NFI = 0.93$ ;  $SRMR = 0.10$ ;  $RMSEA = 0.09$ ;  $P(rmse \leq 0.05) < 0.001$ ; 90% CI [0.09; 0.10]) accordingly with the usual cut-off standards (Hu & Bentler, 1999).

## DISCUSSION

The objective of each company is to accomplish significant degree of profit. These objectives are linked workers' knowledge and human capital. Workers are the main actors of the accomplishment of companies' objectives. Considering that these workers are willing to leave the company (turnover intentions) this may weak the company strategy to achieve these objectives.

This dissertation aimed to verify the relation between Intention to Quit and Openness to change, Teamwork and Employer Branding. To this end, several hypotheses were tested in order to verify which the most significant differences. Using a sample of 222 IT professionals in Portugal, this study examined the moderator effect of teamwork on the relationship between employer branding and turnover intentions. This study reasons that this model allows mitigating the turnover intentions related to employer branding, when introducing existing teamwork as a moderator.

Considering H1: when there are high levels of teamwork it works as a positive moderator between employer branding and intention to quit, the beta weight for a moderation ( $B=-0.517; p < 0.001$ ). This may mean that when there is high teamwork levels in a team and/or organization, the employer branding effect on turnover intentions, negatively influences the intention to quit by a decrease of 0.517. According to Burke et al., (2006) employer branding helps to retain talent and consequently reducing turnover. Later Westlund and Hannon (2008) found a significant predicting relationship between the software developers' turnover intentions and many facets of employer branding. A strong employer branding, moderated by the presence of teamwork may decrease the intention to quit in Portuguese Information Technology professionals. Increasing the importance of the teamwork between this professional class. But, in the same case, when there low teamwork, the construct does not work as a moderator. This may mean that when there are low levels of teamwork, does not moderate the relationship

between employer branding and intention to quit. According to Longenecker (2003), low levels of teamwork can increase the turnover intention. Considering H2: The intention to quit is positively related to the openness toward organizational change, the IQ is positively related but its  $p$ -value is marginally significant ( $p = 0.085$ ). On H2 the intention was to explore a construct that may be associated as an antecedent of turnover intentions. We intended to disclose a possible increase of openness to change when the intention to quit increase, among Information Technology Portuguese professionals, considering that according to Wanberg and Banas (2000) openness to change is related with turnover intentions. The consequences of turnover are financial consequences to the organization (Cascio, 2000). Controlling the employer branding packages and promoting teamwork among IT professionals may reduce potential turnover intentions and organization costs

### **Limitations of the study**

Despite being a non-probability sample, and thus does not allow to consider the sample as representative. Being a cross-sectional study, no causality can be inferred from the current findings. In any case, it is desirable that in the future the response rate be higher.

### **Conclusions**

Through this study it was possible to verify the moderation role of teamwork between employer branding and turnover intentions among Information technology professionals in Portugal. The importance of the teamwork and employer branding strategies to decrease the intention to quit among these professionals surges the need to IT companies to promote teamwork between remote/presential IT workers and the need to develop a brand that offers the conditions for an IT worker to stay in the company. This was the IT companies may decrease the chances of losing these professionals, on a sector that is highly competitive for its human resources.



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