

Repositório ISCTE-IUL

Deposited in *Repositório ISCTE-IUL*:

2023-06-28

Deposited version:

Accepted Version

Peer-review status of attached file:

Peer-reviewed

Citation for published item:

Santos, S. C., Caetano, A. & Junça Silva, A. (2011). Employees' satisfaction between 1996 and 2008 within the Portuguese financial sector. In António Caetano, Sílvia A. Silva, Maria José Chambel (Ed.), *New challenges for a healthy workplace in human services*. (pp. 191-219). München, Mering: Rainer Hampp Verlag.

Further information on publisher's website:

<https://www.nomos-shop.de/nomos/titel/new-challenges-for-a-healthy-workplace-in-human-services-id-99324/>

Publisher's copyright statement:

This is the peer reviewed version of the following article: Santos, S. C., Caetano, A. & Junça Silva, A. (2011). Employees' satisfaction between 1996 and 2008 within the Portuguese financial sector. In António Caetano, Sílvia A. Silva, Maria José Chambel (Ed.), *New challenges for a healthy workplace in human services*. (pp. 191-219). München, Mering: Rainer Hampp Verlag.. This article may be used for non-commercial purposes in accordance with the Publisher's Terms and Conditions for self-archiving.

Use policy

Creative Commons CC BY 4.0

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a link is made to the metadata record in the Repository
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Employees' satisfaction between 1996 and 2008 within the Portuguese financial sector

Silva, A. J.*

Santos, S. C.*

Caetano, A.*

*Lisbon University Institute – ISCTE - IUL

May, 2011

Abstract

This research includes two complementary studies. Study 1 intends to analyze the stability of the latent construct job satisfaction over time, through four facets - satisfaction with relationships, rewards, human resources management practices and work itself. Study 2 aims to compare the results obtained with an aggregate weighted measure of job satisfaction (Aggregated Job Satisfaction) and a single item measure (Overall Job Satisfaction). Both are cross-sectional studies with repeated measures on six time moments over a twelve years period (1996-2008) in the Portuguese financial sector organizations. Results from study 1 evidences the structural invariance of the latent construct job satisfaction and the different loading pattern on each facet, over time. Study 2 evidences that the overall job satisfaction and the aggregated job satisfaction measures displays a similar pattern of results overtime. Moreover, job satisfaction facets predicts overall job satisfaction. Theoretically, this research presents a wider view on job satisfaction issues: its facets, the debate on aggregated vs overall measures and relationships patterns over time. Moreover, satisfaction with human resources management emerges as the stronger predictor of overall job satisfaction in all the six time periods. Results suggest that managers can improve satisfaction through performance appraisal systems and training.

Keywords: Job satisfaction Facets; Aggregated job satisfaction; Financial Sector

INTRODUCTION

Job satisfaction is one of the most-researched constructs in organizational behaviour. Empirical research has been guided in the assumption that job satisfaction increases individual and organizational performance (e.g., Judge, Thoresen, Bono, & Patton, 2001; Ng, Soresen, & Yim, 2009). The evidence on more than four decades of research has not been conclusive. Nevertheless, research has contributed to conceptualize job satisfaction as a multidimensional construct and to explain how these dimension are related with different aspects of organizational life.

Job satisfaction is a quite general construct and can be defined as "...a positive emotional state that results from evaluating the work itself and the individual experiences on the job" (Locke, 1976, p.1300). As Weiss (2002) pointed out, job satisfaction is a general construct, which may relate to almost any type of work and working environment. It is assumed that the overall job satisfaction is associated to a complex set of relationships between tasks, roles, responsibilities, interactions, incentives and rewards within organizations (Bowling, Hendricks, & Wagner, 2008; Cameron, 1973).

In recent years, research has clarified the relationship between job satisfaction and some of the key individual work related behaviors and attitudes, such as: organizational commitment (e.g., Rutherford, Boles, Hamwi, Madupalli & Rutherford, 2009), extra-role behaviours (e.g., Bowling, 2009), absenteeism (e.g., Ybema, Smulders & Bongers, 2010),

counterproductive behaviours (e.g., Chen & Spector, 1992), exit intentions (e.g., Mobley, Griffeth, Hand & Meglino, 1979; Rutherford et al., 2009), life satisfaction (e.g., Judge, Locke, Durham, & Kluger, 1998), affectivity (e.g., Connolly & Viswesvaran, 2000), and health (Faragher, Cass & Cooper, 2005).

Although research on job satisfaction has been developed over decades, there are still some theoretical gaps in OB literature that call for further developments and empirical studies. For instance, there are still open questions concerning the relationship between overall job satisfaction and each particular dimensions of job satisfaction that have been identify in literature OR that have been used in several empirical studies (Jackson & Corr, 2002). Moreover, the pattern of evolution of these relations over time remains unclear (Kinicki, McKee-Ryan, Schriesheim, Carson, & Kinicki, 2002; Klassen & Anderson, 2009; Chen, Zhang, Leung, & Zhou, 2010).

Currently, the stability or instability in the nature of job satisfaction has been a major focus of debate (Dormann & Zapf, 2001; Staw & Cohen-Charash, 2005). Staw and Cohen-Charash (2005) strongly emphasise that individual differences may play a key role in job satisfaction in the way that dispositions may amplify or constrain the experience and expression of job satisfaction. Although several studies have investigated the dispositional approach to overall job satisfaction, little attention has been given to the dispositional approach of job satisfaction facets (Bowling et al., 2008; Schneider & Snyder, 1975). The interest on the specific aspects of job satisfaction is even wider for the managers, especially when organizations seek information to guide improvements regarding important workplace aspects (Spector, 1997).

Several authors have emphasized different facets of job satisfaction. Locke (1976) identified some key aspects that are typically mentioned in research on job satisfaction, including satisfaction with the quality and quantity of work, rewards, promotion opportunities, justice, recognition at work, nature and style of supervision, feelings about the *self*, supervisor and colleagues, working conditions, work environment, as well as satisfaction with the organization and the management practices.

Some researchers (e.g., Hackman & Oldham, 1980; Quinn & Shepard, 1974) have adopted an additive approach in relation to the different aspects of job satisfaction, assuming that they can be combined into a general measure of job satisfaction. Taking this perspective, several scales available in literature measure job satisfaction facets separately that may be add up to a general measure (Snipes, Oswald, LaTour, & Armenakis, 2005). However, this is not a consensual perspective in literature to come to overall measure of job satisfaction. Scarpello

and Campbell (1983) consider that a global measure of satisfaction by a single item is more credible than an aggregate index that result from the sum of scales for each aspect of job satisfaction. In fact, according to the authors multi-items scales may neglect some work components that are important for the employee (e.g., Ironson, Smith, Brannick, Gibson, & Paul, 1989; Scarpello & Campbell, 1983; Wanous, Reichers, & Hudy, 1997).

Despite previous research suggesting that specific measures of job satisfaction can also be used to predict a specific behavior (Fisher, 1980; Ironson et al., 1989; Snipes et al., 2005; Tsai and Huang, 2008), research on the specific impact of different job satisfaction aspects is still in its early years (e.g., Nerkar et al., 1996; Snipes et al., 2005; Tsai and Huang, 2008). Aiming to contribute to the further development of this issue, the present study focuses on the analysis of four main job satisfaction facets: satisfaction with relationships at work, satisfaction with rewards, satisfaction with human resource management practices, and satisfaction with the work itself.

Literature suggests that satisfaction with job aspects is relatively stable over time due in part to the stability of the individual dispositions (Staw & Ross, 1985). One way to study the stability of job satisfaction facets implies to research its evolution across the time line. Therefore, this study aims to examine the evolution pattern of four job satisfaction facets (satisfaction with relationship, satisfaction with rewards, satisfaction with human resource management practices and satisfaction with work itself) in the service sector in Portugal. Some earlier studies were based on longitudinal analysis that generally consider two moments in time (e.g., Gerhart, 1987). However, the present research was based on six different time moments in a spectrum of 12 years in the Portuguese financial sector organizations.

