

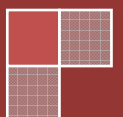
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December 2017*

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Editor-in-Chief

Prof. Dr. Jerry WILLIS - ST John Fisher University in Rochester, USA  
Prof. Dr. J. Ana Donaldson - AECT President  
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OF  
EDUCATIONAL  
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Dear Colleagues,

We are very pleased to publish Special Issue for INTE-2017, ITICAM 2017 & IDEC 2017 conferences. This issue covers the papers presented at International Conference on New Horizons in Education, International Trends and Issues in Communication & Media Conference and International Distance Education Conference which were held in Freie Universität Berlin, Germany. These papers are about different research scopes and approaches of new developments and innovation in education, communication, media and technology.

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## **Toward a Quality Measure of Angolan Public Higher Education Institutions to Enhance Organizational Performance**

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### **ABSTRACT**

Nowadays, Higher Education Institutions (HEI) are obliged to pursue the path of quality, not only because of the growing demand of society, but also because HEI are the driving force for competitiveness. As the knowledge society is increasingly demanding, it is necessary to measure and evaluate it. The use of a self-assessment tool, developed in Europe, Common Assessment Framework (CAF), allows the measurement of the quality of services provided in public administration. In order to evaluate the reliability of the application of the CAF model to Public Higher Education Institutions in Angola, a multivariate analysis it was used. The findings of this study show that the model can be applied with confidence to Angolan HEI. In addition, the CAF model can be a useful tool for HEI to help them get to know each other better and move toward the path of quality, in an endless search for continuous improvement translated into excellent organizational performance.

**Keywords:** Higher Education Institutions; Common Assessment Framework; Competitiveness; Self-assessment.

### **INTRODUCTION**

The increased competitiveness in organizations, as is the case Higher Education Institutions (HEI) in terms of attracting and keeping students leads education managers reassess their strategy intended at finding the elements and indicators of competitive advantage. According to Watson (2000), strategy management is crucial for a HEI, as it provides the realization of its main activities. To this extent, it is fundamental that educational managers use instruments that help them to effectively know the main strengths of their institution. Since human capital is considered the fundamental element of an effective implementation of the organizational strategy, the only ones where companies can efficiently differentiate themselves from their competitors, since the rest is easily imitated. Thus, human resources certainly represent a sustainable competitive advantage for any organization. In this sequence the application of an instrument capable of measuring job satisfaction can be the key to an adequate measure of organizational performance.

In addition, in organizations it is important not only to assess the needs and customer satisfaction but also the level of job satisfaction and participation, making them feel satisfied in the improvement of their activities. Job activity occupies most of the time of workers, and undoubtedly has a notable importance in the life of the active population. Health and safety are two of the pillars that sustain productivity, so organizations must offer their workers favourable conditions. So that they can develop their activities, ensuring their physical and mental well-being (Chiavenato, 2008).

To this extent, it is extremely relevant that the workplace provides well-being, since this satisfaction exhibits a direct connection with the other spheres of workers' lives. According to Graça (1999), job satisfaction comprises an attitude or an emotion that assumes concrete meaning in behaviours and opinions expressed. Barros and Cunha (2010) affirm that it is the activity that determines the set of all the actions (thoughts, feelings and emotions) that characterize human behaviour at work. There are several studies that show that job satisfaction has an effective effect on the productivity of organizations, on the well-being of employees and also on the various dimensions that are directly or indirectly associated with people, both in the labour and personal fields

Several dimensions were indicated in order to ascertain job satisfaction: working and health conditions, job security, achievement, autonomy, relationship, prestige and remuneration. Job satisfaction can be assessed by different approaches and in different environments. Research at the global level suggests that good socialization practices lead individuals to understand their role more clearly, getting more involved in work and organization, leading to greater satisfaction, since according to Gomes et al. (2008) in the initial stages of the individual's life in the organization, it is important that the new employee has good opportunities to interact and socialize with his peers and leaders.

