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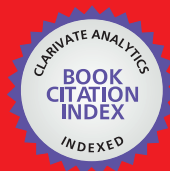
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Chapter

Emotions and Their Impact on Employee Happiness and Satisfaction in Organizational Performance

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Abstract

The objective of this study is to contextualize and understand the different emotions felt by employees, as well as their involvement and performance in the context of small and medium-sized Portuguese companies. An online questionnaire was developed, with a total of 227 participants; 210 were validated and 17 were excluded due to missing answers. Results show that as anger, anxiety and discouragement increase, happiness decreases; and, if there is an increase or an improvement in relationships, involvement and happiness increase, so do performance and satisfaction at work.

Keywords: emotions, job involvement, happiness, job satisfaction, job performance, turnover

1. Introduction

The main challenge of this study is to analyze the factors that can contribute to the constant search for a balance between the individual well-being of workers and their perceptions of their workplace. In other words, it seeks to verify which emotion impacts, positively or negatively, on satisfaction in the work environment.

The objective of the study is to contextualize and try to understand emotions — anxiety, discouragement, anger, happiness, interpersonal relationships — and their impact on the employee's involvement with their work, their satisfaction in the work environment, turnover intention, and level of performance.

The variables included, in this study, aim to understand the relationship between the following dimensions: anger and anxiety; anger and happiness; anxiety and happiness; anxiety and satisfaction; discouragement and anxiety; discouragement and happiness; happiness and job performance; happiness and satisfaction; happiness and turnover; interpersonal relationships and anxiety; interpersonal relationship and

satisfaction; satisfaction and job performance and satisfaction and turnover. They also aim to understand their impact, positive or negative, on the individual's performance at work.

We started by doing a brief literature review to better understand the state of the art and including the most relevant concepts and studies developed on the topic. Then, we developed an online questionnaire, with closed questions supported by a Likert scale, as a result of the bibliographic research carried out. The questionnaire was applied to a convenience sample, having been shared on the research team's social networks, for faster implementation. We then present the results analysis, main conclusions, limitations, and recommendations for future research.

2. Literature review, methodology and data analysis

2.1 Literature review

The analysis of employees' emotional states and their importance in satisfaction with their job is the central theme of this study. About this, previous studies [1] refer that those feelings are known as individual and subjective emotions that can trigger various events or behavioral reactions. Therefore, feelings can be interpreted as distinct emotions that are commonly felt. In a business context, it is useful to understand its impact on individuals' balance and satisfaction. The authors describe feelings from a psychological and sociological perspective, in the area of organizational research. It is crucial for companies to manage their workers' emotions and emotional intelligence, meaning to understand the degree to which a person can manage their different emotions and correctly direct their own thoughts and actions [2]. Feelings can be interpreted as distinct emotions that are commonly felt, such as anger or pleasure, which are assumed to match specific facial expressions and corporal signals (body language).

According to previous research [3], it is important to pay attention to relationships between people; this interpersonal component applies to the personal relationships between the various employees. For this personal component to exist, it is necessary to have mutual knowledge, and the deeper this is, the greater the probability of the parties getting closer, dialoguing with each other spontaneously. The author believes that this leads to seeing themselves as partners or even friends, with common interests and goals. Therefore, the author states that the greater the interaction between people, the better the mutual understanding and acceptance. This, in turn, leads to the creation of strong, lasting, and high-quality relationships between employees that translate into something positive for organizations [3]: commitment, (better) performance, motivation, (contribution) for innovation, error detection, widespread adoption of environmentally friendly practices, a taste for teamwork, mutual help, better organizational communication (internal and external), lower rate of abstention and conflict, and greater resilience to negative events that could come to translate into feelings of discouragement.

In a work context, there are some factors that can hinder the efficient management of emotions: specific circumstances, activities that need to be carried out, lack of time, and/or short deadlines. These are all aspects that can generate stress in the work environment [4]. This, in turn, impacts the health and well-being of any employee [5, 6]. When individuals perceive a high amount of work and are not able to control the associated stress, there is an adverse impact on their health [7]. Other authors [8, 9]

refer to “basic emotions”, such as fear, anger and joy, and consider that it seems to impact, not only the desire to remain in the organization but also the level of performance (actual vs. expected and desired).

That’s why interpersonal relationships must be promoted among employees, regardless of the type of company and the sector in which it operates [3]. Any organization wanting to contribute to sustainable development must monitor the quality of interpersonal relationships at work to minimize the propensity of employees to engage in counterproductive work behaviors. In this sense, the organizational environment must provide conditions for assertive communication and, also, promote favorable conditions for a good working environment.

About involvement at work, employees can have positive or negative feelings and that can affect aspects such as satisfaction, performance, and happiness at work. This range of feelings was verified in the study by [1]. A wide range of affective responses is correlated with employment and may involve general positive (pleasure, happiness) or negative (displeasure, frustration) and other feelings, including anger, frustration, joy, and excitement.

This study focuses on analyzing feelings of happiness, anxiety, anger, and discouragement. Thus, it is essential to find strategies that facilitate and contribute to the promotion of positive emotions and minimize negative ones. In a complementary way, the objective of sustainable human resource management is to get long-term goals and results, focusing on care for employees and the environment, employee participation and development, external partnership, flexibility, compliance with legal regulations, employee cooperation, equity and equality, all without affecting profitability [10].

Job satisfaction, another important issue to bear in mind, is a constant challenge for companies [11–13]. It is a concept that has been recognized and long studied as an important factor, which impacts an individual’s organizational commitment, performance, and intention to stay. Some authors report that learning more about their workers will help organizations establish training and development, as well as identify ways to promote a sustained interest of employees to continue carrying out their professional activity and superintendent position [13]. Given that, job satisfaction was identified as the main antecedent to turnover intention, the variables mentioned (job satisfaction and turnover intention) were chosen as a starting point for this study. Thus, we verified that it is necessary to increase positive emotions, satisfaction, involvement to decrease dissatisfaction, turnover, and the emergence of negative emotions.