~~Taking into account this approach, as well as the theoretical gaps regarding the time perspective in the evolution of satisfaction with different job aspects, the study 1 examines the pattern along time of satisfaction with relationships at work, rewards, human resource management practices, and work itself.~~

The Present Research

This research includes two studies that answer to distinct but complementary questions. On the one hand, we intend to analyze the stability of the latent construct job satisfaction over time, through four facets - satisfaction with relationships at work, satisfaction with rewards, satisfaction with human resource management practices and the satisfaction with work itself (Study 1). On the other hand, we intend to compare the results

obtained through an aggregate measure of job satisfaction and the results obtained from a single item measurement (Study 2), thus contributing to the debate on this issue.

Six organizations from the financial sector in Portugal were involved in six different temporal moments from a twelve years period (1996-2008). The present studies do not present a classic longitudinal design, as they do not assess the same individuals in the six temporal moments. Nevertheless, this research presents a design of cross-sectional repeated measures on six separate moments over a period of 12 years. This analytic strategy allows, in general, to adopt a temporal perspective (e.g., Deaton, 1985; Pelzer, Eisinga & Franses, 2005) in the same sector of activity. The design allows to obtain information at different temporal independent units and aims to provide a cross-sectional view of changing attitudes or opinions over time. A strategy for exploring the temporal equivalence is to use multi-groups confirmatory factor analysis, which may allow comparison between self-reported measures at different time moments. This kind of analysis has been used in satisfaction studies in other European countries, such as the UK or Germany (e.g., Brown, Forde, Spencer & Charlwood, 2008; Tsitsianis & Green, 2005).

In order to contextualize the research regarding the main facts that occurred during the 12 years in the service sector under scope, we describe in Box A the most relevant changes in the macroeconomic context in Portugal and in the financial sector in Portugal.

The Macro-Economic Context of Portugal: 1996 to 2008

In the period under review two stages in the growth of Gross Domestic Product (GDP) in Portugal occurred. Between 1996 and 2001, there has been an intense growth, with an average annual rate slightly above 4.0% (based on data from INE¹ - 2001). In the second phase, from 2001 to 2008, there was a clear slowdown. In 2003 GDP falls 1.1% in the descending phase (INE, 2003). Thus, the differential growth of Portugal, towards the European Union, has become negative, which does highlight the problem of the Portuguese economy sustainability.

After the national economic recession of 2003, real GDP growth remained positive until the last quarter of 2008. The investment, despite the good results of 2007, grew in real terms at an average rate of just 0.2% per year (INE, 2008).

Between the period 1996 to 2002 is evidenced an average wage increase in the Portuguese population in general. In 2005, according to the results obtained in the Household

¹ INE = Statistics National Institute

Expenditure Survey 2005/2006, the average annual net income per household was 22,136 Euros, corresponding to an average monthly net income of around 1845 Euros (INE, 2007). Particularly in the whole period considered, the average pay of men regularly exceed basis for women (INE, 2008).

The Labour Cost Index in 2007 adjusted for working days, excluding public administration, registered an annual increase of 4.6%. This change resulted from an annual 2.4% growth in average costs for labor and a 2.2% decrease in the number of hours actually worked. The annual growth of Labour Cost Index, for most occupational groups, was accompanied by an increase in average costs of labor and a decrease in the number of hours actually worked (INE, 2008).

In relation to the employment indicators, during the twelve years under review, the Portuguese labor market experienced a disturbing trend that reflects the set of many factors, among which are: an unfavorable economic climate and a tendency to reduced rates of economic growth or null; serious loss of jobs resulting from the modernization and organizations restructuring such as mergers; and a very weak bet in valorization and qualifications of persons, especially by businesses. During that period unemployment remained high as well as job insecurity.

In Portugal, the economic climate indicator showed a downward trend over the years under review. However, the economic climate indicator improved in 2006, leaving finally to be located at a level where it was negative since the year 2003².

The Portuguese Financial Sector between 1996 and 2008

Over the twelve years period covered in this study, the financial sector has undergone some changes stemming from bank mergers. The Portuguese banking sector is recognized as one of the greatest innovation sectors of the Portuguese economy, productivity and internationalization. Since the late 2000, five major groups as a whole have a market share of about 75% of the total system in terms fundraising and grant credit, employing also about 65% of workers in the sector (PBA, 2003, 2004, 2005). In 2005, 47 institutions operated in the Portuguese banking sector (PBA, 2005, Bulletin 37).

This industrial structure was reached after a process of industry consolidation that began in the late '80s and early '90s with the privatization process of industry organizations and through continued acquisitions and mergers that occurred between 1995 and 2001

² National Statistics Institute – Censos 2008. Lisboa, INE 2008.

(Pereira, 2009).

The sector has been characterized by a high productivity, as evidenced by the number of employees per branch which has stabilized at around 10 employees, and the cost indicator to income ratio has remained below 60% (PBA, 2003, 2004, 2005). There has been also a tendency to broaden the portfolio of banking products and services. Alongside the diversification of activity in the country, some industry organizations have pursued strategies of internationalization (Pereira, 2009).

The banking sector in Portugal in 2008 employed more than 50,000 people, a figure that represents 1.1% of total employed population in the country, and has registered an overall net operating income of 14 billion Euros, equivalent to 8.7% of Gross Domestic Product³. Following the existing mergers, and between reforms and early retirements, layoffs and termination agreements, there were some changes in staff over the twelve years period under analysis. Between 1996 and 2008, the Bank sector has lost over 10,000 jobs⁴ (PBA, 2008).

Increasing the skill levels of workers in the sector has been impressive. In 2005, graduates represented approximately 40% of the employed population. A strong rejuvenation of the banking population occurred during this period. For instance, in 2004, 72% of employees were younger than 44 years and 67% had a tenure of less than 15 years. The recruitment of collaborators has focused mostly on graduates and in 2005, the recruits were mostly women and there was a tendency to balance the number of employees by gender. Regarding the employment relationship, the predominant type was the indefinite (Pereira, 2009).

Several studies (e.g., Pereira de Almeida, 2002, Pires de Lima et al, 2006) show that investment in workers' professional training has been a consistent practice of financial sector organizations. Investment in training in recent years has been around 22 million Euros, which have covered over 86% of workers in the sector (Pereira, 2009).

Study1. Job Satisfaction Facets

Study 1 aims to answer to three questions concerning the relationship between the four job satisfaction facets (satisfaction with relationship at work, satisfaction with rewards, satisfaction with human resource management practices and satisfaction with work itself) and the latent construct *job satisfaction*.

³ In Economic Bulletin – Bank of Portugal (2009).

⁴ In Newsletters of Portuguese Bank Association (until December 31, 2008).

This study aims at understanding the pattern stability of the four job satisfaction facets in six temporal moments, answering to the research question: *Is there a stable pattern between the four job satisfaction facets in the six time moments in analysis?*

Moreover, we intend to further evaluate the contribution of each of the four job satisfaction facets for the latent construct *job satisfaction* over time. Thus, we want to test if, within the six time moments, the contribution of each job satisfaction facet is constant, or if on the other hand, the contribution of each one varies over time. So, another research question arises: *Which is the contribution of each facets for job satisfaction in the six different time moments?*

We intend also to test if there are differences between mean values of the four job satisfaction facets in the six temporal moments under analysis. To answer these three research questions we will analyze data focused on this subject collected though a questionnaire which was applied six times during a twelve-year period in Portuguese financial sector organizations (1996, 2000, 2003, 2005, 2006, and 2008).

Participants

In this study, a total of 5218 individuals from six Portuguese financial sector organizations were involved. Table 1 presents the year gathering information and sample size in each one.

Table 1

Year of data collection and sample size

Organizations	Year of Data Collection	Sample Size (N)
A	1996	1031
B	2000	1075
C	2003	248
D	2005	1025
E	2006	1114
F	2008	725

Organization A – 1996

In 1996, 1031 individuals participated in this study. 63% were male, 39.1% of the participants are over 50 years old, and 56.4% have a tenure of more than 15 years in the organization. 70.8% were administrative assistants and 47.2% attended up to the 9th grade.

