



**Maria Joel Lopes Gonçalves**

# **Spirituality at work: conceptualization, measurement and impacts.**

*An investigation with Portuguese workers.*

Doctoral Thesis in Business Management, supervised by

Professor Doutor Arnaldo Coelho, presented to Faculty of Economics of Coimbra University

Agosto 2017



UNIVERSIDADE DE COIMBRA



FEUC FACULDADE DE ECONOMIA  
UNIVERSIDADE DE COIMBRA

Maria Joel Lopes Gonçalves

# Spirituality at work: Conceptualization, measurement and impacts.

An investigation with Portuguese workers.

*Thesis in Business Management*

*presented to Faculty of Economics of Coimbra University, to obtain the*

*Doctoral Degree*

Advisor: Professor Doutor Arnaldo Coelho

Coimbra, Agosto 2017





*To all Mankind*



## **AGRADECIMENTOS**

Esta tese foi uma viagem e quando embarquei na mesma pairava apenas a incerteza e a desconfiança sobre o tema. O início foi marcado por momentos ingloriosos. Mas a viagem não parou e o resultado desta viagem está aqui.

Talvez a viagem não tenha parado pelo caminho, pelo simples facto de ter sido movida pela crença de que este tema é fundamental para um Mundo global, que é o Mundo que se apresenta ao século XXI. Ser mãe, terá sido fundamental para desenvolver esta tese. À minha filha, Bárbara, devo a possibilidade de viver o Amor incondicional. A ela, agradeço o tempo que me deu sem reclamar, para desenvolver esta tese.

Ao meu orientador e Professor Arnaldo Coelho devo a orientação e ensinamentos, que me enriqueceram e me tornaram na pessoa que sou hoje. Ao Vitor, agradeço o verdadeiro sentido de partilha e entrega incondicional. À Carla Pinto, toda a força em longas conversas, caminhadas, tidas no nosso Choupal e Rio Mondego. Aos meus avós, onde pude perceber desde tenra idade o significado do Amor. À minha mãe, pai, irmão e sobrinhos e todos os que fazem parte da minha família por laços afetivos.

Às pessoas especiais, que deram do seu tempo, cujas palavras foram de força e de afetos, importantes nos momentos ingloriosos:

Dr Isabel Roque

Dr José Ramos-Horta

Professora Doutora Judi Neal

Compositor Pedro Abrunhosa

Professor Doutor Luiz Moutinho

Manuela Branquinho

Professor Doutor Rui Brites

Eternamente grata, e por isso dedico esta tese à Humanidade, a ela pertence.





## AKNOWLEDGMENTS

This thesis has been a journey and when I stepped into it, there was only uncertainty and mistrust on the subject. The beginning was marked by inglorious moments. But it was not stopped and the result is here, in this document.

Perhaps this journey did not stop along the way, simply because it was moved by the belief that this theme is fundamental to a global world, which is the World that presents itself to us all in the 21st century. Being a mother, was a fundamental part of my life in the development of this thesis. To my daughter Bárbara, I owe the possibility of learning about and living unconditional Love. To her, I am profoundly grateful for the time she gave me without ever complaining, while developing this thesis.

To my doctoral advisor, Professor Arnaldo Coelho, I owe the guidance and teachings that have enriched me and made me the person I am today. To Vitor, I am grateful for the true sense of sharing and unconditional support. To Carla Pinto, all the encouragement, long conversations and walks, taken in our Choupal by the Mondego River. To my grandparents, where I learned and understood, from a young age the meaning of Love. To my parents, brother and nephews. To all of those who are part of my family by affective ties.

To the special people who gave me their time, whose words were of strength and affection, and of extreme importance in the inglorious moments:

Dr Isabel Roque

Dr José Ramos-Horta

Professor Dr. Judi Neal

Composer Pedro Abrunhosa

Professor Luiz Moutinho

Manuela Branquinho

Professor Dr. Rui Brites

I am and will be eternally grateful, and for this reason I dedicate this thesis to Humanity, to whom it belongs.



## **ABSTRACT**

Spirituality at work has received growing attention during the last two decades. This field is full of inaccuracies for both academics and practitioners and, the current investigation specifies and tests a comprehensive model for spirituality at work that includes measures, impacts on worker`s attitudes and on individual performance. The first purpose of this investigation is to contribute to a better understanding of the spirituality at work concept, adding a new dimension to the traditional conceptualizations, labeled “emotional balance and inner peace” and comparing both, traditional and new model, testing the impacts of each of these models on individual productivity. The next goal was to investigate how spirituality at work influences workers’ attitudes and individual performance. To understand the relationship between spirituality at work and individual performance, job resourcefulness and organizational affective commitment were used as mediating variables. The last goal was to identify the influence of a spiritual environment, with both spirituality at work and spiritual practices, on individual performance, mediated by job resourcefulness and moderated by affective commitment. The answer to the whole of relationships proposed was drawn from the partial and cumulative results that were tested in the three partial and complementary models developed, corresponding to the three papers produced. To test the proposed research hypotheses, data was collected based on a structured questionnaire, applied in Portugal. Questionnaires were sent out to individual workers and processed using the Internet, 500 workers were emailed and 273 completed questionnaires were returned. Structural equation modeling was used as the statistical tool to test the hypotheses and to provide a significative and parsimonious explanation to the data. The main findings are: the new dimension emotional balance and inner peace concept is a viable construct; the spirituality at work variable fits well as a second-order variable; the impact of spirituality at work on individual productivity can be increased by adding the dimension emotional balance and inner peace; job resourcefulness appears to be a better mediator in the relationship between spirituality at work and individual productivity; spirituality and spiritual practices at work may improve job resourcefulness directly and individual productivity indirectly; affective commitment moderates some of the present relationships of this study; when affective commitment is low, the spirituality environment produces higher outcomes; creating a spiritual environment, spirituality and spiritual practices at work could increase several

work related outcomes, like individual productivity, especially when mediated by job resourcefulness. The originality of this investigation comes from the proposed global conceptual model, which offers a new approach to define a spirituality environment based on Maslow`s Theory of Needs and according to the principles of the World Health Organization. This new approach includes: development of a new spirituality at work dimension, emotional balance and inner peace; validity and reliability of Ashmos and Duchon`s scale, including the previous measure; perform of spirituality at work variable as a second-order-variable; development of the spiritual practices at work measure and its impacts on spirituality at work and on job resourcefulness; the direct and indirect effects of spirituality and spiritual practices at work on the workers attitudes and on performance. With these findings we believe that new evidence has been provided in the management field and in the spirituality at work area. This new conceptualization and approach, supported by the global conceptual model can guide the future research in this area, and may provide guidance for practitioners to understand the need to manage organizations using this perspective as a management tool. The development of the measures spiritual practices and emotional balance and inner peace at work reveals to be a viable constructs and could be a relevant find to academic agendas, such seems to be a management instrument to be used as a way to promote and create a spirituality-rich culture. The current research had several limitations such as: independent and dependent variables were collected from the same source; this work is based entirely on perceptions; the concept of SW is itself still object of different approaches and definitions that can affect how the construct is operationalized and measured.