With regard to turnover intention, it seems to decrease when employees feel integrated, understood, and relevant to the company [11], therefore, feeling satisfied at their job. It is also vital that top managers who have determined that they have quality hierarchical managers (mid-level managers and section heads) are interested in understanding what specific situations, factors, and circumstances cause discontent at work. As already mentioned, company managers have an important role in coordinating and keeping a collaborative and efficient organizational environment among all employees.

Work performance depends on the ability to manage emotions on the part of the various hierarchical managers, as well as on the acceptance and involvement of employees. In previous studies, competence, self-determination, and impact positively influence the work performance of employees [10]. Job satisfaction seems to lead to good job performance and to partially mediate the relationship between competence and job performance [10]; job performance and job flexibility appear to have a strong positive correlation and flexible working arrangements improve employee retention happiness and job satisfaction, increasing productivity [11, 13].

2.2 Methodology

In order to analyze how workers' emotional feelings, job involvement, and interpersonal relationships influence happiness and job satisfaction, and their impact on job performance and turnover intention, a quantitative study with a descriptive design was developed [14, 15].

Thus, based on the previous literature review [1–4, 10, 11, 16], the following hypotheses were defined:

- H1. There is a significant relationship between anger and anxiety.
- H2. There is a significant relationship between anger and happiness.
- H3. There is a significant relationship between anxiety and happiness.
- H4. There is a significant relationship between anxiety and satisfaction.
- H5. There is a significant relationship between dejection and anxiety.
- H6. There exists a significant relationship between dejection and happiness.
- H7. There is a significant relationship between happiness and job performance.
- H8. There is a significant relationship between happiness and satisfaction.
- H9. There is a significant relationship between happiness and turnover.
- H10. There is a significant relationship between interpersonal relationship and anxiety.
- H11. There is a significant relationship between interpersonal relationship and satisfaction.
- H12. There is a significant relationship between job involvement and anxiety.
- H13. There is a significant relationship between job involvement and satisfaction.
- H14. There is a significant relationship between satisfaction and job performance.
- H15. There is a significant relationship between satisfaction and turnover.

In order to validate the hypotheses and the research model under study, a questionnaire was developed for data collection and, later, data statistical analysis.

The theoretical model is composed of the structural model that incorporates nine constructs (latent variables: feeling of anxiety; feeling of dejection, feeling of anger; job involvement; interpersonal relationship; happiness of work; job satisfaction, job performance; and turnover intention) that represent the elements of the model developed and the measurement module formed by 57 items intended to measure the constructs (observable variables), as shown in **Table 1**. We used a Likert-type scale from 1 (strongly disagree) to 5 (strongly agree). Questionnaire can be consulted in the appendix.

To assess the emotional management and happiness of employees in organizations, we adopted the WORAF scale - work-related affective feeling [16], which includes three dimensions (feeling of anxiety, feeling of discouragement, and feeling of anger).

To assess the other constructs, we took into account the scales used in similar surveys: happiness at work [1]; work involvement [4]; interpersonal relationship [3]; happiness [1]; job satisfaction [1, 10]; work performance [10]; and turnover intention [11].

To analyze the research model created, the structural equation model (SEM) was used, a multivariate technique that combines aspects of multiple regression and factor analysis to estimate a series of interrelated dependence relationships simultaneously [17]. SEM requires the definition of two models: the measurement model and the structural model, which represent two sets of linear equations [18]. After using the SmartPLS® 3.0 Software, the measurement model was obtained, allowing to check of the observable variables (VO), with the respective connections and constructs, as shown in **Figure 1**.

Latent Variable	Number of Items	Authors	Scale
Feeling of anxiety	8	Jaworek, Marek & Karwowski (2020)	1 (strongly disagree) to 5 (strongly agree)
Feeling of dejection	5	Jaworek, Marek & Karwowski (2020)	1 (strongly disagree) to 5 (strongly agree)
Feeling angry	4	Jaworek, Marek & Karwowski (2020)	1 (strongly disagree) to 5 (strongly agree)
Interpersonal relationship	3	Szostek D. (2019)	1 (strongly disagree) to 5 (strongly agree)
Job Involvement	7	Pelfrene et al. (2003)	1 (strongly disagree) to 5 (strongly agree)
Job Satisfaction	11	Çakit et al., 2020	1 (strongly disagree) to 5 (strongly agree)
Davidescu et al. (2020)			
Happiness	7	Çakit et al., 2020	1 (strongly disagree) to 5 (strongly agree)
Turnover intention	8	O'Connor J. (2018)	1 (strongly disagree) to 5 (strongly agree)
Job performance	3	Davidescu et al. (2020)	1 (strongly disagree) to 5 (strongly agree)

Table 1.
Conceptual model–variables.

