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Validation of an instrument to measure the improvement of individual performance in small and medium-sized companies in Mexico

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Abstract

The present paper analyzes psychometric properties of a self-made instrument to measure individual performance based on Gilbert's BEM. This research is quantitative, descriptive, correlational, causal; cross-sectional, using exploratory factor analysis and principal component analysis with Varimax orthogonal rotation. Empirical support was obtained by using a randomly stratified sample of 297 Mexican companies of Sonora State. The questionnaire – named DOPT- proved adequate to assess relevant organizational factors of human performance that could guide organizational performance policies accordingly. Its 40 items assess organizational level achieved in the following areas: Aims and objectives, Feedback, Task support, Incentives, Knowledge/Competences, Context, Sanctions, and Work processes. Psychometric properties results are commented in the light of commented literature about current overall organizational assessment and corporate longevity. In addition, organizational performance areas are discussed under a timing perspective defining mapping and tracing loops of organizational performance management.

Keywords: psychometric assessment; organizational performance; SMEs; work policies.

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Validación de un instrumento para medir la mejora del desempeño individual en pequeñas y medianas empresas de México

Resumen

El presente trabajo analiza las propiedades psicométricas de un instrumento de elaboración propia para medir el desempeño individual basado en el BEM de Gilbert. Esta investigación es cuantitativa, descriptiva, correlacional, causal; de corte transversal, utilizando análisis factorial exploratorio y análisis de componentes principales con rotación ortogonal Varimax. El soporte empírico se obtuvo utilizando una muestra estratificada aleatoria de 297 empresas mexicanas del Estado de Sonora. El cuestionario -denominado DOPT- demostró ser adecuado para evaluar factores organizacionales relevantes del desempeño humano que pudieran orientar en consecuencia las políticas de desempeño organizacional. Sus 40 ítems evalúan el nivel organizacional alcanzado en las siguientes áreas: Metas y objetivos, Retroalimentación, Apoyo a la tarea, Incentivos, Conocimientos/Competencias, Contexto, Sanciones y Procesos de trabajo. Los resultados de las propiedades psicométricas se comentan a la luz de la literatura comentada sobre la evaluación organizativa global actual y la longevidad corporativa. Además, se discuten las áreas de rendimiento organizativo bajo una perspectiva temporal que define los bucles de mapeo y trazado de la gestión del rendimiento organizativo.

Palabras clave: evaluación psicométrica; rendimiento organizativo; PYME; políticas de trabajo.

1. Introduction

Studies on organizational performance management are essential in human resources management as they provide the basis on how to excel in human motivation and satisfaction. As stated by Quintero, Africano and Faría (2008). Organizational Performance Management can be defined from two different but complementary perspectives: effectiveness and efficiency (Malacara-Castillo, Sandoval & Becerra, 2013). A role or a mission accomplished is a final performance (state) dependable upon the act of performing (process) in a "map" that is commonly defined or guided by customers (Bernárdez, 2009; Brethower, 2007; Chen & Lin, 2018). In this sense, Brethower understands Organizational Performance Management as a pending gap between timely set achievements (ideal context) and what is actually being done (real context) at any level. In order to be efficient, organizations should manage their workflows and labor contexts to guarantee excelling efforts and outcomes by means of positive staff job motivation and satisfaction. However, organizational performance is a complex, multidimensional term in which internal and external organizational factors intertwine the company's environment (Cruz et al, 2012).

The design of an organizational performance policy must provide a working environment free of low productivity, labor absenteeism, lack of training among others, all of which impact the organizational commitment and performance (Pershing, 2006; Rothwell, Hohne & King, 2007; Irlbeck, 2008). In this regard, the *human performance technology (HPT)* is an area of research on procedures to assess organizational needs and to develop tools in order to help employees increase their productivity (Pershing, 2006).

According to HPT, many organizational models of organizational performance have been proposed since 1950s that have progressively increased the number of variables (Irlbeck, 2008; Pershing, 2006). Thus, evidence seem to indicate that no single approach or factor is better than the next one. Literature review points out a number of human factors influencing performance such as abilities, skills, needs, knowledge, perception, etc. that interact with work and job nature to yield performance outcomes (Queipo & Useche, 2002). According to Gilbert (1978), all of them are equally important, and must be present for performance to occur.

