

## ***Validación preliminar del modelo de liderazgo espiritual de Fry en trabajadores colombianos y ecuatorianos***

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### Resumen

El propósito de este estudio fue examinar la validez del modelo de *liderazgo espiritual* propuesto por Fry (2003). Se aplicó el Cuestionario de Liderazgo Espiritual [SLT] (Fry & Matherly, 2006), a 279 trabajadores de Colombia y Ecuador. Ambas muestras fueron equivalentes respecto a sexo, edad, nivel de formación y experiencia laboral. De acuerdo con los resultados, todas las dimensiones del instrumento, excepto la de *compromiso*, demostraron ser altamente consistentes (*alpha* superior a .85). Asimismo, se encontró que solo un ítem de los 35 que componen el instrumento presentó baja correlación ítem-escala. En la mayoría de los casos, las relaciones entre las variables y los índices de ajuste del modelo fueron menores a lo reportado por Fry, lo que limitó la validez de constructo. Las evidencias externas de la validez del modelo demostraron que la experiencia laboral y el nivel del cargo son significativos para las dimensiones del *liderazgo espiritual*. Se discuten estos hallazgos respecto a los requerimientos psicométricos del instrumento y la relación del constructo medido con aspectos del comportamiento organizacional. Finalmente, se señalan las limitaciones del estudio y se hacen recomendaciones para futuras investigaciones.

*Palabras clave:* Liderazgo espiritual, bienestar espiritual, desempeño organizacional, propiedades psicométricas.

## ***Preliminary validation of Fry's Spiritual Leadership Model in Colombian and Ecuadorian workers***

### Abstract

The aim of this study was to examine the validity of the Spiritual Leadership model proposed by Fry (2003). Spiritual Leadership Questionnaire [SLT] (Fry & Matherly, 2006) was applied to 279 workers from Colombia and Ecuador. The two samples were equivalent by sex, age, education level and work experience. According to the results, all dimensions of the questionnaire showed to be highly consistent (*alpha* above .85) except Commitment dimension. Likewise, it found that just one of 35 items that composed the scale shows low item-scale correlation. In the most of the cases, the relationships between variables as well as the adjustment index of the model were lower than reported by Fry previously, which limited the construct validity. External evidences of validity of the model, demonstrated that the work experience and level of charge were significant for Spiritual Leadership dimensions. These findings were related to the psychometrics requirement of the scale and regarding of measured construct with organizational behavior. Finally, it is point out some research limitations and provide some suggestions for future studies.

*Key words:* Spiritual Leadership, organizational commitment, spiritual well-being, organizational performance.

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## *Validação preliminar do modelo de liderança espiritual de Fry em trabalhadores colombianos e equatorianos*

### Resumo

O propósito deste estudo foi examinar a validade do modelo de liderança espiritual (Spiritual Leadership Theory, SLT) proposto por Fry (2003). Aplicou-se o Questionário de Liderança Espiritual (SLT Survey) (Fry & Matherly, 2006) a 279 trabalhadores da Colômbia e do Equador. Ambas as amostras foram equivalentes com respeito a sexo, idade, nível de formação e experiência profissional. De acordo com os resultados, todas as dimensões do instrumento, exceto a de Compromisso, demonstraram ser altamente consistentes (alpha superior a .85). Também se constatou que apenas um item dos 35 que compõem o instrumento apresentou baixa correlação item-escala. Na maioria dos casos, as relações entre as variáveis e os índices de ajuste do modelo foram menores que o indicado por Fry, o que limitou a validade de constructo. As evidências externas da validade do modelo demonstraram que a experiência profissional e o nível do cargo são significativos para as dimensões da liderança espiritual. Discutem-se essas descobertas com relação aos requerimentos psicométricos do instrumento e a relação do constructo medido com aspectos do comportamento organizacional. Finalmente, indicam-se as limitações do estudo e fazem-se recomendações para futuras pesquisas.

*Palavras-chave:* bem-estar espiritual, desempenho organizacional, liderança espiritual, propriedades psicométricas.

### INTRODUCTION

The concept of leadership and its perspective of analysis has changed in an important way in the last few decades. It is becoming more and more apparent that leadership is a highly complex phenomenon, which cannot be reduced down to the understanding of the leader as a subject, in their practices, the effect this has on their followers, on their relationship with the context or situational aspects. These findings, which predominated in certain moments on the development of the concept, clearly result as insufficient and scarcely applicable to current organizations, which as stated by Gonzalez-Roma (2008), should operate with highly malleable and complex environments. Durán and Castañeda (2015) add that modern day organizations are consistently subject to high competitive demands, for which they require the participation of human resources.

Currently, and as a product of the findings of influential studies, leadership has begun to be understood as a system that operates based on multiple levels of analysis (Wang & Howell, 2010), in which there are a variety of moderate and mediational variables (personal, social, cultural and organizational) of which there is still not sufficient recognition (DeRue, Nahrgang, Wellman, & Humphrey, 2011).