**Keywords:** Spirituality at work, emotional balance and inner peace, job resourcefulness, organizational affective commitment, individual performance.

## RESUMO

Durante as duas últimas décadas, o conceito espiritualidade no trabalho tem recebido uma atenção crescente. Existem imensas dúvidas entre académicos e gestores, e esta investigação específica e testa um modelo conceptual para compreender e tornar a espiritualidade no trabalho mensurável, incluindo os impactos nas atitudes e performance dos trabalhadores. O primeiro propósito desta investigação é contribuir efetivamente para o entendimento do conceito da espiritualidade no trabalho, adicionando ao modelo conceptual tradicional uma nova métrica, denominada “equilíbrio emocional e paz interior”, comparando de igual modo os dois modelos, tradicional e novo, testando os impactos de cada um destes modelos na produtividade individual. O objetivo seguinte foi investigar como a espiritualidade no trabalho pode influenciar as atitudes dos trabalhadores e a performance individual. Para compreender a relação que pode ser estabelecida entre a espiritualidade no trabalho e a performance individual as variáveis superação no trabalho e comprometimento afetivo organizacional foram usadas como variáveis mediadoras. Por fim, o último objetivo foi identificar a influência de um ambiente espiritual, incluindo a espiritualidade no trabalho e as práticas espirituais, tendo sido considerada como variável mediadora a superação no trabalho e moderadora o comprometimento afetivo. Todas as relações propostas foram desenvolvidas e testadas através de resultados parciais e cumulativos, resultantes de três modelos conceptuais que se complementam e correspondem aos três artigos produzidos. Para que as hipóteses de investigação fossem testadas, foram recolhidos dados, através de um questionário estruturado, aplicado em Portugal. Os questionários foram enviados via email a 500 trabalhadores e foram recebidas 273 respostas. Foi usado o modelo de equações estrutural como ferramenta estatística, para que a explicação dos dados seja significativa e parcimoniosa. Os resultados são: a nova dimensão “equilíbrio emocional e paz interior” é um constructo viável; a variável espiritualidade no trabalho pode ser tratada como variável de segunda ordem; há um impacto crescente da espiritualidade no trabalho na produtividade individual considerando esta nova dimensão; a superação no trabalho revela ser uma variável mediadora com resultados significativos; a espiritualidade e as práticas espirituais no trabalho têm impacto positivo na superação no trabalho (efeito direto) e na performance individual (efeito indireto); a variável comprometimento afetivo modera algumas das hipóteses de investigação; quando existe um baixo comprometimento afetivo, o

ambiente espiritual tem um impacto positivo; um ambiente espiritual pode incrementar diferentes resultados, como a produtividade individual, especialmente quando mediado pela superação no trabalho. A originalidade desta investigação está no desenvolvimento de um novo modelo conceptual com a criação de uma nova métrica para medir a espiritualidade no trabalho. Este modelo conceptual assenta numa nova abordagem para definir o ambiente espiritual, inspirado na Teoria das Necessidades de Maslow, de acordo com os princípios da Organização Mundial da Saúde. Esta abordagem inclui: concepção de uma nova medida para o conceito espiritualidade no trabalho; validade do construto dos autores Ashmos and Duchon; operacionalização do conceito espiritualidade no trabalho como variável de segunda ordem; desenvolvimento de uma escala para medir as práticas para a espiritualidade no trabalho e impactos na espiritualidade no trabalho e na superação no trabalho; efeitos diretos e indiretos do ambiente espiritual nas atitudes e na performance dos trabalhadores. Atendendo aos resultados obtidos, acreditamos que acrescentámos novos desenvolvimentos ao conceito espiritualidade no trabalho. Esta nova conceptualização e abordagem, suportada pelo modelo global conceptual pode representar um guia para os gestores. Ambas as escalas, práticas espirituais e equilíbrio emocional e paz interior, revelaram ser constructos viáveis o que pode representar um resultado relevante para a agenda académica, como instrumentos que promovem ambientes espirituais. São apresentadas as limitações à presente investigação: as variáveis dependentes e independentes foram desenvolvidas através da mesma fonte; o trabalho foi baseado em percepções; a conceptualização torna-se discutível devido à existência de inúmeras definições para o conceito espiritualidade no trabalho.

**Palavras-Chave:** Espiritualidade no trabalho, equilíbrio emocional e paz interior, superação no trabalho, comprometimento afetivo organizacional, performance individual.

## LIST OF ABBREVIATIONS

AC	Affective commitment
AVE	Average variance extracted
AOV	Alignment with the organization`s values
CFA	Confirmatory factor analysis
CR or C.R.	Composite reliability
EBIP	Emotional balance and inner peace
EFA	Exploratory factor analysis
H	Hypotheses
IP	Individual performance
JP	Job performance
JR	Job resourcefulness
OAC	Organizational affective commitment
OIL	Opportunities inner life
MPW	Meaning and purpose at work
P	p – value
RMSEA	Root mean square error of approximation
S	Sample
SCC	Sense of connection and community
SEM	Structural equation model
SPW	Spiritual practices at Work
SRW	Spirituality, religion, work
SW	Spirituality at Work