Organization B - 2000

In 2000, it was collected a sample of 1075 individuals of another organization in the financial sector. 63.4% were male participants and 40.3% are under 30 years of age, 34.2% are on the organization at less than 5 years. The majority of participants are administrative assistants (59.5%) and 26.3% attended up to the 9th grade.

Organization C - 2003

In 2003, a sample of 248 subjects was obtained. 51.9% were female and 86% are on the organization at less than 5 years. 55% were administrative assistants and 43.9% completed the secondary school.

Organization D – 2005

In 2005 it was collected a sample of 1025 individuals from organization D, being 53.8% male, 37.1% aged between 31 and 40 years old, and 48.3% belong to the organizational for over than 15 years. The majority of individuals are administrative assistants (57.9%) and 42.2% completed the secondary school.

Organization E – 2006

In 2006 participated in this study 1114 subjects; 61.4% were male and 31.7% had between 31 and 40 years old. Most respondents (48.9%) were in the organization for over 15 years, and 44.7% were administrative assistants. The largest proportion (43.9%) finished the secondary school.

Organization F – 2008

The last data collection was performed in 2008 with a sample of 725 participants. 51.3% were female, 41% was between 31 and 40 years old, and 43% were over than 15 years in the organization. The majority of participants is in a position of administrative assistant (46.5%) and 39.8% finished the secondary school.

Table 2 presents the socio-demographic characteristics of the samples.

Table 2

Sample socio-demographic description

Organization A	Organization B	Organization C	Organization D	Organization E	Organization F
1996	2000	2003	2005	2006	2008
N=1031	N = 1075	N = 248	N = 1025	N = 1114	N = 725
%	%	%	%	%	%

Sex						
Male	63,6	63,4	48,1	53,8	61,4	48,7
Female	36,4	36,5	51,9	46,2	38,6	51,3
Age						
Until 30 years	26,7	40,3	*	9,4	8,9	7,3
From 31 to 40 years	18,3	23,7	*	37,1	32,7	41,0
From 41 to 50 years	15,8	24,2	*	27,8	30,3	29,6
over 50 years	39,1	11,8	*	25,7	28,2	22,2
Tenure						
Until 5 years	19,5	34,2	86,0	11,4	34,0	31,5
From 6 to 10 years	12,3	25,9	14,0	16,0	-	-
From 11 to 15 years	11,9	6,6	-	24,3	17,1	25,5
Over 16 years	56,4	33,3	-	48,3	48,9	43,0
Professional Category						
Supervisor and middle manager	12,0	12,8	*	2,3	23,1	22,0
Professional	17,2	27,7	*	39,8	32,2	31,5
Administrative Assistant	70,8	59,5	*	57,9	44,7	46,5
Education						
9 th grade	47,2	26,3	4,6	12,6	21,6	15,5
High School	25,0	24,9	43,9	42,2	43,9	39,8
Bachelor	20,7	22,9	28,0	9,2	5,3	5,4
Graduation	6,7	23,3	23,4	26,2	23,7	29,1
Postgraduate	0,4	2,7	0	9,8	5,6	10,1

*, unable to gather information

Measures

Items used to operationalize the job satisfaction facets were adapted from Spector (1997) and preceded by the words "Please indicate your satisfaction level with the following aspects of your job" The response scale ranges from 1 (*very dissatisfied*) to 5 (*very satisfied*).

Satisfaction with Relationship refers to satisfaction with interpersonal relationships aspects in the organization and was operationalized by two items that include "*The working environment at Company X*" and "*The relationship between colleagues.*"

Satisfaction with Rewards refers to satisfaction with the compensation that individuals receive and was operationalized by two items that include "*The pay I receive at the end of the month*" and "*non-salary rewards I receive.*"

Satisfaction with Human Recourses Management Practices refers to the degree of satisfaction with particular aspects of human resources management practices and was

operationalized by two items that include "*The appraisal performance system*" and "*The training I have received.*"

Satisfaction with Work Itself refers to the individual's satisfaction with the work he / she is performing. It has also been operationalized by two items: "*The work I am doing*" and "*The autonomy I have to perform my job.*"

Results

To answer the research question "*Is there a stable pattern between the four job satisfaction facets in the six temporal moments in analysis?*" it was performed a multi-group confirmatory factor analysis (T1 = 1996 T2 = 2000, T3 = 2003; T4 = 2005, T5 = 2006, T6 = 2008), using the AMOS 17.0 (Arbuckle, 2006).

Figure 1 illustrates the second-order confirmatory factor analysis model, where the latent construct "*job satisfaction*" is explained by four first-order factors (the four job satisfaction facets in the study: satisfaction with relationship, with rewards, with human resource management practices and with work itself).

Figure 1

Second-order confirmatory factor analysis on the job satisfaction



The results on the multi-group confirmatory factor analysis evidence good fit indexes to the data ($\chi^2 = 710.20$; $df = 100$; $p < 0.001$; $\chi^2/df = 6.97$; CFI = 0.94; RMSEA = 0.03; SRMR = 0.03). These results show that the factorial structure is constant in the six temporal moments. Thus, one can assume that the indicators used in each of the samples represent

adequately each of the satisfaction facets and the job satisfaction latent construct. These results establish the configurational invariance of job satisfaction in the six samples. In this sense, as the results show good fit indexes from the data to the model, the answer to the first question sustains the pattern stability on the job satisfaction facets over time.

Regarding the second question "*Which is the contribution of each facets for job satisfaction in the six different time moments?*", the results in Table 3 show that the satisfaction with relationship is the one with the lowest loading on the latent construct job satisfaction in all temporal moments. All facets of satisfaction show different loadings on the latent construct job satisfaction over time, suggesting that despite the pattern stability evidenced in the job satisfaction through the operationalization with the four facets in the analysis, each one is different over time. However, satisfaction with HRM practices and with the work itself have the highest loadings across the twelve years.

Table 3

Multi-groups Confirmatory Factor Analysis - Standardized Estimates

	Standardized Estimates					
	Org.A	Org.B	Org. C	Org. D	Org. E	Org. F
	1996	2000	2003	2005	2006	2008
Satisfaction with Relationship	0.49**	0.74**	0.67**	0.44**	0.43**	0.51**
Satisfaction with Rewards	0.58**	0.74**	0.83**	0.68**	0.75**	0.63**
Satisfaction with HRM practices	0.97**	0.98**	0.95**	0.98**	0.96**	0.97**
Satisfaction with Work itself	0.63**	0.99**	0.95**	0.84**	0.98**	0.92**

** , $p < 0.05$

As confirmatory factor analysis showed good fit indices, we proceeded to the aggregation of items from each one of the facets of satisfaction. Thus, table 4 presents the mean, standard deviation and the correlation matrix with the job satisfaction facets in the six temporal moments. This analysis allows answering to the third question: *Are there differences between mean values of the four job satisfaction facets in the six temporal moments?*

Table 4

Mean Values, Standard Deviation and Correlation Matrix on Job Satisfaction Facets on the six temporal moments

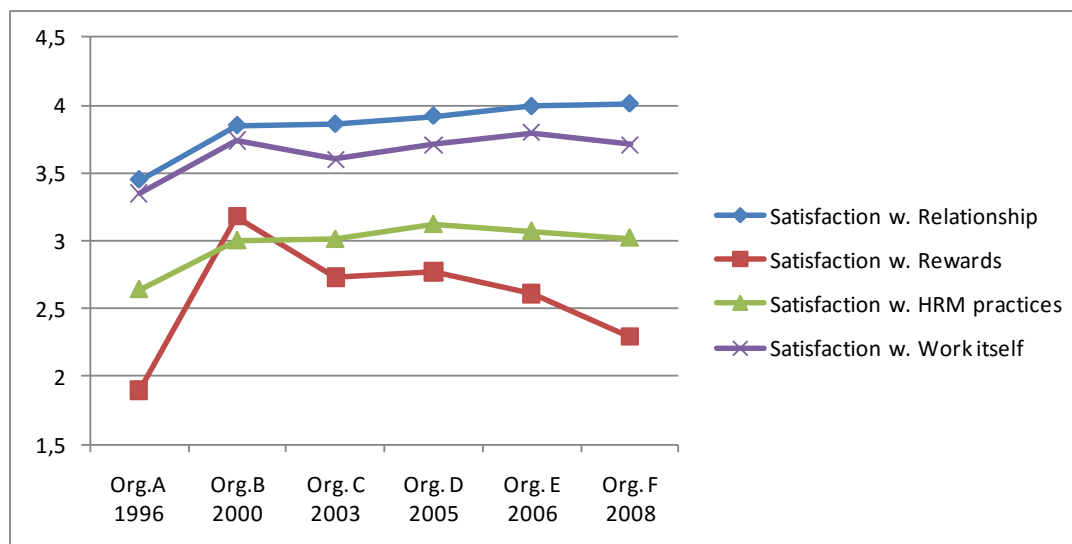
1996 (N=1031)	M	DP	1.	2.	3.	2000 (N = 1075)	M	DP	1.	2.	3.
1. Satisfaction w. Relationship 1996	3.45	0.84				1. Satisfaction w. Relationship 2000	3.85	0.60			