As observed in the study of leadership, recent aspects are being considered apart from the traditional ones, including emotions (Goleman & Boyatzis, 2008; Madera & Smith, 2009; Rajah, Song & Arvey, 2011; Yusof, Kadir & Mahfar, 2014), thoughts (Mumford, Friedrich, Caughron & Byrne, 2007; Mumford, Watts & Partlow, 2015; Steers, Sanchez-Runde & Nardon, 2012), beliefs (Chiang, Salazar & Gómez, 2014; Phipps, 2012), values and virtues (Groves,

2015), which influence, not just in the development of leaders and collaborators, but also on the effect produced and the results obtained by organizations. These, combined with the growing interest in satisfaction and quality of work life, the well-being of the worker, ethical behaviors, transcendence and spirituality (Klaus & Fernando, 2016; Klenke, 2013), have generated conditions for the emergence of the previously named emerging theories on leadership between those who encounter Ethical/Moral Leadership Theories, which have had notable development in the last few years. (Dinh, et al., 2014).

One of these theories corresponds to what is called Spiritual Leadership, whose research products have been published in important indexed journals (Oswick, 2009), which demonstrate the vital development of the model and its significant potential of development (Nicolae, Ion & Nicolae, 2013). Crossman (2010), adds that the emergence of interest in the spiritual in organizational contexts is also grounded in the contemporary perspectives of leadership, which involve an integrated vision of human and socio-cultural factors in the work context.

Based on this emerging tendency, characteristics have developed, relationships established and models proposed that although have not demonstrated conclusive results, offer an opportunity for approach apart from the concept of leadership. This is the development of the construct of Spiritual Leadership, on which *The Leadership Quarterly*, one of the most widely recognized journals on the subject, dedicated a special edition in 2005. In this publication, Dent, Higgins and Wharff (2005) qualitatively reviewed 87 articles and concluded that a clear consistency exists between spiritual values, practices and effectiveness of

leadership. In a second revision, Reave (2005) found that the values that have been traditionally considered ideal, such as integrity, honesty and humility, have a favorable effect on the success of leaders.

The first studies on Spiritual Leadership began in the 1990s; among which Fairholm (1996, 1998, 2002), Biberman, Whitty and Robbins (1999), Cacioppe (2000) and Metroff and Denton (1999) deserve mention. However, the most developed model is that of Fry (2003), who defined Spiritual Leadership as “comprising the values, attitudes, and behaviors that are necessary to intrinsically motivate one’s self and others so that they have a sense of spiritual survival through calling and membership” (p. 694). Two years later, this same author proposed that Spiritual Leadership has the purpose of creating a vision and value of equality among people, empowering work teams in all levels of an organization and promoting organizational commitment and productivity (Fry, 2005).

The Spiritual Leadership Theory (SLT) was later defined by Fry and Matherly (2006) as a causal theory of organizational transformation, designed to create an intrinsically motivated organizational awareness. It found, in accordance with Fry (2003, 2005), that objective leadership promotes stronger commitment and productivity, in addition to intrinsic motivation, and religious and ethical values, that a distinctive concept was constructed on the concepts of hope/faith, vision/mission and altruistic love.

In addition to these developments, other conceptualizations of Spiritual Leadership have been proposed, such as those by Sanders, Hopkins and Geroy (2003), who define it as the degree to which organizations obtain the ability to encourage and provide a sense of significance and interconnection among their collaborators with respect to the hierarchical structure. Another model is that of Moore and Casper (2006), who consider it as an intrinsic value, with attitudes, beliefs and emotions that are experienced within a strong humanistic dimension.

Later Frye, Kisselburgh and Butts (2007) affirmed that Spiritual Leadership should be understood as a relative process whose objective is construction, coordination and transformation of one’s self, others and the organization as a whole. For his part, Crossman (2010) signals that Spiritual Leadership includes attributes such as compassion, care, valor, generosity, inquisitiveness, service, tranquility, peace and gratitude. More recently, Hackett and Wang (2012) reaffirm the noted attributes and signal that Spiritual Leaders tend to focus on the favorable aspects and social goals of the organization and not exclusively in the business.

In general, Spiritual Leadership is based on moral, ethical and religious values that are embodied in organizational culture and directed toward the achievement of business and

social goals. As one of the most relevant characteristics in this kind of leadership, the behavior at the executive level is meant to work toward the concurrent participation of rational moral, and ethical factors, beliefs, and religious matters. It is a different way of approaching leadership, thus the inclusion of the spiritual dimension, which is generally not considered in previous models or perspectives, here is fundamental and at the center of the study.

Spiritual Leadership, therefore, can be seen as an emergent construct in the widest context of spirituality in the workplace, based on the need for transcendence, motivation, spiritual well-being, sense of belonging and vocation among the members of the organization. From this definition, Fry (2003, 2005, 2008), proposed a general model which includes seven variables:

**Hope/Faith:** Affirmation of expectations. To firmly believe that the organization’s vision, goals and mission can be achieved.

**Vision:** Future trajectory of the organization. Self-positioning, self-behavior, vision that create sense of meaning among employees.

**Altruistic Love:** Sense of integrity, harmony, happiness, love and appreciation for one’s self and others.

**Meaning/Calling:** Perception that life is meaningful, valuable and that it is possible to achieve big goals.

**Membership:** To feel understood and appreciated.

**Organizational Commitment:** Desire to maintain the relationship with the organization, along with the organizational goals.