Job satisfaction has become increasingly important because it is pointed out as a variable, implicitly and explicitly, that is linked cumulatively to the productivity and personal fulfilment of workers. Greater job satisfaction contributes to the professional finds meaning in their work activity and adopts positive attitudes towards institutional development. Bearing as the main objective the quality of services provided in and the measurement of job satisfaction in the Public Higher Education Institutions in Angola, was applied the self-assessment tool, developed in Europe, Common Assessment Framework (CAF), it allows the measurement of the quality of services provided in public administration. In order to evaluate the reliability of the application of the CAF model to Public Higher Education Institutions in Angola, a multivariate analysis it was used. In sum, the present research work aims to contribute to the construction and validation of an instrument that can be used by educational managers and other researchers in assessing the level of satisfaction of academic workers in Public HEI in Angola. This paper is organized in 5 points. In addition to the present introduction, there is a section with the theoretical framework, another with the supporting methodology of the whole study. Following is the section where the results achieved with the application and validation the model CAF 2006 are displayed and discussed. Finally, the main conclusions and contributions of the present study are highlighted.

## **THEORETICAL BACKGROUND**

In the current context of globalisation, the work environment has undergone profound and significant changes around the need to systematic adaptation of the organizations to the new market challenges (Lawler, 2005). One of the great and current requirements of organizations is to use the range of knowledge in a strategic and integrated way, rather than simply need to retain the best professionals. In this sequence, according to Handel (2005), professionals considered more satisfied, who perceive greater autonomy and decision-making freedom in the pursuit of their activities, tend to become more involved with their work and to perceive it more in function of the designated ones rewards intrinsic, related to their interests, demands and needs, which most impact on their performance and inherently in organizational performance.

Organizations have begun to invest in strategic management and particularly in human resource management, which reveals the progressive concern with people, regarded as the key factor for excellent performance and organizational competitiveness. In addition to the usual sources of competitive advantage, people have come to be seen not as a mere organizational resource that should be managed like other resources but rather as the strategically most important "resource" for gaining competitive advantage. In the search for this advantage, the contribution requested for the human resources management is in the capacity of production of added value, representing this capacity, the implementation of certain strategic activities of human resources management (Mendes, 2012). The systematic and continuous adaptation of organizational practices to environmental changes and the adoption of leadership styles that stimulate the proximity between goals and interests shared by professionals and organizations undoubtedly lead to the improvement of sustainable organizational performance. To this extent, organizations such as HEI must implement a human resources management that is closer to professionals, which verifies the impact of their actions on their performance, with special incidence on measuring of the level of the satisfaction of their employees.

The importance of the job satisfaction construct to the area of organizational behaviour remits the researchers to respond to the challenge of evaluating it in a valid and precise way. In order to respond to this challenge, the objective proposed of this research was the adaptation and validation of the Common Assessment Framework (CAF), widely used in Europe, to measure the degree of satisfaction of HEI public professionals in Angola. It is intended that the validated application of the CAF scale make it possible to understand the perception of these professionals about this reality, to know what motivates them and what their expectations, and through this knowledge enhance their productivity and efficiency, as well as the quality of higher education Public of Angola. Lobos (1978) argues that so many managers and social researchers believe that if work dissatisfaction were reduced, human barriers to production would be eliminated and transformed into a force that would promote improved performance and consequently productivity.

With regard to the professionals of the higher education, the way in which they feel and faces his work, determine categorically the success and the quality of the education. Because it is a profession that is dynamized particularly in the field of human relations, satisfaction in the workplace becomes essential. In fact, teaching is a profession that has undergone changes and restructurings in the sense of achieving excellence in teaching. With the increasing development of communication and information technologies, education professionals need constant updating so as not to compromise professional competence and the quality of teaching and service delivery to students and the community.