2. Improving Individual Performance in SMEs

Thomas Gilbert - known as "the father of performance technology"- initially identified key factors in six areas that increase organizational performance taking into account variables of both work environment and the employee (Gilbert, 1978, 2007). The *environment* is required to inform on specific data, resources, and incentives, while knowledge, individual capacities, and motives are considered in the case of *employees*. Gilbert developed the BEM tool with the belief that the greatest barrier to the so-called *worthy performance* - characterized by a person's exemplary behavior and accomplishments- comes from a lack of information and support by management rather than an individual's lack of desire to perform well (Gilbert, 1978). Roger Chevalier updated Gilbert's model noticing that environmental factors are the starting point for analysis because they pose the greatest barriers to exemplary organizational performance (Chevalier, 2003). Although somehow implicit in the BEM model, Chevalier proposed to include enough time for the action or decision to be made, safe work environment, opportunities to succeed and develop careers (i.e. positive environment), adequate places to use and share knowledge, and relevant recruitment techniques. Thus, performance can be improved we can improve performance by addressing the information presented in the work environment by communicating clear expectations, providing the necessary guidelines to do the work, and providing timely, behaviorally specific feedback.

In 2006, Mager and Pipe's flow chart model was thought to avoid cost effectiveness in solving organizational performance problems and including seven decision-making steps concerning resources, skills, data, tools, feedback, and behavior contingencies (rewards and punishments) (Mager & Pipe, 2006). Following Gilbert model, a qualitative and longitudinal study was conducted with 30 companies to validate certain steps in the development of organizational performance: (1) performance analysis, (2) performance causes, (3) selection, design and development of an organizational intervention program, (4) intervention, accomplishment, change,

and (5) final evaluation (Pil, 2012). The study stated that performance causes (second step) was mainly covered by most companies (20 cases) using data, information, and feedback, while knowledge and skills were used in 13 cases and consequences, incentives and rewards in only 8 cases. It seems that *environmental support* factors appear to be more relevant than a *person´s repertoire of behavior* factors in assuring outstanding organizational performance. In average, environmental predictive factors of organizational performance outlined in literature nearly triple those referring to the individual's predictive factors (3 versus 1.3), and are considered in 46.4% of cases in comparison to 21.1%.

2.1. Gilbert BEM revised

Gilbert's BEM and related literature was revised in an attempt to include contemporary and agreed predictive factors in a new instrument. Considering theoretical structure of the BEM, we understand the definition and design of an organizational performance management system? in three separated but linked steps. The first two steps are inside the so-called *mapping loop* that is in charge of settling basis for the performance strategic program of the company and includes contextualizing (step 1) and empowering the staff (step 2).

The *tracing loop* includes step 3 referred to the maintenance of the system and also would also affect previous step 2 when the performance program is activated and constantly revised. Although this division is quite theoretical, the mapping loop must be perceived as a business-related and rather stable process in comparison with the tracing loop, which is highly dynamic and unpredictable.

The scientific literature screening on organizational performance management and models of organizational performance factors that predict and assess organizational performance outcomes have frequently given greater support to the environmental level rather than the individual one (Bernandez, 2005; Piersol & Paris, 2007; Pil, 2012; Crossman, 2010; Mager & Pipe, 2006; Brethower, 2007; Del Castillo & Vargas, 2009). Once the organization functions towards its targets, the individual levels advance by adjusting the system and retrieving new information to improve initial performance policies. There are eight different factors or areas of organizational performance:

F1. Aims and objectives; *F2. Feedback; F3. Task support; F4. Incentives; 5. Knowledge/Competences; F6. Context; F7. Sanctions; F8. Work processes*.