**Productivity:** To produce high quality products and services and to provide exceptional service.

Figure 1 shows the variables of the model and its relationships according to Fry’s proposal. The first three variables are central to leadership leadership core, the following two are intermediate variables named Spiritual Well-Being, and the last two constitute organizational performance measures.

The empirical studies conducted with this model have tried to show the relationship between spirituality and the organization and variables like motivation, stress, income, decision-making processes, productivity, absence, rotation, performance, peace, joy (Fry, Hannah, Noel & Walumbwa, 2011), bad behavior in the organization (Weitz, Vardi & Setter, 2012) and change at the personal and organizational levels (Crossman, 2010). According to the study results, it can be confirmed that there is a relationship between spirituality and effectiveness of leadership (Sanders, et al., 2003; Allen & Cherrey, 2000; DePree, 1997), ethical judgment decision-making in business (Longenecker, McKinney & Moore, 2004), satisfaction and organizational commitment (Usman & Danish, 2010), work involvement (Word, 2012),

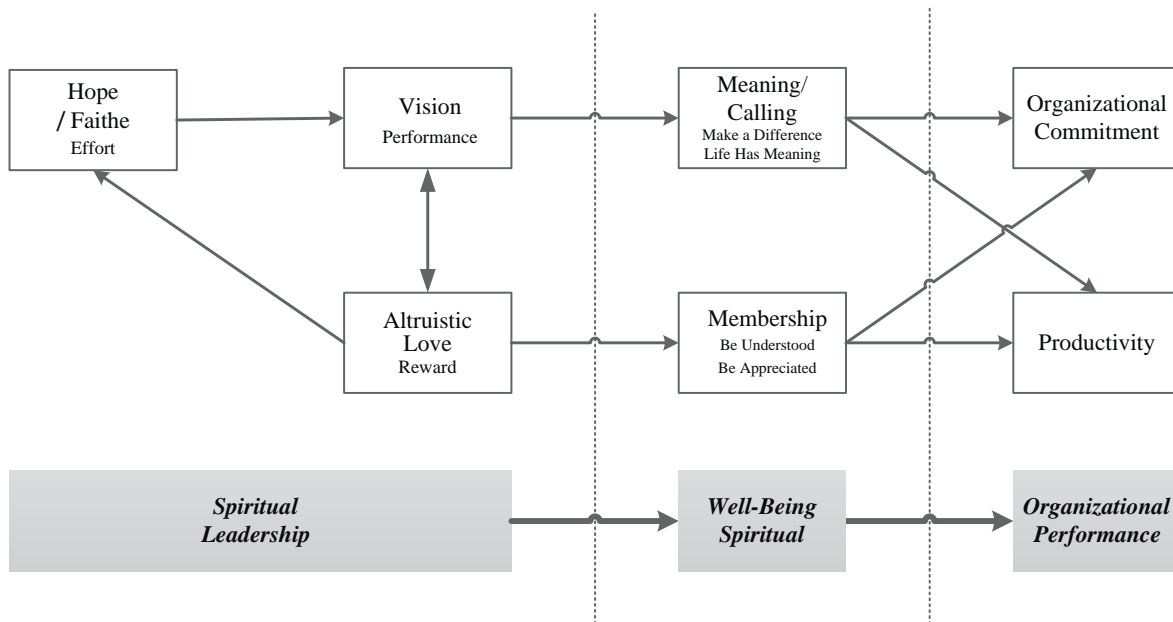


Figure 1. Causal model of Spiritual Leadership, developed by Fry. Taken from L.W. Fry *The Leadership Quarterly*, 14 (2003), 693-727.

and organizational commitment, productivity and team performance measures (Fry et al., 2011). It seems that if leaders and collaborators create a shared vision, employees feel that life and work are special and meaningful, which influences the development of sense of belonging toward the organization and creates a culture that values mutual care.

An interesting aspect of Spiritual Leadership is that it is less focused on the leader and more focused on the participation of all group members, in order to satisfy the spiritual needs and increase organizational commitment and performance. This study proposes to provide evidence about the validity of the Spiritual Leadership model proposed by Fry (2003, 2005, 2008), which supports the theory. The main objective is to determine if the model is valid using a sample of that Latin American employees (Colombia and Ecuador), to establish if the model in this study differs from the original one. Furthermore, the role of sociodemographic and socio-labor variables will be characterized, to describe the way in which the variables are presented with regard to the participants of this study.

## METHOD

### Design

A descriptive correlational-causal non-experimental study (Hernandez, Fernandez & Baptista, 2014) and instrumental, was conducted to study the components and instrument of the model (Montero & Leon, 2007).

### Procedure

The participants were employees from different sectors, graduate students from business areas who attend business schools in Colombia and Ecuador. They were presented with the study and asked for voluntary participation, informing them that they would not get any compensation or reward for their collaboration. Confidentiality of information was guaranteed by using anonymous answers and a standardized survey. They were informed about their right to withdraw the study at any time, without any negative consequences. The consent was signed previous to receiving the survey. Subsequently, the answers were processed through statistical analyses using SPSS 22 and AMOS 22.