Some investigators have dedicate special attention to examine the supposed relation between the job satisfaction and professional performance and consequently organizational competitiveness. Locke (1976) understands job satisfaction as an emotional state, pleasant or positive, which necessarily results from work-related experiences. Such an emotional state is determined by agents (such as relationships with bosses and colleagues, organizational policies and procedures, etc.) and events (such as physical conditions in the industry and recognition by others) related to the work, capable to promote such satisfaction. According to Suar, Tewari and Chaturbedi (2006) job satisfaction is the individual's perception of intrinsic aspects (levels of responsibility, autonomy, functional progression, and others) and extrinsic ones (challenging work, salary, hours of work, type of work Position, among others) related to their performance within organizations. Such definitions of satisfaction directly influence the type of measure used, whether a general satisfaction measure or a measure that evaluates its dimensions or facets separately. There are a large number of measures associated with the operationalization of this variable. Tsang and Wong (2005) define job satisfaction as a positive emotional state or pleasure sensation resulting from assessment of a work or related aspects simultaneously. For Scott-Ladd, Travaglione and Marshall (2006) job satisfaction is understood as how much an individual really likes what he does. It refers, therefore, to an attitudinal response of the individual around how much work gives him rewards and compensations, not necessarily financial ones. The individual would feel satisfied from his attitude towards interpersonal relationships with peers, the confidence climate established in his sector, the friendship among his colleagues, among other intangible aspects that would promote this satisfaction.

Moreover, several studies (Locke, 1969; Cura & Rodrigues, 1999; Judge, Thoresen, Bono & Platton, 2001; Aiken, Clarke & Sloane, 2002; Martinez, Paraguaya & Latorre, 2004; Marquez & Moreno, 2005; Santos, Spagnoli, Ramalho, Passos & Caetane, 2010; Moura, 2012; Azevedo, 2012; Leite, 2013) point to an implicit link between job satisfaction and the high performance of its professionals. According to Lu, Barribal, Zhang and While (2011) workers' expectations play a role in the traditional model of job satisfaction and, in turn, job satisfaction is related to performance. Mezomo (2001) points out that an organization with satisfied employees has a potential advantage, since, as a rule, it attracts the best, reduces staff turnover, increases productivity, reduces costs, improves image in the community and gains competitiveness. The senior works of a higher education institution have an important role in creating job satisfaction, identifying which factors cause satisfaction and/or dissatisfaction, and to use those data to identify strategies that lead to improved situations that are less satisfactory, and to use this data to identify strategies that lead to improving less satisfactory situations, since they are crucial aspects since job satisfaction has a significant impact on employees' commitment to organizations, work performance and motivation (Noordin & Jusoff, 2009; Machado-Taylor, Soares & Gouveia, 2010; Machado-Taylor, et al., 2016).

In addition, job satisfaction is an indispensable condition for improving the functioning of organizations, and educational managers have a decisive role, through the promotion of strategies that lead to increase the satisfaction of the workers, with a view to achieving results in terms of creativity, commitment and productivity (Alpay & Verschoor, 2014; Castro et al., 2011, Machado-Taylor et al., 2016, Wei & Junyan, 2015).

## METHODOLOGY

### Process of construction and adaptation of the CAF 2006 Model

The adaptation and application of the scale was based on a bibliographical review based on literature and research studies on the satisfaction of workers who mainly used the CAF model, this model was elaborated and validated by the European Union, with the support of the Speyer Academy, representative of the German quality model, and the European Foundation for Quality Management (EFQM). The CAF model is a tool that allows public organizations to carry out self-assessment exercises in a perspective of continuous improvement since it is a Total Quality Management tool and was developed based on the Excellence Model of the European Foundation for Quality Management (EFQM). CAF is used throughout Europe as a common framework for quality assessment of Public Administrations and to assist them in the pursuit of excellence. It should be noted that CAF analyses the organization from different angles, promoting a holistic analysis of its performance. The present study was based on the perspective of teaching and non-teaching staff. It is important to mention that this study also intends to measure the satisfaction that the employees have in relation to the remuneration system in force, which is why recourse was made to the questionnaire on teacher and non-teacher satisfaction and dissatisfaction, adapted and validated for the Portuguese population by Seco (2000) being the original author of this questionnaire is (1982). From this questionnaire were extracted 4 items that evaluate the satisfaction with the current remuneration.