A correct organizational performance management contributes to both organizational and individuals benefits normally in a long-term basis. From a managerial perspective, the proposed model could include final consequences of the systems that refer to the *overall organizational performance*. Overall organizational performance can be defined in a broad sense and may refer to individual or team learnings, financial profits or even environmental impact, not to mention multi-level influences between them. *Corporate longevity* is another common variable to evaluate organizational performance plans. Although the topic is highly debatable, increases in performance may foster stronger group affiliation within an organization and leads to lower turnover and therefore

enables organizational continuity, which is associated with retention of knowledge (Burt & Chermack, 2008; Chermack, Lynham, & van der Merwe, 2006; De Geus, 1988, 2002). For any firms to maintain itself, it must be continuous, stable and durable (Pawlowski, 2000). As indicated by De Geus (2002), performance is a critical element that contributes to overall organizational longevity.

According to Weitzman (2014), corporate longevity is a good predictor of organizational innovation and advance especially in terms of financial investment innovations. Others did not find any relationship between organizational longevity and performance in terms of organizational learning, organizational identity or innovation (Cefis & Marsili, 2005; Weitzman & Chermack, 2013; Weitzman, 2014). Overall organizational assessment and corporate longevity will be used as outcome variables in the present study.

The implementation of a questionnaire that could positively assess organizational performance management over an individual's performance and in the ambitious and forecast attitude of Gilbert's model. Both assessment instruments proposed by Gilbert (1978, 2007), and Hersey and Chevalier (2006) used open-ended questions to promote conversation and thus, making impossible the detection of quantitative criteria in order to achieve adequate organizational performance management. Therefore, the present study aims to create a concise quantitative instrument to enable basic designs of organizational performance, focusing on the BEM and further literature review. The development of the so-called DOPT (*Design of Organizational Performance Test*) instrument and the examination of its psychometric properties are presented below.

3. Study method

since this research focuses its objective on proposing a new instrument in the figure of a survey to study the management of organizational performance through eight factors, its exploratory nature is manifested in the context of the approaches of the authors that have been presented in the literature review, but also this purpose implies that its final objective is to achieve the ability to predict organizational performance (through overall organizational performance and corporate. longevity). it is required to show evidence of internal validation, of construction and content, therefore the investigation it is configured as quantitative since the validation of the instrument is developed through measurement and verification of the relationships proposed between individual performance and the explanatory variables using the data obtained from the pilot application of the survey, so it is also transactional (Hernández et al, 2014).

The validity, according to (Hair, Black, Babin & Anderson, 2010) is the degree to wich measure accurately represents what it is supposed to. Ensuring validity starts with a thorough understanding of what is to be measured and then making the measurement as correct and accurate as possible.

The first step is to run a factor analysis to find variates what best represent the underlying structure or patterns of the variables as represented by their intercorrelations using the technique of data reduction to identify a small number of factors that explain most of the variance that is observed in a much

larger number of manifest variables (de IBM), wich what will be representative variables from a much larger set of variables for use in subsequent analyses. Second step develops a descriptive and correlation analysis followed by a reability test to assess the construct validity. Finally, a hierarchical type regression is conducted to evaluate the predictive capacity as a way of finding if these 8 proposed factors can explain the performance of the organization and then predict it.

3.1. Participants

Small and medium-sized Enterprises (SME) of Ciudad Obregón in the Mexican State of Sonora were considered like the population for this study. Through the National Institute of Statistics and Geography (INEGI) in its National Statistical Directory of Economic Units (DENUE), a list of 1,409 active companies was obtained. Given this population and considering a 95% confidence interval and 5% error, a sample of 302 companies were needed. As companies were found to be in the commercial, industrial and service sectors, a stratified random sample was considered with 500 SMEs. Thus, formal official letters through corporate emails invited 242 service (48.4%), 140 commercial (28%), and 118 industrial (23.6%) companies. Three remainders were sent every other week in a 6-week period of data gathering. Response rate was 60.4% and yielded a final sample of 297 composed of 109 service (36.7%), 97 commercial (32.6%), and 88 industrial (29.6%) companies. Thus, final maximum sample error is 5.1%. Only founders, directors or business owners answered the proposed questionnaire that did not mention the specific purpose of the study in any case.