### Participants

The participant selection was done through a non-probabilistic subject-type sample (García, 2009) or proactive (Passmore & Baker, 2005), with inclusion criteria of being an adult and being linked to an organization for a period no less than a year. The study participants were employees from different companies and industries without size limitations, from various cities in Colombia and Ecuador. In the study, 283 employees participated, from which 279 filled out the surveys completely. Of this group, 146 were Colombians and 133 Ecuadorians, mostly women (70%), with graduate degrees; professionals who are in graduate school in a master's degree or specialization program and who state having career experience under 10 years.

### Instrument

The SLT survey (Fry & Matherly, 2006) was applied. The instrument was initially developed by Malone and Fry (2003) and it estimates three variables of spiritual leadership, two variables of spiritual well-being and two variables of organizational performance through 35 items with Likert scale of five points (completely agree to completely disagree). The questionnaire was translated to Spanish, reviewed and adapted linguistically to be applied to the Colombian and Ecuadorian sample. The grades of the seven variables were obtained using simple average calculation of the items from each one of them.

The SLT has shown suitable psychometric properties in various studies, one of them by Fry and Matherly (2006) in which 347 employees from different companies participated, and obtained Cronbach's alpha between .83 and .94, indicating suitable levels of reliability for the analyzed variables. In terms of validity, the structural equation model showed suitable levels of adjustment (NFI = .95 and CFI = .96) and squared multiple correlations between .50 and .93 for the seven variables. Studies like Fry, Vitucci and Cedillo's (2005) found in one sample of 389 participants, Cronbach's alpha between .83 and .93 for all the variables. Similarly, they indicated that the estimated structural equation model showed suitable adjustment levels (NFI = .96 and CFI = .97) and squared multiple correlations between .54 and .93 for the seven variables. On the other hand, Malone and Fry (2003) reported in one sample of 229 school employees Cronbach's alpha between .70 and .93 for the model variables. Also, the structural equation model showed precise results (NFI = .96 and CFI = .98).

Additionally, a survey of sociodemographic variables was used, which included information such as gender, marital status, level of education, and work experience. Similarly, there was research about the workplace, such as size and industry of the company, organizational position, supervised staff and weekly work hours.

### Results

From a descriptive point of view, the sample was made up of 279 employees (146 Colombians and 133 Ecuadorians). Both samples were equivalent demographically in terms of gender (Chi2 = 0.14, Sig = .707), age range (Chi2 = 0.61, Sig = .737), level of education (Chi2 = 1.16, Sig = .282) and work experience (Chi2 = 0.22, Sig = .640). In both countries the samples had a higher percentage of women (71% in Colombia and 69% in Ecuador), with age range under 40 years old (90% in Colombia and 93% in Ecuador). In regards to work experience, 75% of the Colombian sample and 72% of the Ecuadorian had a work experience under 10

years. All the participants, Colombians and Ecuadorians, report having studied in higher education.

Additionally, the sample equivalence was reviewed in terms of the variables of Spiritual Leadership to examine potential differences. It was found that only the Meaning/Calling variable showed statistically significant differences between the Colombian sample and the Ecuadorian sample. However, in both samples the grades are high (see Table 1).

Taking into consideration the equivalence of the samples, both from the sociodemographic aspects and the variables of the studied model, a joint analysis was conducted, without establishing the participants' place of origin. So the psychometric properties of the Spiritual Leadership instrument were based on the 279 participants.

According to the *Standards for Educational and Psychological Testing* (American Educational Research Association [AERA], American Psychological Association [APA], National Council on Measurement in Education [NCME], 1999), the construction process of the test involves a series of steps that go from the definition of the measurement object to the establishment of the interpretation rules. Given that this study aims to evaluate the properties of an instrument that already exists, the statistical process was focused on the analysis of items, on the reliability estimations, and on the validity of the SLT survey.

The statistical analysis of items was conducted using the Classical Test Theory in which the answer distribution is examined in addition to the correlation between these, along with the total test score. The item analysis was not done based on the Item Response Theory given that its restrictions, particularly the need for including samples close to the thousands (Herrera, Sánchez & Jiménez, 2001), is not accomplished in this study. For the first criteria, the mean and standard deviation were used instead of frequency distributions. This information allows the ability to identify how centered or biased the grades are on the measurement scale (1 to 5). As shown in Table 1, the means are biased towards the high extreme of the scale, showing a higher trend in the variables Vision and Hope/Faith of Spiritual Leadership, Meaning/Calling in the Spiritual Well-Being and in the Productivity variable of the Organizational Performance. These results in the answers seem to indicate social desire or the need to escalate the grades to be able to expand the measurement spectrum of the construct, or that the instrument tends to show elevated grades in normal conditions instead of medium levels as is usual in measurement procedures.

The second aspect examined in the item analysis was the item-test correlation, which according to Aiken (2003), constitutes an item validity rate in which high values represent that the item measure is the same that is being measured by the test, while with negative values represent

Table 1.  
Descriptive statistics by sample and total of Spiritual Leadership variables.