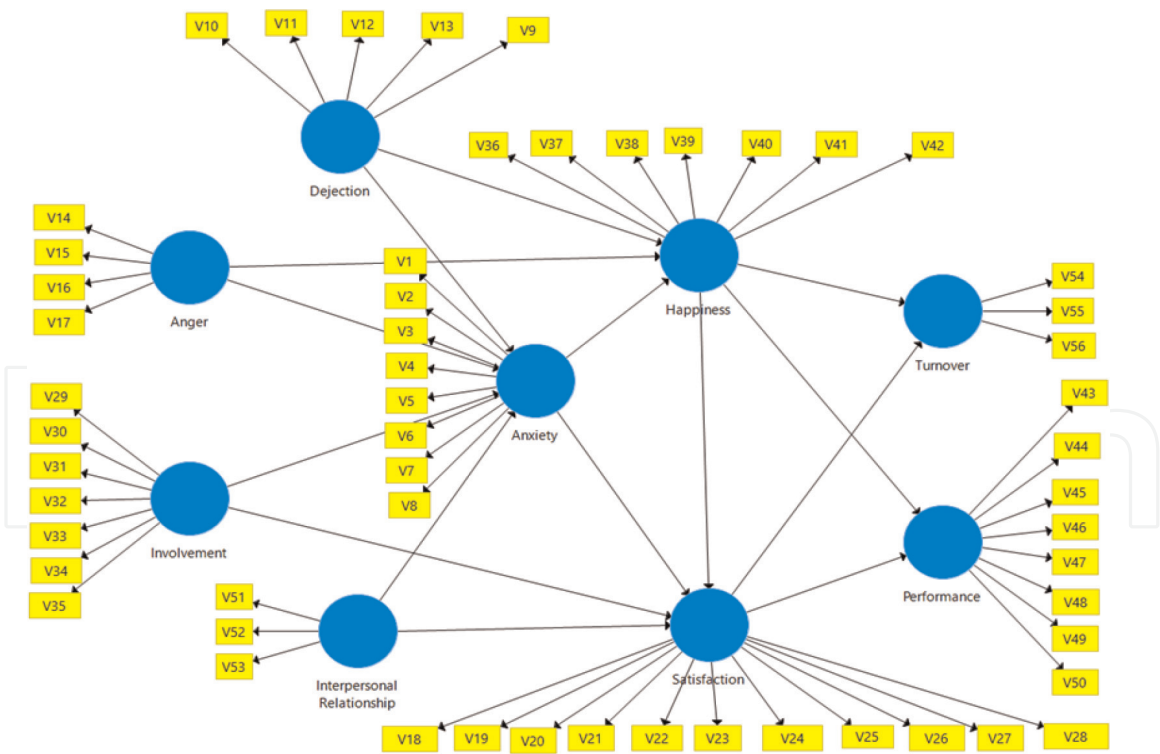


Figure 1.
Path model.

Despite the non-probabilistic convenience sample obtained [14], the G*Power software was used [17] to calculate the sample size; with an f^2 of 0.15, a minimum sample of 189 respondents was estimated.

		n	%
Gender	Male	92	43.8
	Female	118	56.2
Age groups	20–30 years	25	11.9
	31–40 years	40	19
	41–50 years	90	42.9
	51–60 years	42	20
	61–70 years	10	4.8
	+ 71 years	3	1.4
Qualifications	Secondary	21	10.0
	Bachelor	77	36.7
	Master	62	29.5
	Doctorate	50	23.8
Work experience	0 to 3 years	63	30.0
	4 to 9 years	40	19.0
	10 to14 years	21	10.0
	15 to 19 years	28	13.3
	+ 20 years	58	27.6

Table 2.
Sample characterization.

227 questionnaires were collected and 210 were validated (92.5%), allowing the analysis using the SmartPLS® 3.0. 56.2% of respondents were female, against 43.8% of male participants. The sample was distributed between 21 and 73 years of age, so six age groups were created, as shown in **Table 2**. It should be noted that 42.9% of respondents were aged between 41 and 50 years (90 individuals) and that only 6.2% (13 individuals) were over 61 years of age. With regard to educational qualifications, most of the sample reveals that they have graduated in higher education, with 11.6% having a PhD degree and 30.2% having a Master’s degree. Most respondents reveal that they have been in their current job for a short time; thus, 30% of respondents (60) have been in the same company for one, two, or three years (range from 1 to 3); 19% (40) reported being in the same company and in the same service in the time horizon between 4 and 9 years. Only 23.3% of the participants indicate being in the same company for more than 10 years.

2.3 Data analysis

For descriptive statistics (demographic information, frequencies, mean and standard deviation analysis) in SPSS, version 25 (statistical package for social sciences) were performed; other statistical analyses were conducted in SmartPLS 3.0 (partial least squares) software. Confirmatory factor analysis, reliability and convergent validity, discriminant validity, path coefficients, hypothesis testing, and PLS-SEM were used to investigate the relationships among model factors.

(Total mean)	Strongly disagree	Disagree	Undecided	Agree	Strongly agree	M	SD
	1	2	3	4	5		
	F (%)	F (%)	F (%)	F (%)	F (%)		
Feeling of anxiety	119 (56.7)	48 (22.9)	19 (9)	18 (8.6)	6 (2.9)	1.78	1102
Feeling of dejection	116 (55.3)	42 (20)	23 (11)	15 (7.1)	14 (6.6)	1.9	1192
Feeling of anger	103 (49.1)	49 (23.3)	28 (13.3)	18 (8.6)	12 (5.7)	1.98	1183
Interpersonal relationship	11 (5.1)	19 (8.9)	31 (147)	73 (34.6)	77 (36.7)	3.89	1097
Job involvement	7 (3.3)	18 (8.3)	46 (22.1)	75 (35.7)	64 (30.6)	3.82	1035
Job satisfaction	25 (11.9)	32 (15.2)	46 (21.9)	61 (29.1)	46 (21.9)	3.34	1141
Happiness	9 (4.3)	18 (8.5)	38 (18.1)	82 (39.1)	63 (30)	3.81	1071
Job performance	- -	3 (1.4)	24 (11.5)	104 (43.8)	79 (37.3)	4.22	0,692
Turnover intention	97 (46.1)	36 (17.1)	34 (16.3)	23 (10.8)	20 (9.7)	2.21	1371

Table 3.
Descriptive statistics per dimension.

Table 3 presents the aggregated data of the nine dimensions, using descriptive statistics: absolute and relative frequencies, mean and standard deviation. In summary, the total mean values allow us to conclude that most respondents totally disagree (56.7%) and disagree (22.9%) with the statements presented, indicating a low feeling of anxiety (M = 1.78; SD = 1.102). The same happens with the “feeling of discouragement”; it was possible to verify that the majority of the respondents (55.3%) disagreed with the set of statements presented (M = 1.9; SD:1.192). The “feeling of anger” has an identical behavior, with the majority of respondents totally disagreeing (49.1%) or disagreeing (23.3%) with the statements presented (M = 1.98; SD = 1.183). In turn, the dimension “interpersonal relationship” shows high percentages of agreement (34.6%) and total agreement (36.7%) with the statements presented (M = 3.89; SD = 1.097). The same happens with the dimension “involvement at work”, with the majority (66.3%) of the respondents agreeing and fully agreeing with the set of statements presented (M = 3.82; SD = 1.035). Respondents seem to be satisfied with their work, as they agree (29.1%) and totally agree (21.9%) with the statements presented (M = 3.34; SD = 1.1141). Likewise, the dimension “feeling of happiness” has high levels of agreement (69.1%), which means that respondents are satisfied with their work (M = 3.81; SD = 1.071). The perception of “work performance” is high, with 81.1% agreeing and fully agreeing with the set of statements presented (M = 4.22; SD = 0.692). The study reveals low turnover intention (M = 2.21; SD = 1.371), with 63.2% totally disagreeing with the statements presented.