The questionnaire is composed of 82 items and is organized in 2 parts. In the first part, questions were asked in order to obtain elements of sociodemographic and professional characterization of the individuals (13 items). In the second part of the questionnaire, an instrument for satisfaction study was introduced, namely the CAF 2006 model. This part is composed by the set of 8 Factors (total of 69 items), such as: Overall satisfaction with the institution with 9 items, Satisfaction With management and management system with 9 items, Satisfaction with working conditions with 8 items, Satisfaction with career development with 5 items, motivation levels with 5 items, Satisfaction with leadership style Top management with 11 items, Satisfaction with leadership style intermediate management with 11 items, Satisfaction with the conditions of hygiene, safety, equipment and services with 7 items and satisfaction with the compensation system with 4 items. In summary, this study intends to validate the adaptation of the professional satisfaction scale corresponding to the second part of the questionnaire, composed of seven dimensions taken from the CAF 2006 model and a dimension proposed by Seco (2000) to evaluate the remuneration system. The 69 items that make up the 8 factors are expressed in affirmations, in which the professionals of the Higher Education indicate the degree of satisfaction with their place of work. Thus, the present scale aims to evaluate the satisfaction of these professionals related to aspects of work dynamics, such as leadership (intermediate and top leadership styles), management systems, internal career development, hygiene conditions, safety, equipment and services, Working conditions, motivation and professional valuation and remuneration. It is a Likert-type scale with five response options: 1 = Very Unsatisfied, 2 = Unsatisfied, 3 = Moderately Satisfied, 4 = Satisfied and 5 = Very Satisfied.

### Instrument and Procedure for data collection

As a data collection instrument, a questionnaire was sent to all teaching and non-teaching professionals of the Public Higher Education of the Province of Kwanza South in Angola (n = 147). The data collection was carried out from May 6 to 22, 2016. This distribution was made after obtaining superior authorization to perform the data collection in the two public institutions of Higher Education of Kwanza South: Institute Superior Polytechnic of Kwanza South (ISPKS) and Institute of Education Sciences (ISCED) of the Sumbe. After obtaining the questionnaires, statistical data were processed in the Statistical Package for the Social Sciences (SPSS) 20 program.

### Data analysis procedure

Participants' responses were treated using SPSS software and subjected to descriptive statistical analysis, factorial analysis and Cronbach's alpha calculation. The data were examined for normality, collinearity and distribution of outliers. The factorial of the sample was tested by the Kaiser-Meyer-Olkin Coefficient and Bartlett's sphericity test, as recommended by Marôco (2010). After that, the data were submitted to analysis of the Principal components (PC) and the Factorization of the Principal Axes (PAF). The reliability of the factors was estimated by the calculation of Cronbach's alphas. In sum, for the validation of the scale, it was make the first extraction of its factors (dimensions and components) was performed by analysing its Principal Components (PC) in order to verify the initial number of factors in the matrix. We also analysed extreme cases, multicollinearity and matrix factorization through sample size, intercorrelations, as well as distribution of the eigenvalues and graphic analysis through the scree plot. Then, Principal Axis Factoring was carried out. Factor scores were also calculated.

### Sample Profile

The sample was consisted of 147 individuals, 64.6% (95) of these professionals work at ISPKS and 35.4% (52) at ISCED. Regarding gender, 61.2% (90) of the respondents are male and 38.8% (57) female. As to age, 25.9% (38) of the individuals were aged up to 30 years, 41.5% (61) were between 31 and 40 years old and 32.7% (48) were over 40 years old. Of the respondents, 81% (119) of respondents are Angolan, 17% (25) of respondents are Cuban, one is Portuguese and two are Vietnamese. Regarding marital status, 57.1% (84) were single, 38.8% (57) were married / de facto, two were divorced and four were widowed. The majority of respondents, 81.6% (120) had children, these individuals 21.1% (31) had one child, two children and 27.9% (41) had three to five children. With regard to qualifications, it was observed that 3.4% (5) had completed the 1st cycle of secondary education, 12.9% (19) finished secondary school, 17.7% (26) graduated with a bachelor's degree, 29.3% (43) of the respondents were graduates, 33.3% (49) finished the master's degree and one respondent has the doctoral degree. Regarding the employment relationship, 68.0% (100) stated that they were effective and 32.0% (47) were employees.