	Colombian (n = 146)		Ecuadorian (n = 131)		Total (n = 277)		F	Sig.
	Mean	SD	Mean	SD	Mean	SD		
Vision	4.15	.54	4.14	.82	4.14	.69	.004	.951
Hope/Faith	4.32	.58	4.33	.73	4.32	.65	.013	.909
Altruistic Love	3.67	.80	3.80	.84	3.73	.82	1.735	.189
Meaning/Calling	4.65	.54	4.49	.64	4.58	.60	4.916	.027
Membership	3.83	.84	3.93	.92	3.88	.88	.899	.344
Commitment	3.69	.92	3.72	1.03	3.70	.97	.039	.843
Productivity	3.98	.70	4.13	.74	4.05	.72	2.924	.088

coding problems in the answers or incoherence between what is being measured by the item and what is being measured by the test. Given that the SLT model presents seven variables, the estimation was done based on the items in terms of the variable to which they belong, and not the questionnaire as a whole.

The results identify that 34 out of the 35 items on the SLT showed a corrected correlation item-scale over .50. In fact, 26 elements had results over .70; three more had results over .60 and another five showed values over .50. Only one item in the Organizational Commitment variable (I don't feel "part of the family" in this organization), showed a very low correlation (.08), which is possibly related to the fact that it is the only reverted item in the instrument. It is recommended to review the wording and make it positive in future measurements or exclude it with the idea of increasing the internal consistency of the variable.

Subsequently, the reliability estimation was done based on the internal consistency of each one of the seven variables in the questionnaire (see Table 2). The Cronbach's alpha shows that all the variables have values over .85 (very consistent), except the Organizational Commitment variable (.65 alpha). This result is related to the item in the Organizational Commitment variable that showed low correlation with the scale. Once the item was excluded, the internal consistency of the Organizational Commitment variable increased. In the following analyses this item was not included.

Table 2.  
Reliability of Spiritual Leadership variables.

	Cronbach's Alpha
Vision	.87
Hope/Faith	.91
Altruistic Love	.91
Meaning/Calling	.90
Membership	.92
Commitment	.83
Productivity	.86

The empirical evidence of the internal structure was obtained based on a model of structural equations (Byrne, 2010). It was specifically estimated using a Maximum Likelihood model, with the same configuration utilized by Fry and Matherly (2006), which is sufficiently robust when it comes to faults of univariate and multivariate normality (Burnette & Williams, 2005). Upon comparison of both models presented in Figures 2 and 3, similar regression weights can be observed between the variables of Altruistic Love and Hope/Faith (.45 vs .44), Altruistic Love and Membership (.79 vs .96) and between Membership and Organizational Commitment (.61 vs .67); however, the weights of regression between the other variables of Spiritual Leadership are very different.

Upon examination of the relationships between the variables of Spiritual Leadership (Vision, Hope/Faith and Altruistic Love), it can be affirmed that only the relationship between Altruistic Love and Hope/Faith present similar results between the two models. A strong correlation is not identified between Hope/Faith and Vision (.44 vs .85). The bidirectional relationship between Altruistic Love and Vision does not present similarity in the results; a strong relationship of Altruistic Love with Vision does not present (.17 vs .63), nor does the weak relationship of Vision with Altruistic Love (.35 vs .02).

Continuing with the model, relationships are identified between the variables of Vision and Altruistic Love of Spiritual Leadership with Meaning/Calling and Membership of Spiritual Wellbeing, are less than reported by Fry and Matherly (2006). Concretely, a relationship is observed at a medium level, but not high, between Vision and Meaning/Calling (.45 vs .77), similarly, Altruistic Love and Membership (.79 vs .96) are different, although both in this case are of high level.

Finally, the Spiritual Leadership model establishes relationships between Spiritual Wellbeing and Organizational Performance. With respect to this, an observation of the

relationship in the variables of Meaning/Calling with Organizational Commitment (.17 vs .40) and Meaning/Calling with Productivity (.27 vs -.11) is not strong with the first case nor the direction of the second, compared with that reported by Fry and Matherly (2006). With respect to the relationship of the variable of Membership, a stronger relationship is observed with Productivity (.40 vs .63) but similar with Organizational Commitment (.61 vs .67), being relationships of moderate to strong level in both cases.

The differences identified in the relationships of the two models show that the squared multiple correlations in both cases are also different, while, in the current study, with exception of Membership, all of the variables of the model present values less than .50. In the study of Fry and Matherly, all of the variables present values higher than .50.

In the models of structural equations, the model should also be revised. In this absolute and incremental or comparative procedures are used (Hair, Black, Babin & Anderson, 2010; Ruiz, Pardo & San Martin, 2010). The absolute procedures indicate how well the designed model

adjusts to the data, for which reason the Goodness-of-Fit Index estimated is based on Chi-squared, which should not be signified ( $p > .05$ ) in order to be accepted as an adequate adjustment.

Because of the counterintuitive nature of this procedure it is common to use the reasoning of Chi squared among their degrees of freedom, just as the resulting reasoning is less than three it is considered that there are adjustments to the model; however, there exists the Goodness-of-Fit Index (GFI), whose value near one signifies an adequate adjustment of the model which makes it easier to interpret. Another absolute estimation of the adjustment is the approximation of the Root Mean Square Error of Approximation (RMSEA), in which the valuation tends to zero reflect an adequate adjustment of the model.