## LIST OF TABLES

Table 1 - Chronological analysis of SW .....	27
Table 2 - SW Values .....	35
Table 3 – SW approaches.....	38
Table 4 - Sample characterization .....	48
Table 5 - Descriptive analysis 1.....	60
Table 6 – Dimensions of spirituality at work.....	79
Table 7 – Conceptualizing SW.....	81
Table 8 – SW and outcomes.....	85
Table 9 – EBIP loadings .....	89
Table 10 – Exploratory factor analysis of SW .....	90
Table 11 – Factor loadings of the second-order latent variable, SW.....	93
Table 12 – Hypothesis Test.....	94
Table 13 – Results of the first order model.....	95
Table 14 – The three SW levels.....	109
Table 15 - SW impacts.....	114
Table 16 – SW Construct .....	124
Table 17 - Discriminant Validity .....	125
Table 18 – Factor loadings of the second-order latent variable .....	127
Table 19 - Findings .....	129
Table 20 – Dimensions of SW.....	148
Table 21 – Conceptualizing SW .....	149
Table 22 – SPW scale .....	158
Table 23 - SW construct.....	159
Table 24 - Discriminant validity.....	161
Table 25 - Results .....	163
Table 26 - Indirect, Direct and Total Effects.....	165

## LIST OF FIGURES

Figure 1 – The global conceptual model.....	44
Figure 2 – Conceptual model of first paper.....	63
Figure 3 – Conceptual model of second paper .....	67
Figure 4 – Conceptual model of third paper.....	71
Figure 5 – New and traditional model .....	92
Figure 6 – Conceptual model .....	121
Figure 7 – Conceptual Model.....	156



## SUMMARY

AGRADECIMENTOS.....	iv
AKNOWLEDGMENTS .....	v
ABSTRACT .....	vi
RESUMO .....	viii
LIST OF ABBREVIATIONS.....	x
LIST OF TABLES .....	xi
LIST OF FIGURES .....	xi
PART I - BACKGROUND .....	17
1.1 Research Context.....	17
1.2 Research problem and questions .....	19
1.3 Structure of the thesis .....	21
CHAPTER II – LITERATURE REVIEW.....	23
2.1 Introduction .....	23
2.2 The drivers of the investigation.....	23
2.2.1 Abraham Harold Maslow – Theory of Needs	23
2.2.2 Judith Neal – Spirituality at Work, the Theory and Practice	24
2.2.3 Ashmos and Duchon – conceptualization and metrics	25
2.3 Spirituality at Work – controversy and chronological analysis .....	26
2.4 Spirituality at Work – Conceptualization .....	34
2.5 Spirituality at Work – Impacts .....	40
2.6 Spirituality at Work – Success Cases .....	41
2.7 Conclusion .....	41
CHAPTER III – METHODOLOGY .....	43
3.1 Introduction .....	43
3.2 The global conceptual model and research objectives .....	43
3.2.1 The research instrument and data collection	45
3.2.2 Sample description	46
3.2.3 Measures	49
3.3. Statistical Approach.....	53
3.3.1 Structural equation modeling (SEM)	53
3.3.2 Specification, identification and estimation of the conceptual model	54
3.3.3 Construct validity and reliability	57
3.3.4 Descriptive analysis of the variables	59
3.4 The investigation strategy .....	61

3.4.1 PAPER 1	62
3.4.2 PAPER 2	66
3.4.3 PAPER 3	70
CHAPTER IV – PAPER 1 .....	75
PART II – EMPIRICAL ESTUDIES .....	75
4.1 Title Page .....	75
4.2 Abstract and Keywords.....	76
4.3 Introduction .....	77
4.4 Theoretical background .....	78
4.4.1 Spirituality at work – the source and meaning	78
4.4.2 Introducing a new dimension – EBIP	83
4.4.3 The outcomes of spirituality at work	84
4.5 Method.....	86
4.5.1 Overall, analytic strategy	86
4.5.2 Sample size and data collection	87
4.5.3 Measures	87
4.6 Results.....	91
4.6.1 Spirituality at work: the search for the better model	91
4.6.2 Hypothesis test	93
4.7 Conclusions, contributions and limitations.....	96
4.7.1 Conclusions	96
4.7.2 Contributions	97
4.7.3 Limitations and recommendations for future work	97
4.8 References .....	99
CHAPTER V – PAPER 2 .....	105
5.1 Title page.....	105
5.2 Abstract and Keywords.....	106
5.3 Introduction .....	106
5.4 Research background and hypothesis development .....	107
5.4.1 Spirituality at work and meaning	107
5.4.2 Emotional balance and inner peace – A new dimension	111
5.4.3 The outcomes of spirituality at work	112
5.4.4 Spirituality at work and employee’s attitudes	115
5.4.5 Spirituality at work, job resourcefulness and performance	115
5.4.6 Spirituality at work, commitment and performance	117

5.4.7 Organizational commitment and job resourcefulness	120
5.5 Method.....	120
5.5.1 Sample and data collection	120
5.5.2 Measures	122
5.5.3 Model assessment	126
5.5.4 Common method bias	127
5.6 Hypotheses test.....	128
5.7 Discussion .....	130
5.8 Conclusions .....	132
5.9 Contributions.....	133
5.10 Limitations and future investigation.....	134
5.11 References .....	135
CHAPTER VI – PAPER 3 .....	143
6.1 Title page.....	143
6.2 Abstract and keywords.....	144
6.3 Introduction .....	145
6.4 Theoretical background .....	146
6.4.1 Spirituality at work definition	146
6.4.2 Management art, spiritual practices at work (SPW) and SW	149
6.4.3 Spirituality at work impacts	151
6.4.4 SPW, SW and JR	152
6.5 Methodology .....	155
6.5.1 Conceptual model, sample and data collection	155
6.5.2 Measures	157
6.5.3 Model assessment	160
6.5.4 Common method bias	161
6.6 Hypotheses test.....	162
6.7 Indirect, direct and total effects.....	165
6.8 Conclusions .....	165
6.9 Contributions.....	166
6.10 Limitations and future studies .....	167
6.11 References .....	169
CHAPTER VII - Conclusions, contributions and future research.....	177
7.1 Conclusions .....	177
7. 2 Contributions .....	178

7.3 Limitations and future research.....	180
7.4 References.....	182
Appendix .....	191

## **CHAPTER I - INTRODUCTION**

### **PART I - BACKGROUND**

#### **1.1 Research Context**

This investigation is about spirituality, spirituality at work (SW) and respects all beliefs and religions systems. This current research aims to contribute to an inclusive conceptual framework, based on universal conceptions that can make sense for the 21st century and not on a particular faith. The final aim is to give a solid contribution to the pluralistic nature of the different organizations. In a world that can be described as an organizations society, the scientific community has the responsibility to explain the role of organizations for the achievement of the well-being of the whole society and people, and the presence of spirituality at work can play a fundamental role (Sheep, 2006; Karakas, 2010; Daniel, 2015).