2. Satisfaction w. Rewards 1996	1.90	0.71	0.18**			2. Satisfaction w. Rewards 2000	3.18	0.89	0.31**		
3. Satisfaction w. HRM practices 1996	2.64	0.74	0.38**	0.41**		3. Satisfaction w. HRM practices 2000	3.00	0.82	0.43**	0.51**	
4. Satisfaction w. Work itself 1996	3.35	0.70	0.32**	0.22**	0.49**	4. Satisfaction w. Work itself 2000	3.74	0.54	0.21**	0.16**	0.28**
<hr/>						<hr/>					
2003 (N=248)	M	DP	1.	2.	3.	2005 (N=1025)	M	DP	1.	2.	3.
<hr/>						<hr/>					
1. Satisfaction w. Relationship 2003	3.86	0.59				1. Satisfaction w. Relationship 2005	3.92	0.84			
2. Satisfaction w. Rewards 2003	2.73	0.94	0.31**			2. Satisfaction w. Rewards 2005	2.77	0.89	0.24**		
3. Satisfaction w. HRM practices 2003	3.01	0.83	0.44**	0.46**		3. Satisfaction w. HRM practices 2005	3.12	0.87	0.32**	0.48**	
4. Satisfaction w. Work itself 2003	3.60	0.56	0.23**	0.24**	0.34**	4. Satisfaction w. Work itself 2005	3.71	0.63	0.23**	0.20**	0.29**
<hr/>						<hr/>					
2006 (N=1114)	M	DP	1.	2.	3.	2008 (N=725)	M	DP	1.	2.	3.
<hr/>						<hr/>					
1. Satisfaction w. Relationship 2006	3.99	0.78				1. Satisfaction w. Relationship 2008	4.01	0.80			
2. Satisfaction w. Rewards 2006	2.61	0.89	0.21**			2. Satisfaction w. Rewards 2008	2.29	0.88	0.19**		
3. Satisfaction w. HRM practices 2006	3.07	0.87	0.33**	0.54**		3. Satisfaction w. HRM practices 2008	3.02	0.85	0.36**	0.44**	
4. Satisfaction w. Work itself 2006	3.80	0.67	0.24**	0.21**	0.27**	4. Satisfaction w. Work itself 2008	3.71	0.68	0.36**	0.18**	0.34**
<hr/>						<hr/>					

Except in 2000, satisfaction with rewards has always a lower mean value. Moreover, satisfaction with relationship has, at all times in temporal analysis, a higher mean value. In order to clarify this results, the figure 2 presents the mean values evolution graph of the job satisfaction facets across the temporal moments analysis

Figure 2

Mean values graph of the job satisfaction facets from 1996 to 2008



The graph evidences that there are significant differences across the time moments between mean values of all job satisfaction facets: satisfaction with relationship ($F(5;42.28)=72.04$, $p < 0.01$), satisfaction with rewards ($F(5;193.86)=263.14$, $p < 0.01$), satisfaction with human resources management practices ($F(5;30.66)=44.30$, $p < 0.01$), and satisfaction with work itself ($F(5;26.68)=64.96$, $p < 0.01$).

Discussion

The first study sought to test the evolution of four job satisfaction facets in six different time moments between 1996 and 2008 in the Portuguese financial sector organizations. More specifically, we investigated whether the satisfaction with relationship, satisfaction with rewards, satisfaction with human resources management practices, and satisfaction with the work itself are facets of the latent construct job satisfaction. It was still intended to compare the contribution of each latent construct facets for job satisfaction over time, and finally, compare the mean values of the four facets of job satisfaction.

The results revealed that: (a) there is a configurational invariance in the job satisfaction facets in the six temporal moments over the 12 years, (b) each facet of job satisfaction (relationship, rewards, human resources management practices and work itself) contribute differently to the latent construct *job satisfaction* in 1996, 2000, 2003, 2005, 2006 and 2008, and (c) there are significant differences between satisfaction with relationship, with rewards, with human resources management and with work itself in the time moments analysis.

From a theoretical point of view, the study 1, even not being a true longitudinal study, presents some contributions supporting the dispositional perspective of job satisfaction. More specifically, over time the job satisfaction latent construct invariant structure supports the dispositional perspective of job satisfaction (Bowling et al., 2008; Staw and Cohen-Charash, 2005). Supporting the Staw and Cohen-Charash (2005) suggestions, individual differences have a key role in job satisfaction, as dispositional characteristics seem to affect the experience level and the expression of job satisfaction.

However, the results also emphasize that satisfaction with the considered job facets contributes differently to the latent construct of job satisfaction over time. This seems to reflect the importance of management practices and organizational change on each of the facets in job satisfaction.

Finally, the results showed that the mean values on satisfaction with relationship, rewards, human resource management practices and the work itself differ significantly over the six temporal moments. This result suggests the existence of a dynamic relationship between the mean values of the job satisfaction facets over time. These changes in the participants' attitudes patterns may be explained, among other factors, by the organizational changes in the financial sector, such as mergers between organizations and, consequently, the mass dismissal of employees. However, the various changes in the socio-economic situation of the country may also have an important role in explaining these results: the national economic recession in 2003, is followed by a decrease in the satisfaction with rewards. The same seems to happen with the general crisis that emerged in 2008. This is in contrast with the satisfaction with rewards level in 2000, where social and economic conditions witnessed some improvement influenced by political decisions that reinforced the so called European social model.

Briefly, the results of the study 1 "*Job Satisfaction Facets*" evidence that the latent construct job satisfaction shows an invariant configuration across the several time moments. However, the loading of each job aspects is not constant over time. That is, there is variation in the path estimate of each facet to the latent construct *job satisfaction*.

The results of this study 1 arises another question: when we want to assess job satisfaction, as a whole is it necessary to use several items, or on the other side, one may simply use a single item that covers organizational life as a whole? In order to understand the differences between job satisfaction as an aggregated measure, combining and weighting the different job satisfaction facets, and overall job satisfaction, measured through a single item

that relates to the individual's perception of the organization as a whole, we conducted another analysis.

Study 2: “Aggregated Job Satisfaction vs. Overall Job Satisfaction”

The operationalization of job satisfaction through a single item was discussed in a pioneering way on a meta-analysis by Wanous, Reichers, and Hudy (1997). In that study, authors compared previous studies using scales of various job satisfaction facets, and studies using only a single item to assess job satisfaction. Overall, the results showed the existence of a high correlation between these two types of measures, suggesting that job satisfaction can be operationalized through a single item.

The importance of Wanous, Reichers, and Hudy's (1997) research is unquestionable, and its reference is unavoidable in any study on job satisfaction. However, their conclusion emerged from the meta-analysis of different studies and different cultural contexts and, therefore, may raise some methodological and cultural issues. In this sense, some previous research (e.g., Loo, 2002; Nagy, 2002) attempted to compare the job satisfaction measure on an aggregate basis, with a measure of overall job satisfaction, operationalized through a single item.

However, to our knowledge there are no researches that have compared job satisfaction facets measures (including different facets aggregate measures) with overall job satisfaction measures, in the same sample. In this sense, the study 2 bridges this research gap on job satisfaction aggregate measures and single measures, comparing in six different samples representing six different temporal moments.