2.3.1 Reliability and convergent validity of the scale

To assess internal consistency, Cronbach's Alpha (Alpha) was used; to assess the measurement model, a confirmatory factor analysis (CFA) was performed. The questionnaire reveals good internal consistency (Alpha = 0.919), based on the 56 items that make up the scale. All the values of the nine dimensions are greater than 0.887 (**Table 4**), which reveals a good internal consistency.

The first aspect to be observed in the measurement models is the Convergent Validities, obtained from the observations of average variances extracted (AVEs). We followed Fornell and Larcker criterion [18]: AVEs values must be greater than 0.50 ($AVE > 0.50$) [19].

The convergent validity tests of the constructs with values above 0.5—1st Order LV—attest to the convergent validity of the scale. On the other hand, it can be observed that the factor loadings of VO in the original constructs (VL) are always higher than in the others; this confers discriminant validity to the model [20].

The structural model was found to satisfy all relevant reliability and validity requirements, as follows: Cronbach's alfa > 0.8 ; $\rho_A > 0.8$; composite reliability (CR) > 0.9 ; and average variance extracted (AVE) > 0.5 (**Table 4**).

With regard to cross-loads, it is intended to verify whether each item has a greater ratio/weight to the construct to which it is related than to the others [21]. **Table 5** proves that the criterion was also met.

After verifying the conditions mentioned above, it can be concluded that the model meets the criteria of convergent and discriminant validity, guaranteeing the consistency of its construction and statistical inference. Following the analysis of the structural model and considering that our study is related to correlations and linear regressions, we evaluated whether these relationships are significant ($p \leq 0.05$), because for cases of correlation, the null hypothesis (H_0) is established as $r = 0$ and for regression cases, it is established with $H_0: \Gamma = 0$ (path coefficient = 0). If $p > 0.05$ the H_0 is accepted, the inclusion of VL or VO in SEM should be reconsidered.

Table 6 presents the data related to the procedure, described above, with 500 resamplings, pertinent to the values of Student's t test, p values.

Only five values are below 0.7, which is not a cause for concern, considering the reliability studies presented above. The results presented for the modules —structural and measurement—point to the adherence of reliability, consistency, and explanation of the constructs, therefore validating the conceptual model proposed on the factorial aspects based on the 9 (nine) constructs and on the 56 variables. It is possible to verify the significance of each item for the variables, through the external weights, which analyze the significance of each item for the formative variable [18]: all scores are significant ($p = 0.000$).

Likewise, it is possible to verify the significance between the variables, through the external weights (**Table 7**), which analyze the significance of each item for the formative variable [18], in which all scores are significant ($p = 0.000$).

2.3.2 Structural model assessment

After validating the measurement model, we needed to calculate the structural model criteria. Considering that this study was carried out using correlations and linear regressions, it was evaluated whether these relationships were significant ($p \leq 0.05$). For correlation cases, the null hypothesis (H_0) is established as $r = 0$ and

	Cronbach's Alpha	1	2	3	4	5	6	7	8	9
1. Anger	0.929	0.909								
2. Anxiety	0.935	0.828	0.831							
3. Dejection	0.928	0.827	0.791	0.882						
4. Happiness	0.948	−0.702	−0.643	−0.745	0.876					
5. Interp. Relationship	0.877	−0.578	−0.571	−0.543	0.721	0.896				
6. Involvement	0.934	−0.642	−0.604	−0.693	0.903	0.631	0.848			
7. Job Satisfaction	0.909	−0.154	−0.274	−0.216	0.442	0.408	0.475	0.736		
8. Performance	0.880	−0.657	−0.587	−0.684	0.834	0.758	0.790	0.355	0.727	
9. Turnover	0.935	0.652	0.560	0.699	−0.736	−0.581	−0.675	−0.261	−0.734	0.941
Composite Reliability		0.950	0.947	0.946	0.958	0.924	0.947	0.924	0.904	0.959
rho-A		0.901	0.848	0.897	0.917	0.900	0.909	0.815	0.886	0.938
Average Variance Extracted (AVE)		0.826	0.691	0.779	0.766	0.804	0.719	0.529	0.541	0.886

Table 4.
Discriminant validity-Fornell Larcker criterion.

	Anxiety	Dejection	Anger	Satisfaction	Invol	Happiness	Performance	Int. Relat	Turnover
V1	0.833	0.651	0.661	−0.447	−0.482	−0.487	−0.249	−0.469	0.416
V2	0.869	0.667	0.690	−0.452	−0.508	−0.529	−0.253	−0.426	0.417
V3	0.909	0.691	0.738	−0.523	−0.479	−0.536	−0.193	−0.514	0.485
V4	0.810	0.644	0.690	−0.488	−0.507	−0.532	−0.131	−0.456	0.459
V5	0.821	0.651	0.693	−0.405	−0.461	−0.477	−0.186	−0.385	0.431
V6	0.822	0.703	0.774	−0.651	−0.574	−0.658	−0.242	−0.652	0.613
V7	0.685	0.458	0.471	−0.341	−0.431	−0.444	−0.372	−0.310	0.295
V8	0.880	0.728	0.723	−0.531	−0.538	−0.595	−0.264	−0.505	0.533
V9	0.740	0.875	0.733	−0.539	−0.575	−0.614	−0.135	−0.468	0.576
V10	0.797	0.909	0.806	−0.579	−0.633	−0.655	−0.198	−0.506	0.599
V11	0.716	0.931	0.780	−0.622	−0.632	−0.694	−0.232	−0.500	0.660
V12	0.511	0.779	0.588	−0.645	−0.594	−0.636	−0.203	−0.410	0.611
V13	0.700	0.910	0.724	−0.649	−0.625	−0.695	−0.208	−0.506	0.648
V14	0.764	0.762	0.926	−0.629	−0.610	−0.698	−0.124	−0.516	0.639
V15	0.766	0.802	0.929	−0.608	−0.614	−0.648	−0.126	−0.531	0.613
V16	0.746	0.750	0.899	−0.598	−0.573	−0.636	−0.151	−0.569	0.634
V17	0.731	0.684	0.880	−0.552	−0.527	−0.572	−0.178	−0.485	0.478
V18	−0.247	−0.322	−0.368	0.540	0.387	0.367	0.054	0.327	−0.410
V19	−0.470	−0.502	−0.478	0.779	0.573	0.635	0.244	0.623	−0.560
V20	−0.283	−0.366	−0.370	0.676	0.511	0.529	0.250	0.525	−0.442
V21	−0.462	−0.493	−0.524	0.772	0.500	0.581	0.252	0.640	−0.514
V22	−0.333	−0.350	−0.334	0.595	0.369	0.396	0.085	0.482	−0.342
V23	−0.425	−0.560	−0.505	0.763	0.668	0.697	0.340	0.465	−0.596
V24	−0.441	−0.523	−0.455	0.758	0.554	0.553	0.267	0.537	−0.540
V25	−0.458	−0.496	−0.509	0.786	0.546	0.577	0.258	0.578	−0.560