The simple characteristics for this study. Nearly 70% (n=207) of the respondents was male. The mean experience of the sample was 11.69 (SD=10.0) while 61.6% (n=183) of the sample had a work experience of less than 10 years. The majority of respondents hold a University degree (80.4%, n=239) and most of them were managing a small-sized company (75.7%, n=222). Furthermore, the mean average of corporate longevity was 20.4 years (SD=17.0) with the vast majority of companies having lived for 30 years or less (83.8%, n=249). Finally, only 12.1% of the companies had balanced presence of male and female employees. In summary, the most common respondent in the study was a novel male manager, with university studies, in a genderized small-sized company with less than 30 years of history.

3.2. Instrument

A variety of individual performance models was analyzed, including Pil (2012), ISPI, cited by Bernardez (2005); Piersol & Paris (2007); and Vásquez (2014). Literature review helped identify relevant organizational characteristics for a complete assessment of the selected eight organizational performance factors or areas. For the future DOPT questionnaire, between 30 and 40 items were finally expected to be obtained out of the 103 items initially proposed, thus covering at least 79.2% (103/120) of the recommended triple-ratio per factor indicated by Anstey (1966). Up to six new factors could have been considered in the case of some items with “double entries”, but they were redrafted to try to make all proposed factors exhaustive and exclusive. Potential factors referred

to organizational features of total quality management, systemic vision, resources administration, benefits, individual capacity, and staff measuring/follow up. The Spanish-native speakers and authors of this paper served as judges to properly redact and include each item into the correct factor. Composition of items considered the forecast perspective defined in steps 1 to 3 of the organizational performance management by only using future (mapping) or past (tracing) verb tenses. Coincident indexes between judges varied from .69 to .82, while final agreements were achieved after discussion. All items that had to be answered using a 5-point Likert scale were once random and grammatically presented in positive terms.

An additional set of questions to collect respondents' sociodemographic information (gender, work experience and level of education) and aspects of the Company (size and gender composition) was also used. Other questions referred to Corporate Longevity (CL) of the company (in number of years) and to the Overall Organizational Assessment (OOA). Measure of the OOA was obtained by answering seven direct 5-point Likert scale items referring to present levels of staff performance, good behavior, coordination, organization, positive work relationships, organization knowledge and client satisfaction. Items in this scale were written to assess present organizational results such as *"The Company staff is today a highly coordinated team"*. OOA scale reliability was adequate in this study (α= .84).

3.3. Investigation procedure

With the population identified, the potential companies for applying the instrument for a better optimization of time were identified by means of zones, using the city map. Subsequently, the person who held the position of Manager or person in charge of Human Resources of the company was kindly requested to participate in answering the instrument. Mentioning at all times the confidentiality of the information provided. For the statistical analysis, the IBM SPSS program (version 21) was used to create the database, which was then used for exploratory factor analysis and reliability coefficient calculation.

A measurement instrument was designed with Creswell (2009) theoretical validation, validation with experts, as well as internal reliability validation through the use of Cronbach's alpha .84 (Oviedo & Campo-Arias, 2005). They were analyzed using exploratory factor analysis (EFA) to determine the internal factorial structure of the items and identify low-load items to discard them. In this study, principal component analysis was used with Varimax orthogonal rotation.

4. Validation of an instrument to measure the improvement of individual performance

This section describes the procedure carried out for the validation of the instrument applied.

4.1. Factor analysis

In a first step, the data obtained was analyzed using exploratory factor analysis (EFA) to determine the inner factorial structure of the items and to identify low-load items in order to drop them. Principal components analysis with Varimax orthogonal rotation was used as it is independent of distributional assumptions and thus, less likely to produce improper solutions and produces

factors that are uncorrelated (Fabrigar, Wegener, MacCallum & Strahan, 1999). From the initial scale, 61.2% of the items were eliminated while the rest was re-examined and recoded if necessary.

EFA on the sample confirmed the 8-factor solution with a cumulative variance of 67.8%. Consequently, the initial 103 items were finally reduced to 40 every 5 of them corresponding to the following factors: Aims and Objectives (factor 1), Feedback (F2), Task Support (F3), Incentives (F4), Knowledge and Competences (F5), Context (F6), Sanctions (F7), and Work Processes (F8). Most contributing factors to the construct of organizational performance were F5 (Knowledge and Competences) and F4 (Incentives) while F6, F7, and F3 contributed the least. Overall reliability of the scale is highly adequate (α= 0.92) as well as in any of the obtained factors.