The resolution of the international problems of economic, social, cultural and humanitarian nature, promoting respect for human rights, gender, race, language and religion, is one of the priorities of the United Nations, as we can read on its official website:

Improving people's well-being continues to be one of the main focuses of the UN. The global understanding of development has changed over the years, and countries now have agreed that sustainable development – development that promotes prosperity and economic opportunity, greater social well-being, and protection of the environment – offers the best path forward for improving the lives of people everywhere.<sup>1</sup>

Consequently, new conceptual frameworks are needed to promote fair societies in which the worker is not an input throughout the productive process (Gotsis & Kortezi 2008). The growing interest in the return of the investigation on SW is not limited exclusively to the improvement of the organizational performance, but mainly to the inclusion of the human being in the labor world. The Social Justice Declaration for a fair globalization at the International Labor Organization<sup>2</sup>, expresses the work importance as follows: "The work allows humanity to be taken to a collective prosperity".

---

<sup>1</sup> <http://www.un.org/en/sections/what-we-do/promote-sustainable-development/>

<sup>2</sup> [http://www.ilo.org/public/portugue/region/eurpro/lisbon/html/portugal\\_pub\\_tit\\_pt.htm](http://www.ilo.org/public/portugue/region/eurpro/lisbon/html/portugal_pub_tit_pt.htm)

For a collective prosperity the International Labor Organization considers the fundamental values of freedom, human dignity, social justice, security and no discrimination as essential for a sustainable economic and social development. Amartya Sen (2009: 14) stated:

However the focus of attention in real lives it's a case to assess the existence of justice; certainly it will bring long term implications associated with nature and the scope of the idea of justice.

The present research about SW aligns with these concerns and is inspired both classical and contemporary approaches with same concerns, as an ongoing work, going back to the investigators that were pioneers in this field. SW needs further investigation and new and more global and balanced conceptualizations (Daniel, 2015). The match between work related outcomes like performance and workers wellbeing is, nowadays, an undeniable priority (Roof, 2015) as far as they may reinforce each other in a virtuous cycle.

There are empirical evidences that establish a clear link between SW and different organizational outcomes (Rego & Cunha, 2008; Tombaugh et al., 2011). Rego and Cunha (2008) found a strong positive relationship between SW culture and both the affective and normative organizational commitment. Gupta et al. (2014) found a positive relationship between SW and satisfied employees, based on the next four dimensions: meaning at work, sense community, organizational values and compassion.

If the organizational culture is based on SW, this fact can provide guidance for human resources managers to help prevent stress (Daniel, 2015). Even though there are different approaches to SW in the literature, but its importance in the management field is widely recognized (Pavar, 2009; Roof, 2015; Aravamudhan & Krishnaveni, 2015), attending that workers want to feel connected with their work and with their coworkers, and this new idea arises from Conger (1994) who noted the dissolution of many workers' support communities and their substitution by the working community.

The implementation of spiritual programs in organizations, can improve attitudes at the individual level, such as self-efficacy, greater willingness to cooperate, grow, learn and adapt to challenges (Trott III, 1996). So a better understanding of the SW concept is needed as well as further investigation to assess SW culture (Kolodinsky, et al., 2008; Tombaugh et al., 2011), and this work aims to make use of the previous contributions and introduce a new dimension into the concept of SW, given the

recognition of the importance of individual spirituality in people's behaviors and organizational outcomes.

Ashmos and Duchon (2000) are considered pioneers in the SW measurement development just as Neal and Boberman (2004). This investigation development is based on the mentioned authors, and intends to contribute with a stronger conceptualization and measurement of this concept.

On conceptual terms, a search was done about the SW roots through an extensive literature review. In 1969 Maslow starts the study of the importance of spirituality in “personal psychology” contributing to the *Journal of Transpersonal Psychology* (O'Connor & Yballe, 2007) creation. On Maslow's theory of needs (Koltko-Rivera, 2006) was found the reasons to establish and reinforce the links between SW and organizational management. On his investigation, Maslow suggests that on the top of the needs pyramid (self-actualization) we should value well-being, stability, satisfaction with life and mental health (Cavanagh & Bandsuch, 2002; Karakas, 2010).

## **1.2 Research problem and questions**

The humanity waits for the SW development (Maslow, 1970) and, following Maslow's ideas, and authors like Neal (2013) and Ashmos and Duchon (2000), this investigation intends to expand the SW concept, considering measurement, attitudes and impacts on work related outcomes like individual performance.

The theoretical work was inspired on Maslow's thinking, which presents a holistic conception of the human being and also found a purpose for this concept on the management and leadership fields (O'Connor & Yballe, 2007). The mission is to contribute to a subject considered fundamental in the human and organizational improvement, according to the following principles of the World Health Organization (WHO)<sup>3</sup>:

- I. The work should be performed in a safe and healthy environment.
- II. The work conditions should be consistent with the well-being and human dignity.

---

<sup>3</sup> <http://www.who.int/en/>

III. The work should provide individual achievement and service for the whole society.

These three principles are the conceptual foundations that lead to the new SW conceptualization and measurement, based on the adding of a new dimension: emotional balance and inner peace (Joelle & Coelho, 2017).

The academic context has come up with assertions that suggest a clear paradigm change in the last two decades in the organizational field (Karakas, 2010). There is a clear need in the academic literature of new investigations to support the theoretical premises about individual and organizational benefits in spiritualized cultures (Gotzis & Kortesi, 2008). It is possible to configure spirituality in the labor context, as part of an organizational culture that can be measurable, defined as a unisonos trend, linking spirituality and work providing a continuity sensation (Jurkiewicz & Giacalone, 2004).

In the organizations contexts, the 60's represent a decade in which emerge the consciousness of the negative impacts of the organizational practices on the workers' health and well-being. Due to this fact, the World Health Organization (WHO), made an appeal to define new perspectives that inspire a positive organizational behavior based on two arguments: these new perspectives should be preventive; and the new human resources policies should promote authenticity, trust and partnership. In Europe the depression related diseases associated to work represent a cost of €617 billion/year<sup>4</sup>.