	Anxiety	Dejection	Anger	Satisfaction	Invol	Happiness	Performance	Int. Relat	Turnover
V26	−0.404	−0.537	−0.469	0.673	0.642	0.666	0.358	0.444	−0.567
V27	−0.551	−0.566	−0.581	0.792	0.593	0.689	0.244	0.826	−0.589
V28	−0.519	−0.654	−0.582	0.809	0.810	0.816	0.394	0.552	−0.655
V29	−0.575	−0.618	−0.587	0.733	0.885	0.786	0.455	0.595	−0.597
V30	−0.622	−0.715	−0.668	0.792	0.925	0.869	0.429	0.652	−0.710
V31	−0.595	−0.660	−0.644	0.761	0.893	0.812	0.365	0.587	−0.646
V32	−0.463	−0.520	−0.529	0.585	0.803	0.676	0.330	0.456	−0.486
V33	−0.484	−0.579	−0.498	0.631	0.841	0.783	0.473	0.509	−0.549
V34	−0.327	−0.379	−0.314	0.484	0.727	0.613	0.387	0.378	−0.370
V35	−0.440	−0.574	−0.484	0.614	0.845	0.780	0.395	0.503	−0.573
V36	−0.503	−0.657	−0.555	0.749	0.838	0.896	0.418	0.571	−0.640
V37	−0.525	−0.700	−0.603	0.767	0.853	0.944	0.401	0.629	−0.699
V38	−0.496	−0.690	−0.601	0.743	0.826	0.915	0.378	0.590	−0.704
V39	−0.516	−0.658	−0.591	0.734	0.838	0.918	0.410	0.560	−0.686
V40	−0.691	−0.677	−0.742	0.701	0.746	0.845	0.378	0.629	−0.636
V41	−0.631	−0.581	−0.640	0.743	0.667	0.774	0.328	0.835	−0.603
V42	−0.588	−0.602	−0.570	0.660	0.753	0.823	0.412	0.620	−0.524
V43	−0.221	−0.148	−0.129	0.230	0.354	0.334	0.680	0.252	−0.188
V44	−0.138	−0.074	−0.079	0.218	0.304	0.277	0.762	0.284	−0.146
V45	−0.182	−0.198	−0.100	0.252	0.377	0.359	0.749	0.276	−0.222
V46	−0.171	−0.118	−0.065	0.235	0.306	0.279	0.720	0.300	−0.152

Convergent Validity: All factor loadings are significant at 1%.

Table 5.
Cross-load criterion-convergent validity.

	Fator Loadings	STDEV	T Statistics	P Values
V1 < - Anxiety	0.832	0.025	33.395	0.000
V10 < - Dejection	0.912	0.013	69.140	0.000
V11 < - Dejection	0.931	0.012	76.822	0.000
V12 < - Dejection	0.771	0.034	22.928	0.000
V13 < - Dejection	0.908	0.015	61.879	0.000
V14 < - Anger	0.927	0.012	75.572	0.000
V15 < - Anger	0.928	0.013	71.262	0.000
V16 < - Anger	0.898	0.018	49.744	0.000
V17 < - Anger	0.882	0.016	55.513	0.000
V18 < - Satisfaction	0.540	0.057	9.562	0.000
V19 < - Satisfaction	0.779	0.034	22.624	0.000
V2 < - Anxiety	0.869	0.020	42.690	0.000
V20 < - Satisfaction	0.678	0.036	18.763	0.000
V21 < - Satisfaction	0.770	0.029	26.926	0.000
V22 < - Satisfaction	0.590	0.052	11.345	0.000
V23 < - Satisfaction	0.766	0.029	26.207	0.000
V24 < - Satisfaction	0.756	0.031	24.078	0.000
V25 < - Satisfaction	0.784	0.029	26.880	0.000
V26 < - Satisfaction	0.676	0.039	17.208	0.000
V27 < - Satisfaction	0.789	0.028	28.272	0.000
V28 < - Satisfaction	0.812	0.023	35.949	0.000
V29 < - Involvement	0.888	0.015	60.488	0.000
V3 < - Anxiety	0.910	0.012	74.540	0.000
V30 < - Involvement	0.927	0.009	102.176	0.000
V31 < - Involvement	0.896	0.012	72.486	0.000
V32 < - Involvement	0.803	0.035	22.616	0.000
V33 < - Involvement	0.838	0.024	35.435	0.000
V34 < - Involvement	0.723	0.050	14.452	0.000
V35 < - Involvement	0.841	0.027	31.193	0.000
V36 < - Happiness	0.900	0.016	55.206	0.000
V37 < - Happiness	0.947	0.007	135.768	0.000
V38 < - Happiness	0.919	0.011	82.277	0.000
V39 < - Happiness	0.922	0.014	64.922	0.000
V4 < - Anxiety	0.811	0.033	24.428	0.000
V40 < - Happiness	0.842	0.021	40.438	0.000
V41 < - Happiness	0.767	0.034	22.750	0.000
V42 < - Happiness	0.818	0.029	27.849	0.000
V43 < - Performance	0.693	0.044	15.872	0.000