So, study 2 aims to compare the mean values between job satisfaction aggregated measure and overall job satisfaction, and analyze the relation between job satisfaction facets and overall job satisfaction. Thus the research question now is: *Do the four job satisfaction facets predict the overall job satisfaction?* To answer this question, we used the same sample of study 1 and, similarly, we performed an analysis of repeated measures over time (Pelzer, Eisinga, & Franses, 2005).

Participants and Measures

The study 2 involved the same individuals who participated in study 1 (5218 participants coming from six Portuguese organizations in the financial sector). Data were collected in the same six distinct temporal moments over twelve years between 1996 and

2008. Besides the measures described in Study 1 a single-item measure of overall job satisfaction was added.

Overall job satisfaction was measured using a single item adapted from Wanous, Reichers and Hudy (1997): “Overall, and considering all aspects of your work and your life in this company, you would say you are ...”. The response scale ranges from 1 (*very dissatisfied*) to 5 (*very satisfied*).

Results

To answer the research question, we performed an analysis of repeated measures over time. The results show the existence of significant differences between mean values of overall job satisfaction ($F(5;35.18)=49.16; p<0.01$) on the six time moments (M overall job satisfaction₁₉₉₆ = 3.42; M overall job satisfaction₂₀₀₀ = 3.79; M overall job satisfaction₂₀₀₃ = 3.43; M overall job satisfaction₂₀₀₅ = 3.39; M overall job satisfaction₂₀₀₆ = 3.42; M overall job satisfaction₂₀₀₈ = 3.18).

According to Table 5, it is evident that the correlation between overall job satisfaction and the different job satisfaction facets is always statistically significant and above 0.28, suggesting the existence of a relevant correlation between overall job satisfaction and the four job satisfaction facets.

Table 5

Mean values, Standard Deviation and Correlation Matrix of Job Satisfaction Facets and Overall Job Satisfaction in the six temporal moments

	Overall Job Satisfaction					
	1996	2000	2003	2005	2006	2008
1. Satisfaction with Relationship 1996	0.33*					
2. Satisfaction with Rewards 1996	0.34*					
3. Satisfaction with HRM practices 1996	0.52*					
4. Satisfaction with Work itself 1996	0.44*					
1. Relationship satisfaction 2000		0.47*				
2. Rewards satisfaction 2000		0.43*				
3. HRM practices satisfaction 2000		0.45*				
4. Work itself satisfaction 2000		0.31*				
1. Relationship satisfaction 2003			0.56*			
2. Rewards satisfaction 2003			0.56*			
3. HRM practices satisfaction 2003			0.65*			
4. Work itself satisfaction 2003			0.45*			
1. Relationship satisfaction 2005				0.38*		
2. Rewards satisfaction 2005				0.52*		
3. HRM practices satisfaction 2005				0.50*		
4. Work itself satisfaction 2005				0.34*		

1. Relationship satisfaction 2006	0.46*
2. Rewards satisfaction 2006	0.49*
3. HRM practices satisfaction 2006	0.51*
4. Work itself satisfaction 2006	0.28*
1. Relationship satisfaction 2008	0.42*
2. Rewards satisfaction 2008	0.47*
3. HRM practices satisfaction 2008	0.46*
4. Work itself satisfaction 2008	0.41*

*, $p < 0,05$

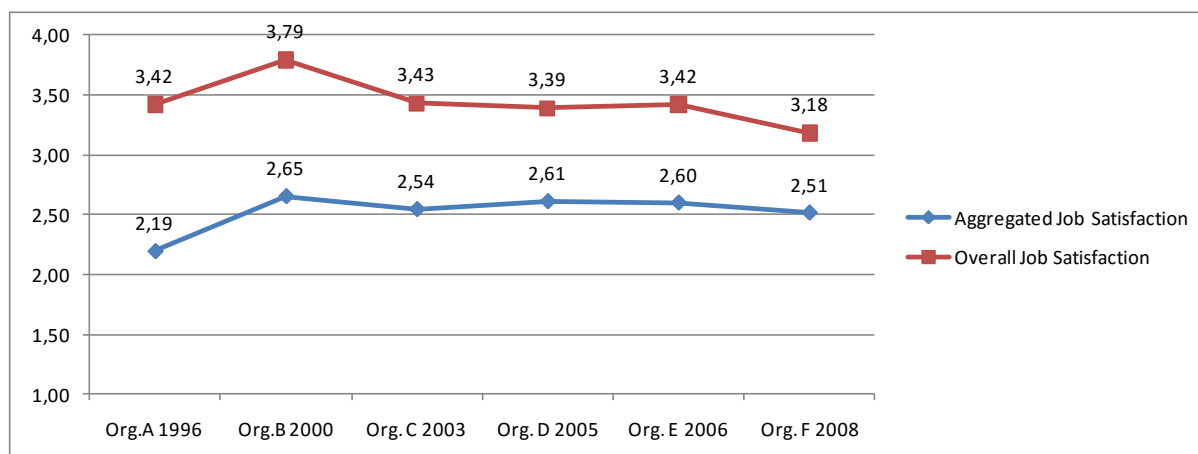
Study 1 showed that job satisfaction construct can be measured aggregating four job satisfaction facets according to their different weights. To compute it, we added data from each job satisfaction facet weighted by their loadings on the second order confirmatory factor analysis. The weighting of each facet concerns the mean contribution of each to the latent construct "job satisfaction" in the six temporal moments. Thus, job satisfaction aggregated measure was computed according to:

$$\text{job satisfaction aggregated measure} = \frac{(0.55 \times \text{relationship sat.} + 0.70 \times \text{rewards sat.} + 0.97 \times \text{HRM practices sat.} + 0.89 \times \text{work itself sat.})}{4}$$

The comparison between mean values in the six temporal moments of aggregated job satisfaction with the overall job satisfaction is presented in figure 3. The overall job satisfaction measure evidenced higher average values at every time moment, when compared to job satisfaction aggregated measure. Additionally, it should be emphasized that the pattern of annual oscillation is similar between the two measures.

Figure 3

Evolution graph of mean values of job satisfaction aggregated measure and overall job satisfaction from 1996 to 2008



The analysis of the individual contribution of each job satisfaction facet for overall job satisfaction was assessed by six linear regression models, including one for each year under analysis. As shown on Table 6, the variance explained in overall job satisfaction by the four predictors varies between 38% and 70% (R^2_{1996} adjusted = 0.38; R^2_{2000} adjusted = 0.50; R^2_{2003} adjusted = 0.70; R^2_{2005} adjusted = 0.48; R^2_{2006} adjusted = 0.50; R^2_{2008} adjusted = 0.50), thus showing that the job satisfaction facets explain a high percentage of overall job satisfaction.

Regarding the contribution of each job satisfaction facet in the six time moments, results show that the satisfaction with human resource management practices has a stronger association with overall job satisfaction (β_{1996} HRM practices = 0.59; β_{2000} HRM practices = 0.51; β_{2003} HRM practices = 0.50; β_{2005} HRM practices = 0.50; β_{2006} HRM practices = 0.47; β_{2008} HRM practices = 0.51).

Moreover, it is evident that the association of rewards satisfaction and overall job satisfaction is, in general, the lowest, except in 2000 and 2008. More specifically, in 1996 the rewards satisfaction presents a statistically significant negative association (β_{1996} = - 0.14).