4.2. Construct Validity

Table 1 shows the descriptive statistics of the eight DOPT organizational performance factors. These results are similar to the results at item level, which are not included in this article. Keeping in mind the recording of the items and test scale, the means show that, in general, selected companies in Mexico describe a good level of criteria in their performance, with a total average score of 4.06 (SD=1.04).

Table 1
Means, Standard Deviations, and Correlations between the eight factors and outcome variables (*p<.05, in Italic, p<.01)

Factor Sample (N=297)	M	SD	F1	F2	F3	F4	F5	F6	F7	F8	CL
F1. Aims and objectives	4.0	1.1									
F2. Feedback	4.1	1.0	*.53*								
F3. Task support	4.2	0.9	*.56*	*.57*							
F4. Incentives	3.7	1.4	*.41*	*.37*	*.34*						
F5. Knowledge/Competences	4.3	0.8	*.55*	*.49*	*.69*	*.34*					
F6. Context	4.4	0.8	*.54*	*.46*	*.68*	*.32*	*.79*				
F7. Sanctions	3.6	1.4	*.47*	*.39*	*.36*	*.30*	*.36*	*.30*			
F8. Work processes	4.1	1.0	*.65*	*.47*	*.56*	*.42*	*.62*	*.54*	*.43*		
Corporate longevity (CL)	20	17	-.02	-.03	-.05	-.02	-.12*	-.06	-.05	-.04	
Overall organizational asst. (OOA)	4.2	.78	*.64*	*.67*	*.82*	*.57*	*.76*	*.74*	*.42*	*.64*	-.03

The correlation analysis shows that organizational performance is more intensly associated with the factors *Task Support* (factor 3), *Knowledge and Competences* (factor 5) and *Incentives* (factor 4). The weakest association is found with *Sanctions* (factor 7) or *Incentives* (factor 4). However, highest standard deviations were obtained in these two last factors, which indicate high variability in their use within the sample. This means a second attribute to

verify the validity of the model proposed in this research.

All factors in the sample correlate significantly and positively with each other. Most evident correlations were obtained between factor factor 5 and 6, and 5 and 3. Thus, when efforts are made for the sake of staff trainings, contextual and cultural aspects of organizational performance seem to increase, and vice versa. In addition, when job competences seem to increase in staff, the construction of task support it moves up too. Moreover, the increase of context-dependent aspects of performance (factor 6) they are positively associated to the staff coordination and distribution of resources (factor 3), that is, they move together. To a less extent, factor 8 (Work Processes) was also eminently correlated with factor 1 and factor 5, thus indicating that the design of work protocols may increase both clear perception of aims and objectives and /or staff learnings, and vice versa. Finally, correlations between DOPT factors and outcomes variables should be commented.

No significant correlation between organizational performance factors and corporate longevity was obtained. In fact, all scores were null and slightly negative except for factor 5 (Knowledge and Competences), that was statistically significant and negative (ρ= -.12, p<.05). No significant bicorrelations were found between DOPT factors and overall organizational assessment.

In order to examine the construct validity of the proposed scale, two hierarchical regression analysis were calculated using SPSS 21, one with *Overall Organizational Assessment* (7-items) as the outcome variable, and with *Corporate Longevity* (in years) as the outcome variable. In step 1, manager´s gender, work experience, and level of education were entered into the model. In step 2, company size and gender composition of the company were entered into the model. All variables have been z-standardized and Durbin-Watson scores for self-correlation were obtained as expected. Table 2 summarizes the hierarchical regression analysis for the outcome variables Overall Organizational Assessment (OOA) and Corporate Longevity (CL).