	Fator Loadings	STDEV	T Statistics	P Values
V44 < - Performance	0.773	0.043	17.812	0.000
V45 < - Performance	0.763	0.037	20.715	0.000
V46 < - Performance	0.714	0.054	13.159	0.000
V47 < - Performance	0.683	0.061	11.139	0.000
V48 < - Performance	0.709	0.056	12.671	0.000
V49 < - Performance	0.732	0.044	16.492	0.000
V5 < - Anxiety	0.820	0.027	30.566	0.000
V50 < - Performance	0.815	0.030	27.485	0.000
V51 < - Interpersonal Relationship	0.931	0.010	90.662	0.000
V52 < - Interpersonal Relationship	0.935	0.010	90.155	0.000
V53 < - Interpersonal Relationship	0.818	0.035	23.551	0.000
V54 < - Turnover	0.946	0.011	86.034	0.000
V55 < - Turnover	0.922	0.018	51.292	0.000
V56 < - Turnover	0.955	0.008	120.735	0.000
V6 < - Anxiety	0.823	0.025	33.066	0.000
V7 < - Anxiety	0.684	0.051	13.312	0.000
V8 < - Anxiety	0.880	0.018	47.669	0.000
V9 < - Dejection	0.879	0.020	43.563	0.000

Note: Values >0,7; p = 0,000.

Table 6.
Outer loadings.

	Mean (M)	STDEV	T Statistics	P Values
Anxiety - > Anger	0.828	0.027	30.491	0.000
Dejection - > Anger	0.827	0.029	28.817	0.000
Dejection - > Anxiety	0.792	0.031	25.665	0.000
Happiness - > Anger	-0.701	0.040	17.499	0.000
Happiness - > Anxiety	-0.643	0.043	14.968	0.000
Happiness - > Dejection	-0.744	0.036	20.924	0.000
Interpersonal Relationship - > Anger	-0.580	0.050	11.611	0.000
Interpersonal Relationship - > Anxiety	-0.573	0.051	11.178	0.000
Interpersonal Relationship - > Dejection	-0.544	0.055	9.835	0.000
Interpersonal Relationship - > Happiness	0.721	0.037	19.569	0.000
Involvement - > Anger	-0.643	0.045	14.244	0.000
Involvement - > Anxiety	-0.605	0.045	13.468	0.000
Involvement - > Dejection	-0.693	0.039	17.648	0.000
Involvement - > Happiness	0.902	0.015	58.316	0.000
Involvement - > Interpersonal Relationship	0.633	0.041	15.499	0.000

	Mean (M)	STDEV	T Statistics	P Values
Performance - > Anger	-0.163	0.074	2.064	0.039
Performance - > Anxiety	-0.278	0.071	3.857	0.000
Performance - > Dejection	-0.223	0.075	2.874	0.004
Performance - > Happiness	0.451	0.063	7.005	0.000
Performance - > Interpersonal Relationship	0.413	0.057	7.109	0.000
Performance - > Involvement	0.482	0.061	7.731	0.000
Satisfaction - > Anger	-0.658	0.044	14.938	0.000
Satisfaction - > Anxiety	-0.589	0.045	13.090	0.000
Satisfaction - > Dejection	-0.685	0.042	16.455	0.000
Satisfaction - > Happiness	0.836	0.031	26.676	0.000
Satisfaction - > Interpersonal Relationship	0.760	0.030	25.566	0.000
Satisfaction - > Involvement	0.792	0.034	22.994	0.000
Satisfaction - > Performance	0.364	0.065	5.464	0.000
Turnover - > Anger	0.651	0.048	13.597	0.000
Turnover - > Anxiety	0.559	0.057	9.813	0.000
Turnover - > Dejection	0.698	0.047	14.989	0.000
Turnover - > Happiness	-0.735	0.032	22.723	0.000
Turnover - > Interpersonal Relationship	-0.582	0.050	11.694	0.000
Turnover - > Involvement	-0.674	0.039	17.438	0.000
Turnover - > Performance	-0.267	0.067	3.872	0.000
Turnover - > Satisfaction	-0.736	0.037	20.014	0.000

Table 7.
External weights.

for regression cases, it is established as $H_0: \Gamma = 0$ (path coefficient = 0). If $p > 0.05$ and H_0 is accepted, the inclusion of VL or VO in SEM should be reconsidered.

To verify the statistically significant hypotheses, significance tests were carried out in the Smart PLS 3.0 software, obtaining the results through bootstrap, with 500 subsamples. As stated by Henseler et al. [21], in the evaluation of the structural model, three aspects must be analyzed: (1) the trajectory coefficients, (2) the determination coefficients (R and R^2), and (3) the relevance of the f^2 coefficients.

After analyzing the trajectory coefficients at the level of significance and relevance of the coefficients, it was found that not all the hypotheses initially proposed were confirmed. As can be seen in **Figure 2** and **Table 8**, hypotheses H3, H4, H10, H12, and H14 were not supported by the data collected. The hypotheses H1, H2, H5, H6, H7, H8, H9, H11, H13, and H15 proved to be statistically significant ($p < 0.05$), so they were confirmed.

The results of the evaluation of Pearson's coefficients of determination (R^2), as shown in **Table 9**, point to a high degree of adjustment and adherence regarding the explanation of the variable "anxiety" ($R^2 = 0.729$), "satisfaction" ($R^2 = 0.757$), "turn-over" ($R^2 = 0.589$), "happiness" ($R^2 = 0.78$) and "performance" ($R^2 = 0.196$), the