**Table 1:** Sample Profile

Variables		<i>n</i>	%
Institution	ISPKS	95	64,6
	ISCED	52	35,4
	Total	147	100
Gender	Male	90	61,2
	Female	57	38,8
	Total	147	100
Age	Up to 30 years old	38	25,9
	From 31 to 40 years old	61	41,5
	Greater than 40 years old	48	32,7
	Total	147	100
Nationality	Angolan	119	81,0
	Cuban	25	17,0
	Vietnamese	1	0,7
	Angolan	2	1,4
	Total	147	100
Marriage Status	Not married	84	57,1
	Married/Union in fact	57	38,8
	Divorced/Separated	2	1,4
	Widower	4	2,7
	Total	147	100
Have Children	Yes	120	81,6
	No	27	18,4
	Total	147	100
Number of children	One child	48	32,7
	Two children	31	21,1
	Three to five children	41	27,9
	Total	120	100
Educational Qualifications	1st cycle of secondary education	5	3,4
	2nd cycle of secondary education	19	12,9
	Bachelor's Degree	26	17,7
	Graduation	43	29,3
	Master	49	33,3
	PhD	5	3,4
	Total	147	100
Job link	Effective	100	68,0
	Collaborator	47	32,0
	Total	147	100

## FINDINGS

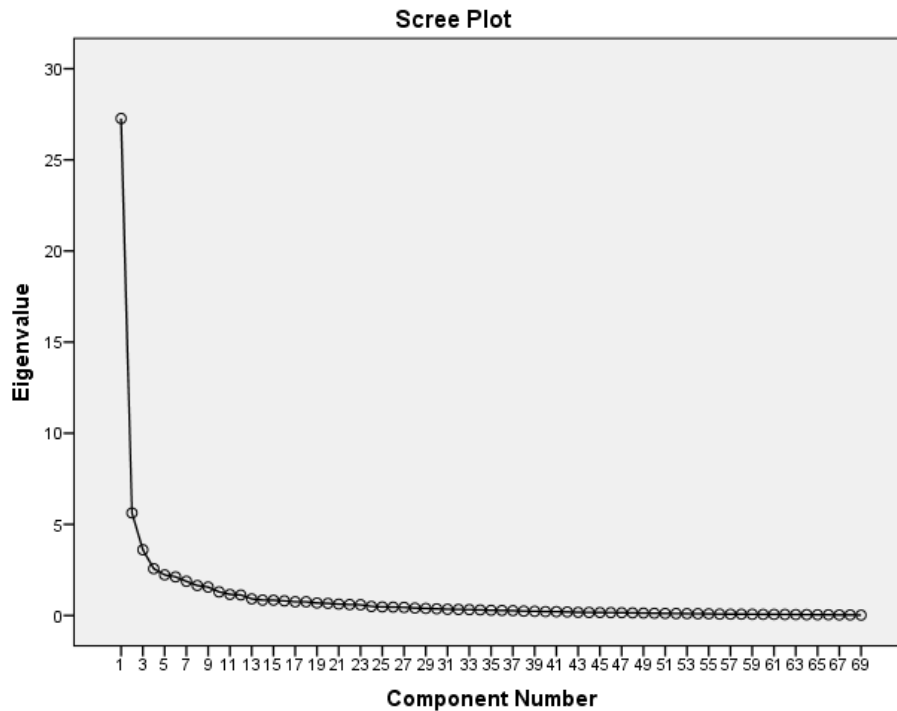
### Validity and Reliability

The legitimacy of the factorial analysis was assessed by the Kaiser-Meyer-Olkin of Adequacy (KMO) measure of adequacy. The value obtained was 0.90, considered as very good according to Marôco (2010). Which means a strong correlation between the variables. The Bartlett test ( $p < 0.001$ ) allows us to conclude that the variables are significantly correlated. In this way, it can be ensured that with the available sample, the scale is subject to factorial analysis.

### Factor analysis

Exploratory factorial analysis was performed, and it were obtained eight factors (components) with a value greater than 1 (Figure 1) explaining 68.04% of the total variance (Table 2). The obtained values demonstrated, according to Marôco (2010), to be acceptable for the pursuit of the study.