The WHO refers precisely both globalization and technological advance as the two big drivers in the labor world transformation, opening opportunities for a dangerous global competition, looking for financial results in detriment of fundamental human rights and well being. The new developing technologies and internet came to show that the line that separates professional and private life became almost invisible and work life balance became questioned. The stress from this new labor reality during the XXI century influences negatively the workers' physical and mental health causing absenteeism, low motivational levels, satisfaction and creativity decrease and organizational productivity and competitiveness reduction. In other words, we are facing conditions that are globally a concern to us all, that represent serious social and financial costs.

---

<sup>4</sup> [http://www.ilo.org/wcmsp5/groups/public/---ed\\_protect/---protrav/---safework/documents/publication/wcms\\_466547.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/publication/wcms_466547.pdf)



Accordingly, this need for further research on the SW field lead us to the following problems:

- What defines SW at work?
- How to create a spirituality environment?
- Does the SW contribute to improve the workers' well-being?
- Does this impact in the workers' life have a positive influence on their performance?
- How to implement SW? What impacts may represent for workers and organizations?

### **1.3 Structure of the thesis**

This thesis analyzes issues on the organizational management that may increase the individual, society and community well-being and scientifically represents a new approach on organizational culture (Neal, 2013; Gupta et al., 2014; Daniel, 2015). Attending to the organizational context and the state of the art, this investigation has the purpose to represent a contribution to the SW concept development, synchronizing it with work-life for the 21st century. In this scope three investigations models were built, that are the basis of the three papers that compose this current thesis.

The first paper corresponds to the development of a new SW measure that captures the importance of work in the workers' emotional stability and inner peace, named emotional balance and inner peace (EBIP). It is not just a new metric, it's a new dimension added to the four traditional dimensions of the SW concept (Ashmos & Duchon, 2000) and contributes to reinforce the conceptual density and balance of the concept, capturing all aspects of SW. This new metric includes the principles above referred by the WHO and it's anchored in Maslow's theory of needs, that recognizes the alignment needed between spirituality and labor component.

The results of the present investigation reveal that the SW presence in the organizations make the workers more capable and committed, since they get to go beyond themselves, facing obstacles and difficulties, and this relationship has a positive impact on the individual performance.

The second article intends to identify which of the following models are more homogeneous to measure SW:

- the traditional model, that includes the pre-existent four dimensions identified in the literature;
- the new model proposed by this investigation, that includes this new dimension EBIP.

The third and last article has the purpose of identifying a set of practices, which are aligned with the *management art* perspective (Atkinson, 2007, 2008), that could that can boost a spiritual culture and a spiritual environment inside the organizations. An analysis was performed about the workers' attitudes like job resourcefulness and its mediating role between SW and individual performance.

These three partial investigations work complementary to give answer to the proposed objectives and hypotheses. Burack (1999) highlights two purposes that cross most of the investigations performed so far, and this investigation as well:

- ✓ the basic notion of the SW concept based on ideas like “one`s own being” and when the “inner self” connects to “one´s work”
- ✓ The economic imperatives impose profitability as a result to be found, but with this approach, this outcome will not be the unique goal. New issues must be considered like meaning workers can find at work, the alignment between individual and organizational values, the sense of community, opportunities for inner life, emotional balance and inner peace and an overall wellbeing, therefore, contributing to performance.

## **CHAPTER II – LITERATURE REVIEW**

### **2.1 Introduction**

Spirituality at work is not about beliefs or religions' systems. In this investigation the SW perspective adopted comes from a deep literature review going back to the seminal work of Maslow (1970). To develop this work, the main ideas for the SW conceptualization and analysis of its impacts on workers' attitudes and individual performance, were collected from several empirical studies, described in this chapter.

The literature review reveals many different approaches to define SW. For this work, it was adopted the Ashmos and Duchon (2000) conceptualization, considered the first authors to produce a serious and foundational approach to SW (Milliman et al., 2003; Pawar, 2009; Daniel, 2015; Brophy, 2015). They developed an empirical study to define SW as a multidimensional concept, based on the four next dimensions: sense of community, meaningful work, alignment with organizational values, opportunities for inner life.

On Maslow's Theory of Needs a reason was found to establish a link between SW and organizations (Kolkto-Rivera, 2006) and according to Neal (2013) studies it was found the need to implement an SW culture to help organizations increase their performance and improve the links between workers, their workplace and the company

### **2.2 The drivers of the investigation.**

#### **2.2.1 Abraham Harold Maslow – Theory of Needs**

There is a connection between spirituality and organization, which is easily established after a deep analyze of the SW concept and its impacts on the improvement of attitudes and individual performance at work.

To establish this connection and answering all inheriting concerns related to the SW conceptualization and measurement, a dialogue was established between spirituality and science, accepting the appeal that Maslow left in his work:

I want to demonstrate that spiritual values have naturalistic meaning, that they are not exclusive possession of organizational churches, that they are well within the jurisdiction of a suitable enlarged science, and that, therefore they are the general responsibility of all mankind (1970: 4).

This responsibility has been assumed in social sciences, where the search for the definition is guided by organizational excellence, looking for an organizational purpose or humanitarian aid (Csikszentmihalyi, 2003).

The research that is in the source of the present investigation has also an epistemological nature, since it is intended to identify the origin and validity of the SW existent knowledge, as well as estimate its importance for the human knowledge, appealing to practical methodologies to assess its potential practical implications. Several authors have mentioned the need to contribute and understand the SW epistemological concept (Ashmos & Duchon, 2000), potentially considered as a new paradigm in the organizational science and the management field (Karakas, 2010).

Maslow and his investigations created the foundations of the SW concept, identifying the following dimensions to the self-actualization (O'Connor & Yballe, 2007): unique self, peak experience and transcendence, spirituality and meaning, and esthetic-creative element. Maslow gave an additional contribution helping the launch in 1969 of the Journal of Transpersonal Psychology. Several other specialists found there a good opportunity to clarify the SW concept and the role spirituality may have in the organizational context, in the management and in leadership fields. This new approach contributes to a natural commitment in actions related to justice, trust, beauty, order, simplicity, meaning and purpose (O'Connor & Yballe, 2007). It is important to note that self-actualizing people are committed with themselves and with the well-being of their groups and community (O'Connor & Yballe, 2007), when they are committed with these intangible being-values (Maslow, 1971).

This investigation expects to contribute to a better definition and validation of the SW concept and establish a predictive value to it and Maslow and his seminal work played a critical role.