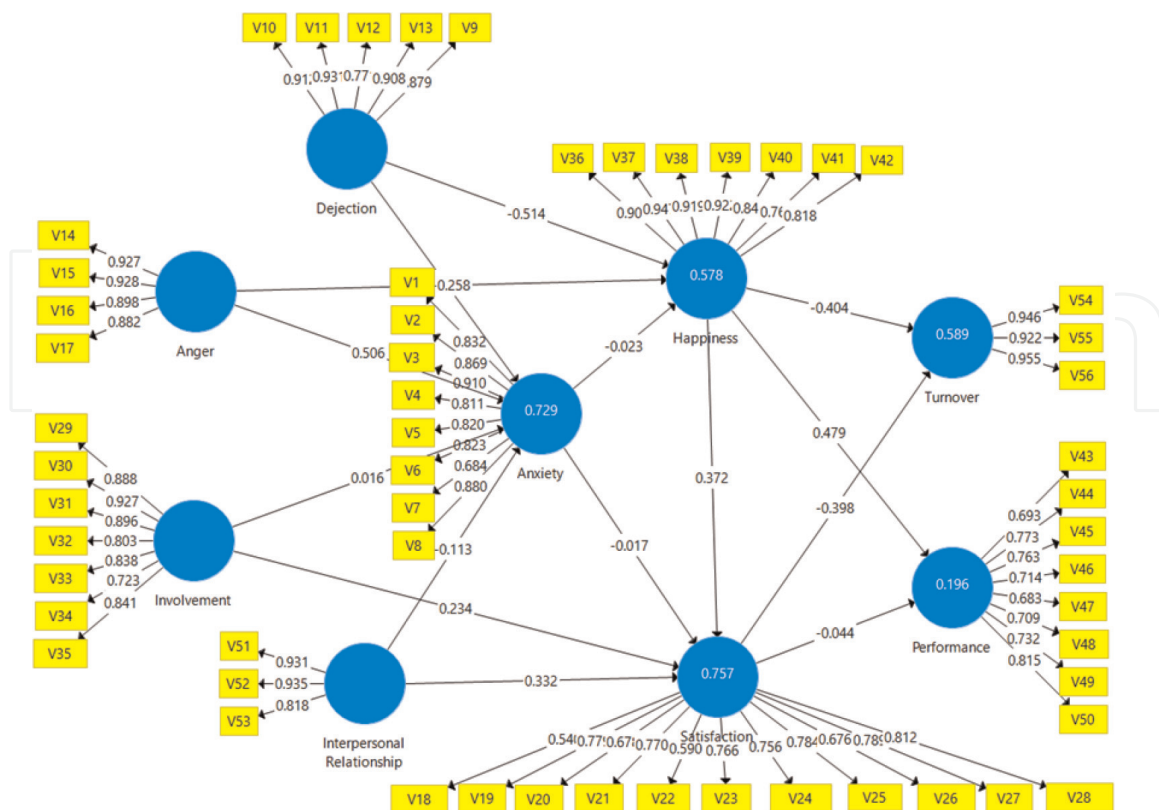


Figure 2.
Structural model with standardized path coefficients.

	Hypothesis	Sample Mean (M)	STDEV	T Statistics	P Values	Confirmation of the hypothesis
H1	Anger -> Anxiety	0.506	0.102	4.937	0.000	Confirmed
H2	Anger -> Hap	-0.258	0.111	2.323	0.021	Confirmed
H3	Anxiety -> Hap	-0.023	0.094	0.240	0.810	no
H4	Anxiety -> Satisf	-0.017	0.039	0.434	0.664	no
H5	Dej -> Anxiety	0.328	0.108	2.997	0.003	Confirmed
H6	Dej -> Hap	-0.514	0.097	5.285	0.000	Confirmed
H7	Hap -> Perfor	0.479	0.117	4.084	0.000	Confirmed
H8	Hap -> Satisf	0.372	0.088	4.239	0.000	Confirmed
H9	Hap -> Turnover	-0.404	0.101	3.990	0.000	Confirmed
H10	Int. Relat. -> Anxiety	-0.113	0.065	1.738	0.083	no
H11	Int. Relat. -> Satisf	0.332	0.043	7.721	0.000	Confirmed
H12	Involv -> Anxiety	0.016	0.068	0.227	0.820	no
H13	Involv -> Satisf	0.234	0.086	2.730	0.007	Confirmed
H14	Satisf -> Perfor	-0.044	0.122	0.361	0.718	no
H15	Satisf -> Turnover	-0.398	0.101	3.940	0.000	Confirmed

Table 8.
Significance results and hypothesis testing.

	R Square	R Square Adjusted
Feel of Anxiety	0.729	0.723
Happiness	0.578	0.575
Job Performance	0.196	0.190
Job Satisfaction	0.757	0.752
Turnover intention	0.589	0.585

Table 9.
Determination coefficient.

latter considered a weak effect according to the criteria of Cohen (1988) and Chin (1988), not allowing it to be explained by the model [20–22].

Changes in discouragement, anger at work, work involvement, and interpersonal relationships affect anxiety, with $R^2 = 0.729$. That is, anxiety is affected by discouragement, anger at work, involvement at work, and interpersonal relationships, with a contribution of 72.9%. Likewise, discouragement, anxiety, and anger at work play a crucial role in happiness, with $R^2 = 0.578$. Happiness, anxiety, involvement, and interpersonal relationships affect anxiety, with $R^2 = 0.757$. Happiness and satisfaction affect turnover intention and, finally, happiness and satisfaction affect job performance (Table 9 and Figure 2).

The study carried out and based on the patterns illustrated in Figure 2, allows us to conclude that: (1) as anger at work increases, happiness at work decreases; (2) as anxiety at work increases, happiness at work decreases; (3) as discouragement at work increases, so does anxiety at work; (4) as anger at work increases, so does anxiety at work; (5) as involvement at work increases, so does anxiety at work; (6) as involvement at work increases, so does satisfaction at work; (7) as interpersonal relationships increases, so does satisfaction at work; (8) as interpersonal relationship increases, anxiety at work decreases; (9) as anxiety increases, satisfaction at work decreases; (10) as happiness increases, so does job satisfaction; (11) as happiness increases, so does job performance; (12) as happiness increases, turnover intentions decreases; (13) as satisfaction increases, turnover intentions decreases (14) as satisfaction increases, job performance decreases.

3. Discussion and conclusions

This research is in line with previous studies [1] stating that general positive feelings (pleasure, happiness) in the work context seem to impact turnover rates; in fact, also in this study, we saw that (1) happiness and satisfaction affect the turnover intention and (2), happiness and satisfaction affect job performance. Negative feelings (e.g., displeasure) and other feelings, including anger and frustration, cause anxiety, according to the participants’ answers in this study.