Table 6

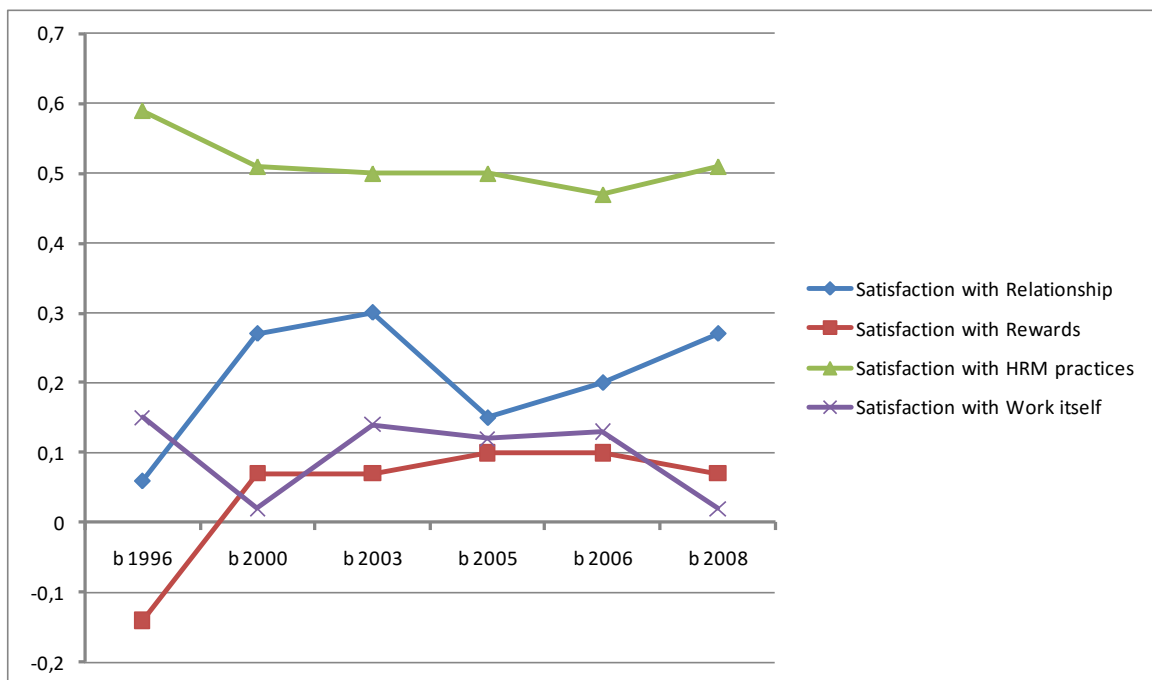
Regressions of the four job satisfaction facets (satisfaction with relationship, rewards, human resource management practices, and work itself) on overall job satisfaction in 1996, 2000, 2003, 2005, 2006 and 2008

	Overall Job Satisfaction 1996			Overall Job Satisfaction 2000			Overall Job Satisfaction 2003		
	β	t	p	β	t	p	β	t	p
Satisfaction with Relationship	0.06	2.17	0.03	0.27	10.63	0.00	0.30	6.28	0.00
Satisfaction with Rewards	-0.14	-3.64	0.00	0.07	2.04	0.04	0.07	1.24	0.22
Satisfaction with HRM practices	0.59	12.73	0.00	0.51	13.89	0.00	0.50	7.68	0.00
Satisfaction with Work itself	0.15	4.90	0.00	0.02	0.96	0.34	0.14	3.40	0.00
	$R^2_{1996,adjust} = 0.38$			$R^2_{2000,adjust} = 0.50$			$R^2_{2003,adjust} = 0.70$		
	$F_{1996} (4;991) = 153.19;$			$F_{2000} (4; 949) = 240.24;$			$F_{2003} (4;222) = 133.65;$		
	$p_{1996} < 0.01$			$p_{2000} < 0.01$			$p_{2003} < 0.01$		
	Overall Job Satisfaction 2005			Overall Job Satisfaction 2006			Overall Job Satisfaction 2008		
	β	t	p	β	t	p	β	t	p
Satisfaction with Relationship	0.15	5.97	0.00	0.20	4.94	0.00	0.27	10.63	0.00
Satisfaction with Rewards	0.10	2.82	0.00	0.10	1.92	0.06	0.07	2.04	0.04
Satisfaction with HRM practices	0.50	13.08	0.00	0.47	8.62	0.00	0.51	13.88	0.00
Satisfaction with Work itself	0.12	4.92	0.00	0.13	3.40	0.00	0.02	0.96	0.34
	$R^2_{2005,adjust} = 0.48$			$R^2_{2006,adjust} = 0.50$			$R^2_{2008,adjust} = 0.50$		
	$F_{2005} (4;989) = 227.06;$			$F_{2006} (4;409) = 106.07;$			$F_{2008} (4;949) = 240.24;$		

The changes in the standardized estimates of each predictor to the overall job satisfaction in the six temporal moments are presented in Figure 4. We can observe that the contribution of human resources management practices satisfaction to overall job satisfaction is the greater one.

Figure 4

Graph of the evolution of the regression coefficients (β) of the facets of job satisfaction from 1996 to 2008



Discussion

The study 2 " *Aggregated Job Satisfaction Measure vs. Overall Job Satisfaction*" aimed to analyze the differences and similarities between a measure of job satisfaction resulting from an aggregation of different job aspects (job satisfaction aggregated measure), and a measure of overall job satisfaction operationalized with a single item referring globally to various organizational aspects.

Results showed a statistically significant correlation between all job satisfaction facets and overall job satisfaction, suggesting that these constructs are closely related to each other. Regarding the mean values of the two measures (aggregated job satisfaction vs. overall job satisfaction) results show that the pattern of annual oscillation is similar between the two measures, but the measure of overall job satisfaction presents higher mean values in all the

time moments than the job satisfaction aggregated measure. In our opinion there are at least three possible alternative explanations for these results: a) The higher values may be determined by the fact that overall measure includes other facets beyond the four ones we have used in the aggregated measure; b) It can derive from an inflated assessment when one use a single item from measuring job satisfaction; c) It can express simple a measure error. This issue deserves further attention in future studies.

It was also showed that the four job satisfaction facets explain between 38% and 70% of the overall job satisfaction variance, thereby strengthening that those four facets of job satisfaction are closely related to overall job satisfaction. However, the contribution of each job satisfaction facet in the six temporal moments is different. In fact, satisfaction with human resource management practices is the best predictor of overall job satisfaction across time.

In general, the results of the study 2 showed that overall job satisfaction, operationalized with a single item, displays an overtime behavior very similar to the job satisfaction aggregated measure. In addition, overall job satisfaction is strongly correlated with the different facets of job satisfaction. This result corroborates the main results on previous studies (e.g., Wanous, Reichers, and Hudy, 1997; Loo, 2002; Nagy, 2002) suggesting that job satisfaction can be successfully operationalized through one single item, capturing the individual's level of satisfaction in relation to most aspects of organizational life.

GENERAL DISCUSSION

This research includes two studies conducted with samples collected at six different time moments in the Portuguese financial sector organizations, and aims to understand the general evolution pattern of job satisfaction over a period of 12 years. Theoretically, this research aims to understand the difference in using a job satisfaction aggregated measure, result from the weighted sum of the perceptions of satisfaction with different job facets, and a measure of overall job satisfaction, operationalized by a single item.

The study 1 "*Job Satisfaction Facets*" shows that the satisfaction with relationship, rewards, human resource management practices and the work itself are facets of the job satisfaction latent construct in six temporal moments, thus underlining the structural invariance of the construct. Moreover, it was found that there are significant differences between the four facets in the different temporal moments. These results can be explained by several conditions. On the one hand, there were organizational changes in the financial sector, which involved mergers between organizations and that led to the dismissal of numerous

employees. On the other hand, the socio-economic changes of the current state of the country also seem to have a role in explaining these results. For example, following a general improvement of life conditions determined by public policies and political decisions regarding economic situation in the year 2000, the satisfaction values were the highest in that year. On the other hand, the substantial increase in unemployment, the national economic recession in 2003, the sharp increase in the average skill level of the workforce, the population aging, the growth in the level of consumption expenditure per family in favor of lowering the rate of gross saving family.

Briefly, it is evident that satisfaction with different job facets varies over time and that these four facets are expressions of the latent construct "job satisfaction".

The second study, "*Job Satisfaction Aggregated Measure vs. Overall Job Satisfaction*", aims to compare summative measures of job satisfaction (job satisfaction aggregated measure) and a measurement of a single item (overall job satisfaction). Theoretically this is an issue raised by Wanous, Reichers, and Hudy (1997), but needs further clarification.