On the other hand, the incremental procedures of adjustment, which are interpreted as adequate when the result is close to 1, are based on the comparison between a baseline model in which significant relationships between the variables and model are obtained. Found among the incremental rates

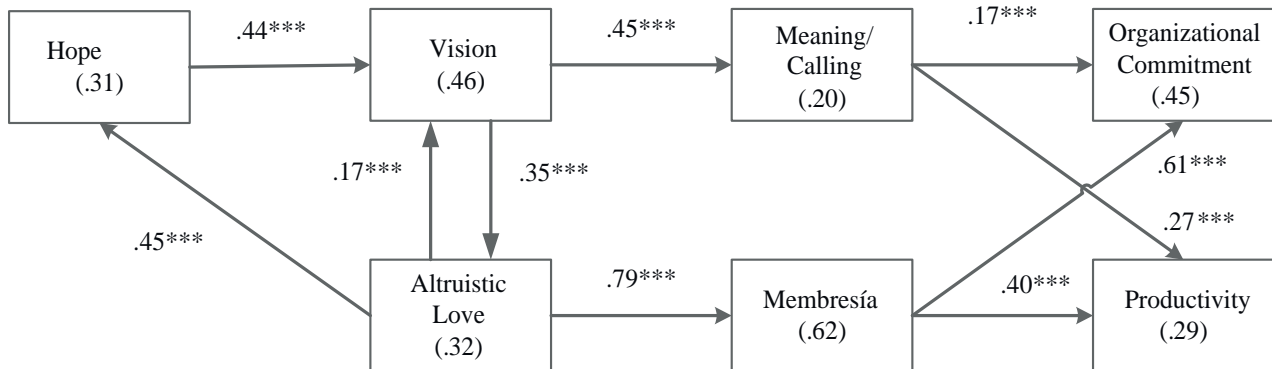


Figure 2. Model of structural equations of Spiritual Leadership using the complete sample (n=277). Maximum Likelihood model with Chi<sup>2</sup> = 134.83 (df= 12) p = .000 and GFI .89; RMSEA .19, NFI .87; CFI .88; IFI .88. Squared multiple correlations in top right corner of the variables and weights of regression (betas) alongside the arrows.

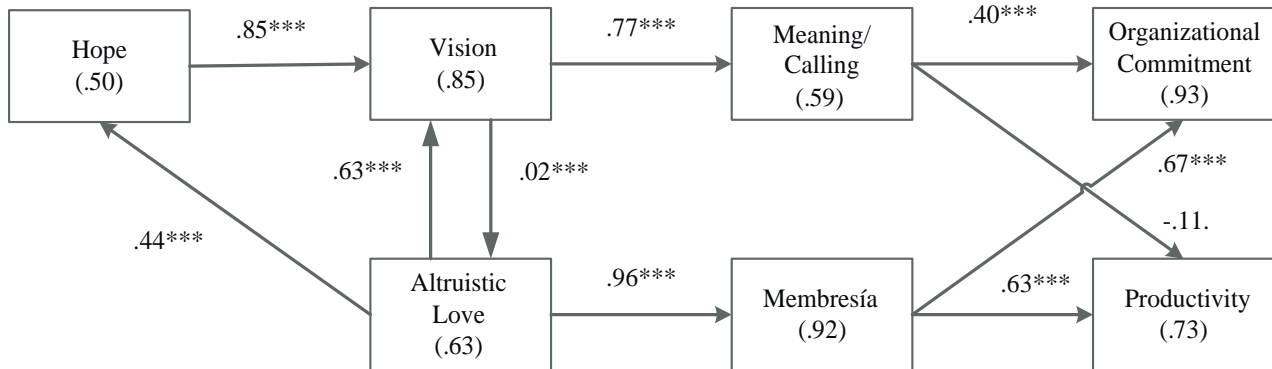


Figure 3. Model of structural equations of Fry, L.W., & Matherly, L. (2006). *Spiritual Leadership and Organizational Performance: An Exploratory Study*. Paper presented at the Academy of Management, Atlanta, Georgia. Presentation of 347. Maximum Likelihood model with Chi<sup>2</sup> = 2345.36 (df = 621) p = .000 and NFI .95 CFI .96; squared multiple correlations in parenthesis and weights of regression (betas) alongside the arrows.

are the Normed Fit Index (NFI), which is sensitive to the sample size and usually shows underestimations in small samples; the Comparative Fit Index (CFI), which is not sensitive to the sample size but can result as biased when the measurements are not centered; and the Incremental Fit Index (IFI), which is not sensitive to sample size but can exceed a value of one.

Keeping in mind the mentioned parameters, these results were compared with those of the study conducted by Fry and Matherly (2006) (See Table 3). It was identified that the model for the sample studied, presents values close to the criteria GFI; however, the Chi-squared is significant (not adjusted) and an elevated margin of error is observed (RMSEA). Bearing in mind the Chi-squared reported by Fry and Matherly (2006) the reported model also does not present an adequate absolute adjustment, which is significant and the reason Chi-squared/degrees of freedom is higher than three. However, the reasoning is closer to this criterion than the reasoning obtained in this study. Finally, given that Fry and Matherly do not report GFI nor RMSEA, it is not possible to make a comparison with respect to those two rates of adjustment.