Job satisfaction, being an important issue to consider, is a constant challenge for companies, as mentioned in some studies [11–13]. It is a concept that has been recognized and studied for a long period of time as an important factor that impacts organizational commitment, performance, and the employee’s intention to stay in organizations. In a specific way, we noticed that, as anger and discouragement increase, anxiety at work also increases. On the other side, promoting involvement

and good interpersonal relationships seems to contribute to an increase in job satisfaction. Our study highlights that, (1) as interpersonal relationships increase, workplace anxiety decreases; (2) if anxiety increases, job satisfaction decreases; (3) if happiness, satisfaction, and performance increase, turnover intentions decrease. Although not expected, this study reveals that as satisfaction increases, performance decreases. This may allow us to say that any organization needs to bear in mind the constant development of Human Resources practices and methods that allow engaging workers; interesting training actions, teamwork, new forms of reward, and career development may keep employees aware of the need for constant commitment and personal development, thus avoiding any decrease on job performance.

To summarize, this study allowed us to verify that negative emotions, such as anger and discouragement, contribute to the increase in anxiety. Also, aspects such as involvement and interpersonal relationships seem to contribute to better performance, satisfaction, and happiness. However, increasing satisfaction seems to lead to a decrease in performance.

The research findings have managerial implications by showing us that motivation needs to be constantly rethought in order to contribute to committed and challenged employees, aware of the need to maintain and improve their level of performance.

The main limitations of this research are related to having a convenience sample and data obtained through an online questionnaire; these aspects do not allow for extrapolating results to the Portuguese population and, also, to all national companies. For future research, we suggest the use of a statistically representative sample, as well as combining the study with insights from the owners and managers of some companies, representing the main Portuguese economic sectors—qualitative study, such as Delphi, personal interviews and/or observation (case study)—and focusing, also, on employees' engagement.

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Conflict of interest

The authors declare no conflict of interest.

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References

- [1] Çakit E, Karwowski W, Marek T, Jaworek, Wrobel G. A cross-sectional study of the relationships between work-related affective feelings expressed by workers in Turkey. *International Journal of Environmental Research and Public Health*. 2020;**17**(24):1-13. DOI: 10.3390/ijerph17249470
- [2] Ekman P. What scientists who study emotion agree about. *Perspectives Psychology Science*. 2016; **11**:31-34
- [3] Szostek D. The impact of the quality of interpersonal relationships between employees on counterproductive work behavior: A study of employees in Poland. *Sustainability*. 2019;**11**(21):5916. DOI: 10-3390/su11215916
- [4] Pelfrene E, Vlerick P, Moreau M, Mak RP, Kornitzer M, De Backer G. Perceptions of job insecurity and the impact of world market competition as health risks: Results from Belstress. *Journal of Occupational and Organizational Psychology*. 2003; **76**(4):411-425. DOI: 10.1348/096317903322591569
- [5] Bonn TL. The complete guide to book marketing. *Publishing Research Quarterly*. 2000;**16**(2):98 <https://link.gale.com/apps/doc/A69653011/AONE?u=anon~14809615&sid=googleScholar&xid=e2dba356>
- [6] Ferrie JE, Shipley MJ, Stansfeld SA, Marmot MG. Effects of chronic job insecurity and change in job security of self reported health, minor psychiatric morbidity, physiological measures, and health related behaviours in British civil servants: The Whitehall II study. *Journal of Epidemiol Community Health*. 2002;**56**:450-454. DOI: 10.1136/jech.56.6.450
- [7] Karasek RA. Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*. 1979; **24**:285-308. DOI: 10.3390/bs7040066
- [8] Ekman P. All emotions are basic. In: Ekman P, Davidson R, editors. *The Nature of Emotion: Fundamental Questions*. New York, NY: Oxford University Press; 1994
- [9] Shaver P, Schwartz J, Kirson D, O'Connor C. Emotion knowledge: Further exploration of a prototype approach. *Journal of Personality and Social Psychology*. 1987;**52**: 1061-1086
- [10] Davidescu AAQ, Apostu S-A, Paul A, Casuneanu I. Work, flexibility, job satisfaction, and job performance among Romanian employees – Implications for sustainable human resource management. *Sustainability*. 2020;**12**(15):6086. DOI: 10.3390/su12156086
- [11] O'Connor J. The impact of job satisfaction on the turnover intent of executive level central office administrators in Texas public school districts: A quantitative study of work related constructs. *Education Sciences*. 2018;**8**(2):69. DOI: 103390/educsci9020069
- [12] Lambert EG, Hogan NL, Barton SM. The impact of job satisfaction on turnover intent: A test of a structural measurement model using a national sample of workers. *Social Sciences Journal*. 2021;**38**:233-250
- [13] Zopiatis A, Constanti P, Theocharous AL. Job involvement, commitment, satisfaction and turnover: Evidence from hotel employees in

Cyprus. *Tourism Management*. 2014;**41**: 129-140

[14] Pestana M, Gageiro J. *Análise de dados para Ciências Sociais. A Complementaridade do SPSS*. 6ª ed. Lisboa: Edições Sílabo; 2014

[15] Malhotra N. *Marketing Research: An Applied Orientation*. 7th ed. NY: Pearson; 2019

[16] Jaworek MA, Marek T, Karwowski W. The scale of work-related affective feelings (WORAF). *Applied Ergonomics*. 2020. DOI: 10.1016/j.apergo.2019.102945

[17] Hair FF Jr, Sarsted M, Hopkins L, Kuppelwieser VG. Partial least squares structural equation modeling (PLS-SEM). *European Business Review*. 2014; **26**:106-121. DOI: 10.1108/EBR-10-2013-0128

[18] Henseler J, Ringle C, Sinkovics R. The use of partial least squares path modeling in international marketing. *Advances in International Marketing*. 2009;**20**:277-319

[19] Hair FF Jr, Rischer J, Sarsted M, Ringle CM. When to use and how to report the results of PLS-SEM. *European Business Review*. 2018;**31**(1):2-21. DOI: 10.1108/EBR-11-2018-0203

[20] Chin WW. The partial least squares approach to structural equation modeling. *Modern Methods for Business Research*. 1998;**295**(2):295-336

[21] Henseler J, Ringle CM, Sarstedt M. A new criterion for assessing discriminant validity in variance based structural equation modeling. *Journal of the Academy of Marketing Science*. 2015; **43**(1):115-135

[22] Cohen J. *Statistical Power Analysis for the Behavioral Sciences*. New York: Routledge; 1988. DOI: 10.4324/9780203771587