Table 2
Results of the hierarchical regression analysis

Outcome variable	Predictor	b	t
	Step 1		
	Constant	.005	.058
	F1. Aims and objectives	.088	2.00*
	F2. Feedback	.198	2.00**
	F3. Task support	.320	6.44**
	F4. Incentives	.222	6.33**
	F5. Knowledge/Competences	.215	3.83**
	F6. Context	.130	2.33*
	F7. Sanctions	.031	.951
	F8. Work processes	-.038	-.792
	Manager´s gender	-.004	-.137
	Manager´s work experience	.031	1.06
	Manager´s level of education	.022	.738
		R^2= 0.84; F=97.2**	

Cont... Table 2

Step 2		
Constant		
F1. Aims and objectives	.000	.000
F2. Feedback	.041	1.24
F3. Task support	.189	6.38**
F4. Incentives	.362	10.2**
F5. Knowledge/Competences	.243	9.49**
F6. Context	.181	4.44**
F7. Sanctions	.150	3.87**
F8. Work processes	-.007	-.27
Company size	.024	.717
Gender org. composition	.056	2.42*
(omitted)		
		R^2= 0.85; F=173.1**

Concerning the first outcome variable, it appears that 6 out of 8 organizational performance factors predicted *Overall Organizational Assessment (OOA*) with at least factors 2, 3, 4, and 5 as highly significant. In Step 1, the results of the regression indicate that the model explained 84% (R2=.84, F (11) = 97.2, p<.01) also including factor 1 and factor 6 as predictive variables while excluding the rest. In Step 2, *company size* was included as predictive variable of organizational performance among with factors 2 to 6 (R2=.85, F (9) = 173.1, p<.01). In the distinction of environmental versus individual level of organizational performance anticipated in Gilbert´s model, average data indicate that environmental supports account for 22% of the prediction with 4 factors while the person's repertoire of behavior contributed to the outcome variable up to 19.8% with only 2 factors (knowledge/ competences and feedback).

Among the factors contributing to the *Corporate Longevity* outcome in Step 1, factor 5 (Knowledge and Competencies) and manager work experience accounted for 23% of its variance (R2 = .23, F (11) = 4.99, p<.01). In Step 2, only factor 5 accounted for 10% of the outcome variable (R2=.10, F (8) = 4.08, p<.05) being all non-factor variables omitted in the model (table 3.

Table 3
Business longevity

Outcome variable	Predictor	b	t
	Step 1		
	Constant	.120	1.359
	F1. Aims and objectives	-.007	1.188
	F2. Feedback	.098	-.083
	F3. Task support	.077	.856
	F4. Incentives	-.285	.949
	F5. Knowledge/Competences	.103	-2.21*
	F6. Context	.013	.802
	F7. Sanctions	-.038	.170
	F8. Work processes	.070	-.343
	Manager´s gender	.441	1.05
	Manager´s work experience	-.023	6.45**
	Manager´s level of education		-.334
		R^2= 0.23; F=4.99**	

Cont... Table 3

	Step 2	
Constant		
F1. Aims and objectives		
F2. Feedback	.062	.000
F3. Task support	.033	. 893
F4. Incentives	.060	.488
F5. Knowledge/Competences	.013	.736
F6. Context	-.11	.216
F7. Sanctions	.063	-2.02*
F8. Work processes	-.005	.670
Company size	.045	-.084
(omitted)		.616
Gender org. composition		
(omitted)		
	R^2= 0.10; F=4.08*	

Bearing in mind predictive impact of DOPT performance factors on OOA previously obtained, means and OOA rankings were calculated for a deeper analysis of DOPT performance factors (the higher value, the better).

It is evident that most performance factors are actually ranked in importance as empirically recommended except for the Aim and Objective and Task support factors. In these concerns, organizational initiatives on Task support should be decreased in detriment of the Aims and Objectives factor that appears to be slightly lower than desired. However, when we approach the process of individual performance management from a time perspective approach, performance factors are being attended by the sample as empirically expected in each step.

It is worth saying that *Aims, Task support,* and *Context* factors are generally considered in the appropriate amount of interest in step 1, followed by step 3 – *Feedback, Sanctions,* and *Incentives* factors-, and finally, step 2 – *Work processes* and *Knowledge/ Competences* factors.