Results showed that there is a strong correlation between overall job satisfaction and the different job satisfaction facets, suggesting that these constructs are conceptually close to each other. Further evidence that contributes to this conclusion is that the four job satisfaction facets explained a large percentage of overall job satisfaction. Moreover, results showed that the pattern of annual oscillation is similar between the two measures, suggesting that both capture the changes in the perceptions and assessment of individuals.

Theoretical Contributions

The controversy over the use of summative / aggregate measures or a single item in the evaluation of job satisfaction has been much debated in international research (e.g., Wanous, Reichers & Hudy, 1997; Loo, 2002; Nagy, 2002). In general, it has been suggested that the measurement with a single item, overall job satisfaction, is generally sufficient to describe the level of individual's satisfaction in the organization. The present study supports this evidence, thus contributing to enhancing the usefulness of a single item measures on job satisfaction. However, this research also shows that if one envisages a detailed description of the individual's satisfaction with the different job aspects, it is useful to analyze the several job satisfaction facets.

Consequently, this result suggests that adopting a summative approach in the operationalization of job satisfaction, or a single item measure should be decided according to the study aims more than to methodological issues.

Theoretically, this research is also important to the subjective well being, as it has been addressed the relation pattern between job satisfaction and subjective well being (e.g., Caetano, Tavares, & Reis, 2002; Caetano & Silva, 2010).

Limitations, future research and practical implications

The present studies evidence inevitably some limitations. Firstly, only four job satisfaction facets were studied. Thus, future research should also investigate other job satisfaction facets.

Moreover, this study used a cross-sectional design with repeated measures, rather than a longitudinal study. The methodology used in this study is generally less genuine than of a panel with repeated observations over time from the same individuals. However, the longitudinal studies have also some weakness since they have smaller samples and usually are not able to cover a large period of time (Pelzer et al., 2005). With long time periods, the analysis of cross sectional data at different temporal moments is typically used, but research would benefit with a longitudinal approach.

For practical implications, this research has important consequences for managers of financial sector organizations in Portugal. It is clear that employees have different attitudes to various job aspects, revealing different levels of job satisfaction facets. Moreover, satisfaction with human resources management emerges as the stronger predictor of overall job satisfaction in all the six time periods. That suggests that, if organizations envisage to improve satisfaction (and performance) they should be careful on designing appraisal of performance and delivering training to their employees. Results also suggest that fluctuations on job satisfaction are linked to organizational changes and this relation should be addressed in advance in order to maintain employees focused on performance.

References

- Arbuckle JL. Amos (Version 7.0). Chicago: SPSS, 2006. [Computer Program].
- Arvey RD, Bouchard TJ, Segal NL, Abraham LM. Job satisfaction: environmental and genetic components. *Journal of Applied Psychology* 1989; 74: 187-192.
- Boletim Económico (2009). *Textos de Política e Situação Económica*. Lisboa: Banco de Portugal.

- Bowling NA, Beehr TA, Wagner SH, Libkuman TM. Adaptation-level theory, opponent process theory, and disposition: an integrated approach to the stability of job satisfaction. *Journal of Applied Psychology* 2005; 90: 1044-1053.
- Bowling NA, Hendricks EA, Wagner SH. Positive and negative affectivity and facet satisfaction: a meta-analysis. *Journal of Business Psychology* 2008; 23: 115-125.
- Bowling NA. Effects of job satisfaction and conscientiousness on extra-role behaviours. *Journal of Business Psychology*, online September 2009.
- Brown, A.; Forde, C.; Spencer, D. & Charlwood, A. (2008) Changes in HRM and job satisfaction, 1998–2004: Evidence from the Workplace Employment Relations Survey. *Human Resource Management Journal*, 18 (3), pp. 237–256
- Bruk-Lee V, Khoury HA, Nixon AE, Goh A, Spector PE. Replicating and extending past personality/job satisfaction meta-analyses. *Human Performance* 2009; 22: 156-189.
- Cameron S. *Job Satisfaction: The Concept and its Measurement*. Michigan: Work Research Unit, 1973.
- Cropanzano R, Wright T. When a “happy” worker is really a “productive” worker, a review and further refinement of the happy-productive worker thesis. *Consulting Psychology Journal: Practice and Research* 2001; 53: 182-199.
- Crossman, A., & Abou-Zaki (2003). Job satisfaction and employee performance of Lebanese banking staff. *Journal of Managerial Psychology*, 18 (4), 368-376
- Chen PY, Spector PE. Relationships of work stressors with aggression, withdrawal, theft, and substance use: an exploratory study. *Journal of Occupational and Organizational Psychology* 1992; 65: 177-184.
- Deaton, A. (1985) Panel data from time series of cross-sections. *Journal of econometrics*, 30, pp. 109-126.
- DeConick JB, Stilwell CD. Incorporating organizational justice, role states, pay satisfaction and supervisor satisfaction in a model of turnover intentions. *Journal of Business Research* 2004; 57: 225-231.
- Direcção Geral de Estudos e Previsão (2005). *A Economia Portuguesa*. Lisboa: Ministério das Finanças.
- Direcção Geral de Estudos e Previsão (2006). *A Economia Portuguesa*. Lisboa: Ministério das Finanças.
- Dormann C, Zapf D. Job satisfaction: a meta-analysis of stabilities. *Journal of Organizational Behavior* 2001; 22: 483-504.

- Fisher C. On the dubious wisdom of expecting job satisfaction to correlate with performance. *Academy of Management Review* 1980; 5: 607-12.
- Gerhart B. How important are dispositional factors as determinants of job satisfaction? Implications for job design and other personnel programs. *Journal of Applied Psychology* 1987; 72: 366-377.
- Green, F. & Tsitsianis, N. (2005) An Investigation of National Trends in Job Satisfaction in Britain and Germany. *British Journal of Industrial Relations*, 43, 3, pp. 401–429.
- Hackman JR, Oldham GR. *Work Redesign*. Reading, MA: Addison-Wesley, 1980.
- Hartline MD, Ferrell OC. The management of customer–contact service employees: an empirical investigation. *Journal of Marketing* 1996; 60: 52-70.
- Herzberg F, Mausner B, Snyderman B. *The Motivation at Work*. New York: Wiley, 1959.
- Ilie R, Wilson KS, Wagner DT. The spillover of daily job satisfaction onto employees' family lives: the facilitating role of work-family integration. *Academy of Management Journal* 2009; 52: 87-102.
- Instituto Nacional de Estatística (2002). *Recenseamento da população (1990-2008)*: Lisboa: INE.
- Instituto Nacional de Estatística (2004). *Retrato Territorial Português*. Lisboa: INE.
- Instituto Nacional de Estatística (2007). *Censos: 2007*. Lisboa: INE.
- Instituto Nacional de Estatística (2007). *Síntese Económica de Conjuntura: 2007*. Lisboa: INE.
- Instituto Nacional de Estatística (2008). *Censos: 2008*. Lisboa: INE.
- Instituto Nacional de Estatística (2008). *Síntese Económica de Conjuntura: 2008* Lisboa: INE.
- Ironson GH, Smith PC, Brannick MT, Gibson WM, Paul KB. Construction of a job in general scale: a comparison of global, composite, and specific measures. *Journal of Applied Psychology* 1989; 74: 193-200.
- Ivancevich, J., Olelelins, M. & Matterson, M. (1997) *Organizational Behaviour and Management*. Irwin, Sydney.
- Jackson CJ, Corr PJ. Global job satisfaction and facet description: the moderating role of facet importance. *European Journal of Psychological Assessment* 2002; 18: 1-8.
- Jayarathne S. The antecedents, consequences, and correlates of job satisfaction. In: Golembiewski R, editor. *Handbook of Organizational Behavior*, Chap. 6. New York: Martin Dekker, 1993. pp. 111-140.
- Judge TA, Heller D, Mount MK. Five-factor model of personality and job satisfaction: a meta-analysis. *Journal of Applied Psychology* 2002; 87: 530-541.