On the other hand, the results of the comparative indexes obtained in this study do not correspond with those of Fry and Matherly (2006), who report values higher than .95. In the present study none of the three indexes arrive at this level, but are close to the reference values proposed by Byrne (2010).

Overall, the findings in this study on the adjustments of the model are close to the reference values. Particularly the comparative or incremental indexes. This result can be related to the fact that the found correlations are not as strong as the ones reported by Fry and Matherly (2006).

In terms of the external evidence of validity this study considered sociodemographic variables as potential sources of variation in the variables of the model, including gender, age range, level of education and work experience (see Table 4). In this regard, gender differences were identified in the variables of Altruistic Love and Productivity, in which men reported a higher presence in the workplace. In terms of age range, there were differences in the variables Hope/Faith, Organizational Commitment and Productivity, in which it

was shown that participants between 30-39 years old had lower levels than the other two age range groups. This means that participants older than 40 show higher altruism and also a larger organizational effect (Organizational Commitment and Productivity).

Another sociodemographic variable that showed influence in the perception of Spiritual Leadership was work experience. This variable had a significant effect in all the variables of the model, except in the Productivity variable (see Table 4). It was found that the longer the work experience, the higher the grade in the variables of Spiritual Leadership, while in the dimensions Membership and Productivity, the relationship with work experience had an inverted effect.

On the other hand, the effect on workplace variables was also analyzed, such as company size, work experience, position and number of workers supervised (See Table 5). The findings show that the company size influences the dimensions of Altruistic Love and Meaning/Calling. In the case of the dimension of Altruism, the effect is inverted. This is, the higher the size of the company, the less altruism is perceived. In contrast, in the variable of Meaning/Calling, there is a direct connection, which means that in larger companies, a higher presence of Spiritual Well-Being is seen. Work experience in the company was found to be relevant in the Organizational Commitment variable, in which a U-type relationship is observed. This means that participants with less or more work experience report a higher level in the Organizational Commitment variable in their organizations than those whose work experience is intermediate.

Lastly, the findings also show that the position held in the company, along with the number of supervised staff had a significant impact on participants' perception of the Spiritual Leadership variables. Participants with top and intermediate management positions report a larger presence of the Spiritual Leadership variables, compared to those who are in middle management or don't have a management position. On the other hand, the number of supervised employees showed to influence participants' perception in four variables of Spiritual Leadership. Findings show that those who supervise a larger staff tend to demonstrate

Table 3.  
Model fit index

	Chi <sup>2</sup> /DF	GFI	RMSEA	NFI	CFI	IFI
Reference values (Byrne, 2010)	< 3.00	> .90	< .08	> .90	> .93	> .90
Fry & Matherly (2006)	3.78	-	-	.95	.96	.96
Current study	11.23	.89	.19	.87	.88	.88



Table 4  
*Spiritual Leadership variables by sociodemographic aspects.*

	Gender		Age		Work experience	
	F	sig	F	sig	F	sig
Vision	.012	.912	2.128	.121	3.720	.025
Hope/Faith	.006	.936	3.430	.034	3.762	.024
Altruistic Love	5.291	.022	1.271	.282	3.334	.037
Meaning/Calling	2.686	.102	1.369	.256	4.304	.014
Membership	2.095	.149	2.915	.056	4.923	.008
Commitment	2.698	.102	5.576	.004	7.390	.001
Productivity	4.368	.038	5.060	.007	2.630	.074

Table 5  
*Spiritual Leadership by workplace variables.*

	Company size		Work experience		Position in the company		Workers supervised	
	F	sig	F	sig	F	sig	F	sig
Vision	1.056	.369	.747	.560	4.834	.003	3.086	.028
Hope/Faith	.187	.905	1.057	.378	9.503	.000	4.940	.002
Altruistic Love	3.801	.011	1.605	.173	6.361	.000	1.831	.142
Meaning/Calling	3.764	.011	.472	.756	1.543	.204	1.520	.209
Membership	2.498	.060	1.698	.151	8.307	.000	4.423	.005
Commitment	1.147	.331	3.647	.007	9.263	.000	2.783	.041
Productivity	.297	.828	.799	.527	5.266	.002	1.181	.317

a stronger presence in the variables of Vision, Hope/Faith, Membership and Organizational Commitment in their organizations (see Table 5).

## CONCLUSION

The model proposed by Fry (2003) is founded on an instrument which shows the conceptual proposal (Fry & Matherly, 2006), thus, this research study examined this model following AERA, APA and NCME (1999) recommendations for the evaluation of the measurement instruments.

In general, the author presents a clear conceptual delimitation of the construct, less centered on the leader and more focused toward the participation of the members of the organization in order to satisfy their needs and spiritual well-being and increase the Organizational Performance

in the variables of Organizational Commitment and Productivity (Fry, 2006). It is about a model that fits in with the contemporary leadership trends in which human and sociocultural factors are considered fundamental in the workplace (Crossman, 2010). Conceptually, the Spiritual Leadership Theory, just like other emerging models proposed with the same premise, offer a new way to envision leadership, while additionally emphasizing the importance of people, their well-being and their needs for transcendence in the workplace, which is very important for leadership in this century, in which these aspects will certainly constitute some of the most effective measures.