**Figure 1: Scree Plot**



Moreover, Table 2 shows that all variables have a strong or moderate relationship with the retained factors, because for the extracted factors, the percentage of the variance of each variable explained by the common factors extracted was higher than 49,8% for all variables.

**Table 2:** Components Matrix

Factors	Own Value	% de Variance	% Cumulative Variance
1	27,269	39,520	39,520
2	5,628	8,156	47,676
3	3,607	5,228	52,904
4	2,566	3,719	56,624
5	2,229	3,231	59,855
6	2,122	3,075	62,930
7	1,880	2,725	65,655
8	1,648	2,388	68,043

Table 3 shows the main factor matrix obtained by the Varimax rotation method. In the factorial analysis, no item was excluded, all of which presented a correlation value higher than 0.30, in fact the minimum value obtained was 0.36. After the eight factors were obtained, their designation was made, taking into account the theoretical reference. Thus, the dimensions that make up the Satisfaction Scale were denominated: Satisfaction with Management and Management Systems that encompass Internal Career Development, Satisfaction with the Intermediate Leadership Style, Global Satisfaction of Workers with the Institution, Satisfaction with Style Leadership - Top Management, Satisfaction with the Conditions of Hygiene, Safety, Equipment and Service, Levels of Motivation, Satisfaction with the Current Remuneration System and Satisfaction with Working Conditions.

**Table 3:** Rotated Component Matrix

Items		1	2	3	4	5	6	7	8	Items	1	2	3	4	5	6	7	8
Q16	SManager5	,748								Q40				,728				
Q24	Sconditions6	,713								Q39				,688				
Q17	SManager6	,691								Q38				,652				
Q15	SManager4	,686								Q44				,645				
Q25	Sconditions7	,663								Q42				,640				
Q7	Sglobal7	,645								Q43				,613				
Q26	Sconditions8	,641								Q47				,608				
Q9	Sglobal9	,639								Q41				,587				
Q29	Sdevelopment3	,603								Q37				,586				
Q12	SManager2topo	,587								Q46				,567				
Q20	Sconditions2	,565								Q10				,467				
Q30	Sdevelopment4	,557								Q45				,361				
Q18	SManager7	,543								Q59					,752			
Q28	Sdevelopment2	,540								Q60					,732			
Q27	Sdevelopment1	,444								Q61					,713			
Q54	SIntermediate7b		,794							Q62					,639			
Q51	SIntermediate4b		,786							Q65					,607			
Q55	SIntermediate8b		,784							Q64					,535			
Q53	SIntermediate6b		,784							Q63					,495			
Q52	SIntermediate5b		,776							Q35						,794		
Q50	SIntermediate3b		,756							Q36							,775	

Q49	SIntermediate2b	,717						Q33	N Motivation 2	,732					
Q48	SIntermediate1b	,716						Q34	N Motivation 3	,727					
Q57	SIntermediate10b	,713						Q32	N Motivation 1	,518					
Q58	SIntermediate11b	,703						Q67	Sremuneration2		,761				
Q56	SIntermediate9b	,543						Q69	Sremuneration4		,726				
Q3	Sglobal3	,783						Q66	Sremuneration1		,726				
Q4	Sglobal4	,719						Q68	Sremuneration3		,706				
Q6	Sglobal6	,706						Q22	SConditions4			,756			
Q8	Sglobal8	,687						Q23	SConditions5			,694			
Q1	Sglobal1	,649						Q21	SConditions3			,671			
Q31	Sdevelopment5	,639													
Q13	SManager2Intermediate	,573													
Q11	SManager1Intermediate	,561													
Q2	Sglobal2	,552													
Q5	Sglobal5	,521													
Q14	SManager3	,454													
Q19	Sconditions1	,441													