- Judge TA, Thoresen CJ, Bono JE, Patton GK. The job satisfaction-job performance relationship: a qualitative and quantitative review. *Psychological Bulletin* 2001; 127: 376-407.
- Judge, Timothy A.; Locke, Edwin A.; Durham, Cathy C.; Kluger, Avraham N.. (1998). Dispositional Effects on Job and Life Satisfaction: The Role of Core Evaluations. *Journal of Applied Psychology*, Vol. 83 Issue 1, p17-34.
- Kinicki AJ, McKee-Ryan FM, Schriesheim CA, Carson KP. Assessing the construct validity of the Job Descriptive Index: a review and meta-analysis. *Journal of Applied Psychology* 2002; 87: 14-32.
- Locke EA. The nature and causes of job satisfaction. In Dunnette M, editor. *Handbook of Industrial and Organizational Psychology*. Chicago: Rand McNally, 1976. pp. 1293-1349.
- Mobley WH, Griffeth RW, Hand HH, Meglino BM. Review and conceptual analysis of the employee turnover process. *Psychological Bulletin* 1979; 86: 493-522.
- Nagy M. S. (2002). Using a single-item approach to measure facet job satisfaction. *Journal of Occupational and Organizational Psychology*, Volume 75, Number 1, March 2002 , pp. 77-86(10)
- Nerkar AA, McGrath RG, Macmillan IC. Three facets of satisfaction and their influence on the performance of innovation teams. *Journal of Business Venturing* 1996; 11: 167-188.
- Ng TWH, Soresen KL, Yim FHK. Does the job satisfaction-job performance vary across cultures? *Journal of Cross-Cultural Psychology* 2009: 1-36.
- Pelzer B, Eisinga R, Franses PH. "Panelizing" repeated cross section. *Quality & Quantity* 2005; 39: 155-174.
- Podsakoff PM, MacKenzie SB, Lee J, Podsakoff NP. Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology* 2003; 88: 879-903.
- Quinn RP, Shepard LJ. *Quality of Employment Survey*. Ann Arbor: Institute for Social Research, University of Michigan, 1974.
- Robert Loo, (2002) "A caveat on using single-item versus multiple-item scales", *Journal of Managerial Psychology*, Vol. 17 Iss: 1, pp.68 - 75.
- Rutherford B, Boles J, Hamwi GA, Madupalli R, Rutherford L. The role of seven dimensions of job satisfaction in salesperson's attitudes and behaviors. *Journal of Business Research* 2009; 62: 1146-1151.
- Scarpello V, Campbell JP. Job satisfaction: are all the parts there? *Personnel Psychology* 1983; 36: 577-600.

- Schjoedt L. Entrepreneurial job characteristics: an examination of their effect on entrepreneurial satisfaction. *Entrepreneurship Theory and Practice* 2009; 33: 619-644.
- Schleicher DJ, Watt JD, Greguras GJ. Reexamining the job satisfaction-performance relationship: the complexity of attitudes. *Journal of Applied Psychology* 2004: 165-177.
- Schneider B, Bowen DE. Employee and customer perceptions of service in banks: replication and extension. *Journal of Applied Psychology* 1985; 70: 423-33.
- Schneider B, Dachler HP. A note on the stability of the Job Description Index. *Journal of Applied Psychology* 1978; 63: 650-653.
- Shore, L. Mc., & Martin, H. J. (1989). Job satisfaction and organizational commitment in relation to work performance and turnover intentions. *Human Relations*, 42(7), 635-638.
- Smith PC, Kendall LM, Hulin CL. *The Measurement of Satisfaction in Work Retirement: A Strategy for the Study of Attitudes*. Chicago: Rand McNally, 1969.
- Snipes RL, Oswald SL, LaTour M, Armenakis AA. The effects of specific job satisfaction facets on customer perceptions of service quality: an employee-level analysis. *Journal of Business Research* 2005; 58: 1330-1339.
- Spector PE. *Job Satisfaction: Application, Assessment, Causes, and Consequences*. Thousand Oaks, CA.: Sage, 1997.
- Spector PE. Measurement of human service staff satisfaction: development of the Job Satisfaction Survey. *American Journal of Community Psychology* 1985; 13: 693-713.
- Staw BM, Cohen-Charash Y. The dispositional approach to job satisfaction: more than a mirage, but not yet an oasis. *Journal of Organizational Behavior* 2005; 26: 59-78.
- Staw BM, Ross J. Stability in the midst of change: a dispositional approach to job attitudes. *Journal of Applied Psychology* 1985; 70: 469-480.
- Steel RP, Rentsch JR. The dispositional model of job attitudes revisited: findings of a 10-year study. *Journal of Applied Psychology* 1997; 82: 873-879.
- Tait M, Padgett MY, Baldwin TT. Job and life satisfaction: a reevaluation of the strength of the relationship and gender effects as a function of the date of the study. *Journal of Applied Psychology* 1989; 74: 502-507.
- Taiwan. *Journal of Business Ethics* 2008; 80: 565-581.
- Tharenou P. A test of reciprocal causality for absenteeism. *Journal of Organizational Behavior* 1993; 14: 169-190.
- Tsai M-T, Huang CC. The relationship among ethical climate types, facets of job satisfaction, and the three components of organizational commitment: a study of nurses in

- Vallejo, R. D., Vallejo, J. A. D., & Parra, S. O. (2001). Job satisfaction in banking workers. *Psicothema, 13* (4), 629-635.
- Wanous JP, Reichers AE, Hudy MJ. Overall job satisfaction: how good are single-item measures? *Journal of Applied Psychology* 1997; 82: 247-252.
- Wanous, J. P., Reichers, A. E., & Hudy, M. J. (1997). Overall job satisfaction: How good are single-item measures? *Journal of Applied Psychology, 82* (2), 247-252.
- Weiss DJ, Dawis RV, England GW, Lofquist LH. Manual for the Minnesota Satisfaction Questionnaire. *Minnesota Studies in Vocational Rehabilitation* 1967: 22.
- Weiss HM. Deconstructing job satisfaction: separating evaluations, beliefs and affective experiences. *Human Resource Management Review* 2002; 12: 173-194.
- Ybema, Jan F.; Smulders, Peter G. W.; Bongers, Paulien M. (2010). Antecedents and consequences of employee absenteeism: A longitudinal perspective on the role of job satisfaction and burnout. *European Journal of Work & Organizational Psychology, Vol. 19* Issue 1, p102-124.
- Yousef DA. Job satisfaction as a mediator of the relationship between role stressors and organizational commitment: a study from Arabic cultural perspective. *Journal of Managerial Psychology* 2002; 15: 250-267.
- Chen, Z.; Zhang, X.; Leung, K.; Zhou, F. (2010). Exploring the interactive effect of time control and justice perception on job attitudes. *Journal of Social Psychology, 150*(2), 181-197.
- Klassen, R. M.; Anderson, C. J. K.. (2009). How times change: Secondary teachers' job satisfaction and dissatisfaction in 1962 and 2009. *British Educational Research Journal, 35* (5), 745-759.
- Schneider, B & Snyder, R.A. (1975). Some relationship between job satisfaction and organizational climate. *Journal of Applied Psychology, 60*(3), 318-328.
- Teresa (2009)
- Pereira de Almeida, 2002
- Pires de Lima et al, 20
- Connolly, J.J., & Viswesvaran, C. (2000). The role of affectivity in job satisfaction: a meta-analysis. *Personality and Individual Differences, 29*(2), 265-281.
- Faragher, E. B., Cass, M., & Cooper, C.L. (2005). The relationship between job satisfaction and health: a meta-analysis. *Occupational Environmental Medicine, 62*, 105-112.

- Caetano, A. Tavares, S. & Reis, R. (2002). Valores do Trabalho em Portugal e na União Europeia. In J. Vala, M.V. Cabral e A. Ramos (Orgs.), Valores sociais: mudanças e contrastes em Portugal e na Europa. Lisboa: Imprensa de Ciências Sociais.
- Caetano, A. & Silva, S. A. (2010). Bem-estar e saúde no trabalho. In Lopes, M. P. Ribeiro, R. B., Palma, P. J. e Cunha, M. P. (eds), Psicologia Aplicada, Lisboa: Recursos Humanos Editora.