### **2.2.2 Judith Neal – Spirituality at Work, the Theory and Practice**

The work developed by Judith Neal, speaker, researcher and consultant in the USA, was the starting point to develop this research work. The reading of many articles that since the 90's have been published, confirmed the need of new investigation in this management field. Even if we are talking about a well-established field, coming from

the 90's, there is a specific moment when the management world opens the doors to this new subject creating the Management, Spirituality and Religion group, by the Academy of Management (Dean et al., 2003). Spirituality at work can be seen as an ideology (Cunha et al., 2006) and not only a trend (Gostsis & Kortezi, 2008).

The existing gap between those who are stucked on their basic needs (physical conditions, safety and survival) and those who could get free of them, was the first observation taken into account in the construction of this research. THE XXI century shows a huge part of workers trying to overcome this gap and find self-actualization and meaning to their lives based on their work. SW appears as an answer for contemporary organizational problems like layoffs, downsizing or reengineering, in a transformational context leaving the industrial revolution footprints, in a traditional, centralized, standardized e bureaucratic organization (Gostsis & Kortezi, 2008).

By definition, SW is a multidimensional construct, not consensual in the academic context, raising an immediate question: how can spirituality in the organizational context contribute to bridge this gap?

However, Judith Neal went further: far beyond these academic discussions, she transformed a theoretical concept into a very useful tool, based on a set of practices, that can be found in some of the biggest companies of the world with very promising results.

### **2.2.3 Ashmos and Duchon – conceptualization and metrics**

In the year 2000 SW met a shift mark, with the research developed by the authors. Ashmos and Duchon established a turning point on SW investigation in 2000, setting the conceptual frontiers and measurement, therefore enabling the research of the SW practical impacts on workers' attitudes and work related outcomes. Their initial investigation was published on the Journal of Management Inquiry. Based on previous theoretical developments, their conceptualization and measurement inspired most of the subsequent investigations.

The research developed on this topic may be typified in seven general categories (Brophy, 2015):

- how SW can be understood and implemented
- methodologies that allows SW measurement

- how can SW benefit workers
- how can SW increase organizational performance
- how can SW interact with corporate social responsibility and sustainability programs
- which practices may create a spiritual environment
- how leadership may adopt a spiritual nature contributing for ethical leadership

### **2.3 Spirituality at Work – controversy and chronological analysis**

Indefiniteness is the most used word in the SW research field, published since the 90's. Attending to the doubts raised by academics, there are the skeptical authors (Brown, 2003; Rego et al., 2007) who remain in this uncertainty, but some arguments have been presented to increase the dialogue between SW and science throughout the last three decades. This indefiniteness is due to the SW concept nature (Milliman et al., 2003; Gotzis & Kortezi, 2008): complex, multifaceted, abstract and personal character.

The contemporary researches identified an opportunity for investigation, in different analysis levels. Table 1 presents a historical-temporal alignment of the SW evolution in the scientific terrain.

**Table 1 - Chronological analysis of SW**

<b>Author (s)</b>	<b>year</b>	<b>perspective</b>	<b>publication</b>
<b>Maslow</b>	1970, USA	This work contributes to concept delimitation on spiritual values, sorting out spirituality from religion and mystical concepts.	Religions, values, and peak experiences. <i>New York: Viking Press.</i>
<b>Lee &amp; Zemke</b>	1993, USA	The author distinguishes spirituality from religion, reinforcing its importance for organizations.	The search for spirit in the workplace. <i>Training</i>
<b>McCormik</b>	1994, USA	The author made a literature review and explores spirituality concept in the management context. He explores the work concepts as a way of meditation, compassion and right way of life.	Spirituality and management. <i>Journal of Managerial Psychology</i>
<b>Burack</b>	1999, USA	The author has made a literature review which denominates this new topic as “new work life and organizational culture” with positive impact on organizations profitability and stability.	Spirituality in the workplace. <i>Journal of Organizational Change Manageme</i>
<b>Butts</b>	1999, USA	The author refers as “psychospiritual technologies” such as prayer and meditation as	Spirituality at work: An overview. <i>Journal of Organizational Change</i>

		ways to improve the workers well-being and creativity and have positive impacts on organizations' success.	<i>Management</i>
<b>Cavanagh</b>	1999, USA	In this work the author shows the reasons that justify the importance of spirituality on people's work life.	Spirituality for managers: Context and critique. <i>Journal of Organizational Change Management</i>
<b>Freshman</b>	1999, USA	The author has made a qualitative study and concludes that SW has several definitions. He presents a framework for future studies.	An exploratory analysis of definitions and applications of spirituality in the workplace. <i>Journal of Organizational Change Management</i>
<b>Tischler</b>	1999, EUA	The author has made a literature review and found on Maslow's Theory of Needs the theory that justifies this new trend.	The growing interest in spirituality in business: A long-term socio-economic explanation. <i>Journal of Organizational Change Management,</i>
<b>Ashmos &amp; Duchon</b>	2000, USA	The authors have made a quantitative study developing scales that get it on SW concept. They make a clear distinction between religion and spirituality.	Spirituality at work: A conceptualization and measure. <i>Journal of Management Inquiry.</i>
<b>Benefiel</b>	2003, USA	The author has made a literature review and an appeal that new research with scientific character should be prepared.	Mapping the terrain of spirituality in organizations research.  <i>Journal of Organizational Change Management.</i>



<b>Fry</b>	2003, USA	The author focuses on spiritual leadership theory which is inclusive (ethical values and religion). This leadership model embodies vision and altruistic love, SW and spiritual survival.	Toward a theory of spiritual leadership.  <i>Leadership Quarterly</i>
<b>Fry et al.</b>	2005, USA	The spiritual leadership theory includes values, attitudes and behaviors for the leader motivates intrinsically themselves and others, in order to provide a spiritual survival sensation, in other words, they try the meaning of life and have that sensation to make a difference and feel as if they are understood and considered.	Spiritual leadership and army transformation: Theory, measurement, and establishing a baseline.  <i>The leadership Quarterly</i>
<b>Milliman et al.</b>	2003, USA	The authors have made an empiric study with the purpose to establish the relationship between SW (Ashtoms and Duchon, 2000) and attitudinal variables.  All hypotheses have been supported.	Workplace spirituality and employee work attitudes: An exploratory empirical assessment,  Journal of Organizational Change Management
<b>Ashar &amp; Lane-Maher</b>	2004, USA	The authors establish a connection between spirituality and individual success	Success and spirituality in the new business paradigm.  <i>Journal of Management</i>