By performing a cross-analysis of tables 2, 3 and 4 we can describe the eight dimensions with respect to its composition of the items and the explanation of each dimension for the total variance. Satisfaction with Management and Management Systems was the first dimension obtained after the factorial analysis of the CAF model was carried out. It constituted by 15 items that refer to the satisfaction with the relationship established between the worker and the Management, the Management Systems and the internal development of the career. This first factor explains 39.52% of the total variance. The second dimension, Satisfaction with the Intermediate Leadership style is composed of eleven items that explains 8.16% of the variance. The all items refer to the intermediate leadership of the workplace. The third dimension obtained after conducting a factorial analysis was called Global Satisfaction of workers with the Institution. The name assigned is related to the nature of the items, which refer to aspects related to overall satisfaction with the Institution. This dimension consists of 12 items that explains 5.23% of the variance. The Top Management Leadership Satisfaction dimension consists of twelve items that account for 3.72% of the variance. All items refer to aspects related to satisfaction with the leadership style adopted by Top Management. The fifth dimension Satisfaction with the Conditions of Hygiene, Safety, Equipment and Service, is composed of seven items that explain 3.23% of the variance. The same items refer to the organizational structure of the workplace and resources. In this dimension the hygiene and safety conditions of the premises, the equipment / materials and the physical work space are taken into account. The sixth dimension refers to the levels of motivation of the workers, it is composed of five items that explain 3.08% of the variance. Satisfaction with the current remuneration system was the seventh dimension obtained after the execution of the factorial analysis. It consists of four items that explain 2.73% of the variance. This dimension is composed of items that refer to the satisfaction with the remuneration in relation to the work performed and the literary qualifications. The last dimension obtained Satisfaction with working conditions consists only of 3 items that explain 2.38% of the total variance. These items refer to the satisfaction with the working environment, working hours and the conjugation of work with family life.

The internal consistency study was performed using Cronbach's alpha coefficient (Table 4). All dimensions have obtained values for the Cronbach Alpha ranging from 0.795 to 0.96, which means that the dimensions have a good internal consistency. We highlight the first 5 dimensions of the satisfaction scale with values above 0.90, which means according to Hill and Hill (2009) that these dimensions present an excellence internal consistency. In the remaining dimensions Cronbach's alpha values are very good, according to Marôco (2010). Thus, taking into account the previously mentioned, it can be said that the values demonstrate an internal consistency appropriate to the achievement of the study (Table 4). Regarding the determined factors, it can be seen from table 4 that the best results in average terms occur for the factors (dimensions): F2, F6 and F8, while the less satisfied perspective happens in factors F5 and F7.

**Table 4:** Statistic Summary of Factors extracted by Factorial Analysis

Factors	Items	Alpha de Cronbach	Minimum	Maximum	Average	Standard Deviation	Medium
<b>F1</b>	7;9;12;15;16;17;18;20;24;25;26;27;28;29;30	0,960	1,07	5,00	3,12	1,01	3,13
<b>F2</b>	48;49;50;51;52;53;54;55;56;57;58	0,947	1,45	5,00	3,73	0,88	3,82
<b>F3</b>	1;2;3;4;5;6;8;11;13;14;19;31	0,920	1,17	5,00	3,59	0,76	3,67
<b>F4</b>	10;37;38;39;40;41;42;43;44;45;46;47	0,939	1,00	5,00	3,64	0,87	3,75
<b>F5</b>	59;60;61;62;63;64;65	0,900	1,00	5,00	2,88	0,98	2,71
<b>F6</b>	32;33;34;35;36	0,876	1,20	5,00	3,78	0,93	4,00
<b>F7</b>	66;67;68;69	0,837	1,00	5,00	3,10	1,06	3,25
<b>F8</b>	21;22;23	0,795	1,00	5,00	3,77	0,89	4,00

### Correlation between Factors

Concerning the correlations between factors and total scale, it is observed that F1, F3 and F4 are the ones that present a stronger relation with the total score. Among factors, there are correlations of weak to moderate intensity, although they are all statistically significant. In short, the correlations between the factors are positive and statistically significant, being an indicator of consistency between the dimensions of the construct and also the validity or fidelity argument of the measure (Table 5).