5. Measurement of individual performance based on Gilbert's BEM. Psychometric properties

A review of organizational performance management literature and the current need of companies for organizational improvement have shown the importance of the development of a questionnaire to assess and monitor organizational factors influencing organizational performances. Based on pioneer Gilbert´s model (BEM) and revisions of theoretical models of performance improvement, the first analysis of psychometric properties of DOPT instrument was presented. An EFA showed an eight-factor solution for the 40 items of the DOPT questionnaire. Reliability analyses on the different factors showed highly acceptable Cronbach's alphas ranging from .90 to .97, with an overall reliability of the DOPT of .92. Correlations at the item and factor level show mostly moderately to high positive correlations.

Alternatively, sanctions may be weak related to the contextual values of

the company if they are wrongly or poorly informed by inadequate communication channels (Obeidat et al, 2017).

Descriptive data analyses showed that managers primarily rely on new learnings, contextual variables and task support to implement policies on organizational performance. Lower average scores were obtained in factors referring to incentives and sanctions. These findings may suggest a clear move from contingent, behaviorist theories of staff behavior control towards contemporary frameworks of positive environment and information-driven management to subtly guarantee and control staff performance (Kim, 2018). As expected, all DOPT factors significantly correlated with the overall organizational assessment being the highest of those referring to *task support, knowledge and competences*, and *contextual aspects*.

These relationships have received empirical evidence on long-supported literature (*see* Rothwell, Hohne & King, 2007). The relationship between corporate longevity and organizational performance is likely to have greater complexity as expected and probably not describing linear tendencies. As indicated by Galadanchi and Bakar (2018), many factors contribute to business longevity that are based on strategic elements and financial excellence that may mediate between these variables. A long-term company is a "living company" that seeks to fulfill its potential while perpetuating themselves as ongoing communities.

The separate regression analysis showed that overall organizational assessment is significantly predicted by DOPT organizational performance factors. Precisely, factors referring to aims, feedback, task support, incentives, knowledge/competences, and context are very good predictors of present organizational effectiveness. This is in accordance with previous research underlying the impact of organizational macro-variables such as data, feedback, task design, incentives, learnings, or contextual variables on organizational performance (Chevalier, 2003; Bernández, 2005; Crossman, 2010; Mager & Pipe, 2006; Brethower, 2007; Del Castillo & Vargas, 2009; Pielson & Paris, 2007; Pil, 2012; Vásquez 2014). Despite internal consistency as factors, "sanctions" and "work processes" did not explain overall organizational assessment. However, previous studies have found that the existence of work sanctions policies can give rise to the inefficient allocation of resources, resulting in structural rigidity and organizational stagnation (Mancur, 1982; Nee, 1998).

6. Conclusions

This research proposal was to find out how eight factors related with individual performance can attend the measurement of organizational performance and beyond, to achieve iterative improvements like a vehicle for competitive advantage on short, medium and large term. the theoretical contribution of this research lies in the validation of an organizational performance evaluation instrument which constitutes in its an integrative model of different contributions trying to represent the individual performance management process that finally leads to the performance of the organization.

the validation carried out with an exploratory factor analysis and hierarchical regression allows to confirm the grouping of the different items to be measured in constructs that represent each element in the model as well as

to prove the cause-effect relationship between the constructs (in this case factors) and the variables established as dependent ooa and cl, which was calculated under different scenarios in which the predictive model did not vary upon respondents 'gender, experience or level of education, aditionally, have been found evidence to indicate that organizational performance factors at the environmental level are of similar importance in predicting organizational performance than factors at the individual level.

This is contrary to information given by previous surveys that overestimated the first level (Pierce, Banko & So, 2003; Pielson & Paris, 2007; Pil, 2012), and even more in the line of balancing both types of factors (Rummler & Brache, 1995; Bernández, 2005; Gilbert, 2007).

On the other hand, corporate longevity is significantly predicted by the "knowledge and competences" organizational performance factor, though weak and negative, regardless of the company's size and gender organizational composition. This fact partially matches the literature review on the relationship of organizational learning and corporate longevity (Cefis & Marsili, 2005; Weitzman & Chermack, 2013; Weitzman, 2014). While serving the bases and structure of constant learning in organizations, it is essential for a company's survival that its final long-term impact on corporate longevity will certainly depend upon both learning contents and strategic financial investments of the on-going success (Pawlowski, 2000; Weiztman, 2014).

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