		(balance; well-being; connection)	<i>Inquiry</i>
<b>Jurkiewicz &amp; Giacalone</b>	2004, USA	The authors develop a conceptual model through which SW becomes measurable.	A Values Framework for Measuring the Impact of Workplace Spirituality. <i>Journal of Business Ethics</i>
<b>Kinjerski &amp; Skrypnek</b>	2004, Canada	The authors develop an exploratory study to define “spirit at work”.  They find the following definition: “spirit at work” involves physical and affection components and the belief that work is a contribution, the human connection is something that transcends individual, in the search of perfection and transcendence.	Defining spirit at work: Finding common ground. <i>Journal of Organizational Change Management</i>
<b>Duchon &amp; Plowman</b>	2005, USA	The authors have made an exploratory study to realize the relationship established between “ <i>spirit at work</i> ” and “ <i>work unit performance</i> ” in a friendly environment. They defend that the dimensions developed by the authors Ashmos and Duchon (2000) have a place in management field.	Nurturing the spirit at work: Impact on work unit performance. <i>Leadership Quarterly</i>
<b>Marques et al.</b>	2005, USA,	A conceptual model is developed to serve as	Spirituality in the workplace: developing an integral model

	India	base in future quantitative studies in metric conceptions which could measure SW.	and a comprehensive definition. The Journal of American Academy of Business
<b>Sheep</b>	2006, USA	The author has made a literature review and proposes a new theoretical conceptualization for future studies.	Nurturing the whole person: The ethics of workplace spirituality in a society of organizations. <i>Journal of business ethics</i>
<b>Tischler et al.</b>	2007, USA, France	A theoretical study is based in literature review developing a conceptual model for future studies.	A model for researching about spirituality in organizations. Business Renaissance Quarterly
<b>Gotsis &amp; Kortezi</b>	2008, Greece	The author has made a large literature review and defend that SW offers an impetus for the big and deep organizational changes in the century XXI.	Philosophical foundations of workplace spirituality: A critical approach. <i>Journal of Business Ethic</i>
<b>Pawar</b>	2009, Índia	The author defines and develops a conceptual model. “A comprehensive model of workplace spirituality facilitation”, based on literature review and suggests that leadership may adopt a set of practices to contribute to SW, inspiring in the	Workplace Spirituality Facilitation: A Comprehensive Model. <i>Journal of Business Ethic.</i>

---

		company Southwest Airlines case.	
<b>Karakas</b>	2010, Canada	<p>The author has made an exhaustive conceptual and instrumental study analyzing 140 articles about SW.</p> <p>The author defines three conceptual perspectives, which can benefit workers and organizations.</p>	Spirituality and performance in organizations: A literature review. <i>Journal of Business Ethics</i>
<b>Brophy</b>	2015, USA	The author stated that with “the spiritual imagination” managers can facilitate loyalty between the convergent values and the actions, policies, and culture of a company.	Spirituality incorporated: Including convergent spiritual values in business. <i>Journal of Business Ethics</i>
<b>Daniel</b>	2015, USA	Based on Ashmos and Duchon’s metrics (2000) the author has made a quantitative study, to know the SW impact on stress.	Workplace spirituality and stress: Evidence from Mexico and US. <i>Management Research Review</i>
<b>Mahakud &amp; Gangai</b>	2015, India	<p>The authors develop a case study applied on government.</p> <p>The definition of SW is based on literature review and concluded that there is a positive relationship between SW and organizational commitment.</p>	The influence of workplace spirituality on organisational commitment among public sector employees. <i>Journal of Organisation and Human Behaviour</i>

---

<b>Paul et al.</b>	2015, Índia	<p>The authors have made a literature review to understand the role of SW on work-life balance among women executives.</p> <p>The authors have made a clear distinction between religion and spirituality. They stated: “Spirituality is a relationship with self, which cannot be dictated by any organized religion. Employing Spirituality within the workplace is an opportunity to recognize our power and to understand the process involved in exchanging our energy with others” (p.273)</p>	<p>Workplace Spirituality and Work-Life Balance: A Study among Women Executives of IT Sector Companies</p> <p>International Journal of Management and Behavioral Sciences</p>
<b>Roof</b>	2015, USA	<p>The author has made a study which establishes a causal relationship between individual spirituality and work involvement. He suggests that in future studies practical analysis may consider leadership to promote spirituality and increase all individual and organizational benefits.</p>	<p>The association of individual spirituality on employee engagement: The spirit at work. <i>Journal of Business Ethics</i></p>
<b>Gatling et al.</b>	2016, USA	<p>The authors have made a quantitative study defining causal</p>	<p>The relationship between workplace spirituality and hospitality supervisors’</p>

relationship between SW and organizational engagement.	work attitudes: A self-determination theory perspective. <i>International Journal of Contemporary Hospitality Management</i>
--	--

Maslow (1970) created the roots and produced the seminal work that showed the importance and gave rise to the SW concept on the organizational field. Ashmos and Duchon (2000) settled the basic boundaries of the concept and its measurement, giving place to the most significant developments in this field.

#### **2.4 Spirituality at Work – Conceptualization**

The values underpinning SW should be considered by business people, managers and researchers, as far as they try to match the citizens’ needs (Butts, 1999; Cunha et al., 2006), the human dignity and the organizational results (Wright & Cropanzano, 2000). In other words, organizations should look at people not only as human resources but as whole human beings, including their spiritual needs (Cunha et al., 2006), meeting Abraham H. Maslow’s appeals (1970) helping workers “become a spiritual being on a human journey” (O’Connor & Yballe 2007: 747). Jurkiewicz and Giacalone (2004) developed a set of values (Table 2) whose intensity in terms of application in organizations shows the presence and absence of SW.