In this study, a qualitative evaluation of the instrument items was conducted, which was translated and linguistically adapted for Colombia and Ecuador. Given this process, the attention was focused on verifying that the translated items correctly reflected the original content and were written in a brief and easy-to-understand way for participants. Therefore,

instead of an evaluation to validate the content, a facial validation was done as part of the qualitative evaluation of the items.

On the other hand, the statistical analysis of the items allowed the study to identify the correct functioning of 34 of the 35 items used in the survey, which led to a very favorable result that only excluded one item. The excluded item belongs to the Organizational Commitment variable, which is part of the Performance dimension. This variable is formed by four items, and once excluded, this resulted in the minimum of elements recommended for a scale evaluation (Aiken, 2003). The excluded item showed a low correlation with the Organizational Commitment variable and also its wording was the only phrased negatively in the entire survey. This finding supports the recommendation of changing the wording to positive in future research studies for use of this instrument.

Next, the internal structure of the questionnaire was examined based on two procedures. The first one consisted of estimating correlations between the variables proposed in the model, which led to positive and relevant correlations. Similarly, the findings showed that the variable of Meaning/Calling, which conceptually is part of the Spiritual Well-Being, is the one that presents less correlation with the other variables, and at the same time is the one with a higher average among participants. This could mean that what is relevant for people in terms of the workplace is more related to work itself instead of the leadership they perceive in their organizations. This aspect must be more deeply examined in future research studies about Spiritual Leadership Theory.

The second procedure used to estimate the internal structure was a model of structural equations based on maximum likelihood. This proved to be important given the robustness of these models when they transferred the assumptions of normality univariate and multivariate (Burnette & Williams, 2005; Hair et al., 2010), just as happened in this case, in which the item score and consequently, the variables of the model were biased towards the top part of the score scale. Despite this limitation, the model showed high levels of adjustment according to the usual parameters in this type of multivariate analysis (Byrne, 2010; Ruiz et al., 2010).

The coefficients obtained in this study were contrasted to those published by Fry and Matherly (2006). The results of this comparison showed relevant similarities and few differences, which were related mainly to the level of variability reached in each one of the variables. This means that the model in contrast presents higher values than the ones obtained in this study. Similarly, the relationships between variables were less in most cases, showing that the

Meaning/Calling variable presented a bigger discrepancy in the comparison. This confirms the previous result about the role of this variable in the Spiritual Leadership Theory.

The reliability estimations were conducted based on the Cronbach's Alpha for each variable in the model. This coefficient ranges between 0 and 1, showing a result higher than .70, which is considered suitable (Carretero-Dios & Pérez, 2007; Hinkin, 2005). The results obtained for the samples in Colombia and Ecuador combined were higher than .80, which leads to consistent measurements with the questionnaire employed. Only the Organizational Commitment variable required a double estimation given the exclusion of one of the items. However, this exclusion did not have a negative impact on the coefficient, as expected with short scales (Aiken, 2003).

The external evidence of validity of the Spiritual Leadership model was estimated using sociodemographic and occupational variables. Regarding the former, findings show work experience in general, not the company or the position held, result as relevant in the Spiritual Leadership variables, while the level of education did not have incidence. The latter is possibly related to the homogeneity of the sample regarding graduate level studies, which is why it is important to review in future research studies if participants with a lower level of education also perceive high levels of Spiritual Leadership in their organizations.

Regarding the occupational and organizational variables, findings show that the level of the position held is the most responsive variable in this leadership model, therefore, the higher the position held in the organizational structure, the larger the likelihood to perceive the presence of the Spiritual Leadership variables, which can be related with a more general overview and with wider reach to the organization than the one developed by participants with a lower positions. The outcome could also be related to the trend toward optimism that has been reported by top-level executives (Contreras & Juárez, 2013), which would explain satisfactorily the differences observed in the variables of Hope/Faith, Altruistic Love, Membership and Commitment.

Finally, the model of Spiritual Leadership should be analyzed in future research studies with a focus on the positive psychological capital aspect, given that this construct refers to the positive state of development and has shown positive and relevant relationship with leadership practices (Contreras & Juárez, 2013), which could contribute evidence regarding the external evidence of model's validity.

In conclusion, the SLT survey is a robust instrument for its elements and the internal consistency of each of the seven variables. Regarding validity, the confirmatory factorial analysis with structural equations allows to confirm that in the considered samples, the coefficients in the

model are different and the adjustment indexes are below the common standards accepted in this type of analysis. Therefore, it is not clear if the model proposed by Fry has validity in Latin America. Additionally, the Spiritual Leadership model requires more research since there is not enough empirical evidence regarding its external evidence of validity, particularly with other processes of organizational behavior.

It is important to highlight some limitations of this study that must be considered in future research. Such is the case of the sample balance between men and women, given that it was not considered as one of the sample selection parameters for this study, and there was more participation by women. It is recommended to use quota sampling to ensure gender balance in future research studies.

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