**Table 5:** Correlation between Factors

	F1	F2	F3	F4	F5	F6	F7	F8	TOTAL
<b>F1</b>	1	0,636**	0,693**	0,785**	0,695**	0,459**	0,460**	0,510**	0,925**
<b>F2</b>		1	0,409**	0,708**	0,466**	0,337**	0,196*	0,340**	0,750**
<b>F3</b>			1	0,538**	0,552**	0,587**	0,449**	0,486**	0,785**
<b>F4</b>				1	0,573**	0,409**	0,288**	0,431**	0,865**
<b>F5</b>					1	0,320**	0,538**	0,428**	0,772**
<b>F6</b>						1	0,289**	0,350**	0,568**
<b>F7</b>							1	0,284**	0,516**
<b>F8</b>								1	0,572**
<b>TOTAL</b>									1

Note: \*\*Correlation is significant at the 0,01 level (2-tailed).

## DISCUSSION AND CONCLUSION

In this study, the application of the CAF 2006 Satisfaction Scale was validated in a population of teachers and non-teaching personnel from Public Higher Education of Angola, belonging to the Kwanza South Public HEI: ISPKS and ISCED of Sumbe. It was verified that the minimum, maximum, average and median values are distributed over the intervals of the response scale, revealing some sensitivity in the evaluation of the construct. The value obtained from KMO was 0.90, being the same, according to Marôco (2010) considered excellent. Concerning the values of the Cronbach alpha, the scale dimensions presented values varying between 0.795 and 0.96, values that mean a very good internal consistency (Hill & Hill, 2009; Marôco, 2010), which shows a good Reliability of the instrument of the professional satisfaction scale. By means of the above, it can be affirmed that the results obtained have proved satisfactory in all dimensions to the pursuit of the study. An exploratory factorial analysis with varimax rotation was performed. After the same, the 69 items under evaluation were grouped into eight dimensions named, according to the bibliographic research by: 1) Satisfaction with Management, Management Systems and Career Development; 2) Satisfaction with the Intermediate Leadership Style; 3) Global Satisfaction of Workers with the Institution, 4) Satisfaction with Leadership Style - Top Management; 5) Satisfaction with the Conditions of Hygiene, Safety, Equipment and Service; 6) Levels of Motivation; 7) Satisfaction with the current Remuneration System and 8) Satisfaction with Working Conditions. The dimensions that constituted the final version of the professional satisfaction assessment instrument explain 68.04% of the total variance. In the present study, the fact that the research design was transversal could be considered as a limitation, since it did not allow to test the stability of the instrument, i.e. its capacity to produce the same results in successive applications.

This study aimed to validate the satisfaction scale in the CAF 2006 work. It was intended to verify the factorial structure of this scale obtained in a sample of the professionals of Public Higher Education of Angola, and thus verify the validity of the application of the CAF 2006 model, developed In a European context, to measure the degree of satisfaction of HEI professionals in Angola. The results pointed to an empirical structure similar to the CAF 2006 model, made up of eight factors. The eight dimensions identified allow the evaluation of the degree of satisfaction of the individuals in relation to both the working conditions, such as the perception of the degree of satisfaction with the leaders, and the characteristics more intrinsic to the task. Some dimensions can be evaluated separately, in the case of replication of this scale in organizations. If there is, for example, an interest in investigating the greater or lesser satisfaction of the individual with the organization's remuneration policy, it is recommended to analyse the items belonging to this factor. The same can be observed in relation to other dimensions identified, such as the degree of satisfaction with leadership styles, satisfaction with working conditions, among others. In summary, the CAF 2006 scale was reliable for what it aims to evaluate, and it is an important tool in the strategic of management human resources within organizations, especially in the specific case of HEI. It is recommended that there be replication in other organizations, with distinct cultural characteristics and a diversified organizational structure compared to those used both in their original design of the CAF 2006 model and in this study.

In addition, employee satisfaction correlates with productivity and the sustainable competitiveness of organizations. It is therefore important to assess the satisfaction of workers to promote working conditions based on their needs while ensuring their physical and mental well-being. The purpose of this study was to present the construction and validation of the CAF 2006 Scale for the context of Angolan Higher Education. The scale consisting of 69 items that are grouped in eight factors, allows evaluating the satisfaction of the professionals that perform functions at HEI. This model proved to be easy to apply and presented a good index of reliability and validity, so it can be a valuable tool for studies that intend to evaluate the perception of job satisfaction at HEI.

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