**Table 2 - SW Values**

(+)		(-)
<p><b>The workers' feelings have place.</b></p> <p><b>Workers' happiness and prosperity is taken into account.</b></p>	<p>benevolence</p>	<p>The workers' feelings are not important</p>
<p><b>Focus on long-term concerning about generativity. The future generations are taken into account.</b></p>	<p>generativity</p>	<p>There is focus on short-term and the future generation has no importance</p>
<p><b>Practices and policies that protect dignity and value of each worker. There is one opportunity for personal growth in line with organizational objectives</b></p>	<p>humanism</p>	<p>No kindness notion, unconcern about workers' needs as human beings</p>
<p><b>Don't exist forced power exercise, but an ethical conduct, sincerity and honesty.</b></p>	<p>integrity</p>	<p>Propitious environment to easily deceive and manipulation</p>
<p><b>There is an equal treatment among workers</b></p>	<p>justice</p>	<p>Dishonesty and judgment trends</p>
<p><b>Responsibility notion</b></p>	<p>mutuality</p>	<p>There is a separation among workers, working as independent agents</p>
<p><b>Freedom of thought, open-minded environment.</b></p>	<p>receptivity</p>	<p>What matters is doing well what it is necessary to do, don't exist freedom for creativity or innovation</p>
<p><b>Concern to show</b></p>	<p>respect</p>	<p>There is an</p>

<b>consideration and esteem for workers</b>		environment where exists non-civility, disregarding workers.
<b>Independent of the difficulties, workers wish to do well even in a difficult context</b>	responsibility	If they were forced, the workers wish to do well even with obstacles.
<b>Being reliable, is a hierarchy requirement.</b>	trust	Character, trust and keep all obligations, are criteria for personal gains

Barley and Kunda (1992) claimed that the management theories have an ideological foundation, as follows: Industrial Betterment, Scientific Management, Human Relations, Systems Rationalism, Organizational Culture. The problems with people in the labor context coming from Taylorism-Fordism were replaced by Human Resources (Mayo, 1945). In this ideology we may find some SW variables: feelings of belonging, recognition and search for life purpose (Cunha et al, 2006). The theory comes to the individual level according to Giacalone and Jurkiewicz (2003: 13):

A framework of organizational values evidenced in the culture that promotes employees' experience of transcendence through the work progress, facilitating their sense of being connected to others in a way that provides feelings of completeness and joy.

At the same time, there has been a huge work on scale development to assess SW. Fornaciari et al. (2005) analyzed 29 empirical studies for the period 1996-2004 about religion, spirituality and work (RSW) and drew to the following conclusions:

- 86% of the studies describe new scales creation based on deductive method, according to an existent theory.
- 45% of the studies applied factorial analysis to evaluate new constructs, and less than 25% reported factor retention criteria (example, *eigenvalues*)
- 45% of the studies have performed internal consistency of items (coefficient alpha)
- 38% of the studies reported information about scales validity.



From the 29 articles analyzed, five used the words spirituality, meaningful work and spiritual values in the titles. In the SRW domain, 112 articles were published between 2001 and 2004, whereas between 1996 and 2000, only 63 were published. This growing interest has been held (Daniel 2015). Apparently, SW knowledge and meaning help to understand work-life balance (Gotsis & Kortezi, 2008) as a self-actualization need.

Karakas (2010) has made an extensive analysis of 140 articles published about this topic and found more than 70 different definitions about spirituality, revealing the need to develop new studies that contribute to an academic concept that could be more widely accepted. Furthermore, several different expressions are used in different studies with common meanings like: workplace spirituality, spirituality at work, spirituality in the workplace, spirit at work (Gotsis & Kortezi, 2008).

There are two dominant approaches in the academic literature, one concerning on the SW conceptualization and another on SW impacts on people and organizations. Gotsis and Kortezi (2008) identified the following exploratory approaches: conceptual framework based on religion; studies based on philosophical traditions and scientific paradigm; Maslow's theory of needs and psychoanalytic perspective. Another instrumentalist approach divides investigation between worker level and organization level (Table 3):

**Table 3 – SW approaches**

<b>Analysis Level</b>
-----------------------

**Exploratory**

<b>Analysis level</b>	<b>Studies</b>
Conceptualization based on religion	Hindu Approach (Sharma, 2004) Muslin Approach (Bouma et al., 2003) Christian Approach (Herman, 2004)
Philosophical traditions and scientific paradigm	Phylosophic Perspective (Pava, 2004)
Maslow's Theory of Needs	Theoretical Needs Model (Tischler, 1999)
Analysis psychoanalytic secular	Customization Approach (Driver, 2005)

**Instrumentalist**

<b>Analysis level</b>	<b>Studies</b>
Spiritual place organizational-based	There is a link between SW and: <ul style="list-style-type: none"> <li>- organizational objectives (Kinjerski &amp; Skrypnek, 2004)</li> <li>- trust and honesty increase (Brown, 2003)</li> <li>- profits increase (Benefiel, 2003)</li> <li>- Increase the organizational productivity levels (Fry, 2003)</li> <li>- reduce absenteeism (Giacalone &amp; Jurkiewicz, 2003)</li> </ul>
Spiritual place individual-based	There is a link between SW and: <ul style="list-style-type: none"> <li>- increase of the individual creativity (Krishnakumar &amp; Neck, 2002)</li> <li>- increase of the individual success at work (Tischler et al., 2002)</li> <li>- the experience of feeling authenticity (Driver, 2005)</li> <li>- well-being, peace and serenity (Giacalone &amp; Jurkiewicz, 2003)</li> </ul>

The SW concept adopted in this investigation includes three perspectives, identified in the work of Karakas (2010):

- ✓ Human Resources Perspective: worrying about quality of life and well-being.
- ✓ Philosophical Perspective: to develop the notions of meaning and purpose in work life.
- ✓ Interpersonal Perspective: Strong connection between people and sense of community.

SW is the recognition that workers perform work with meaning and purpose, for them and society as a whole, including a strong sense of enjoyment at work. Workers find an opportunity at work to express many aspects of one's being, not just the ability to perform physical or intellectual tasks, and feel work as a source of spiritual growth and connection with coworkers. In the organizational level SW is the link between personal values and the organization's mission and purpose, and the source of employee's emotional balance and inner peace. When organizations introduce SW, it means that they take care of both mind and spirit of their employees (Ashmos & Duchon, 2000), finding a more holistic picture of human (O'Connor & Yballe, 2008), returning to Maslow's (1970) theory of needs, in other words, self-actualization implies the valence of the individual mind and spirit involved in the work component.

Ashmos and Duchon (2000) created the boundaries for a better definition of the SW concept, establishing the four foundational dimensions: meaningful work involves a deep sense of meaning and purpose in one's work for workers and society as a whole, including a sense of contribution to the community and sense of enjoyment at work; opportunities for inner life is about finding an opportunity at work to express many aspects of one's being, not just the ability to perform physical or intellectual tasks; sense of community is described as the feeling of connectedness that workers develop with other coworkers (Daniel, 2015); alignment with an organization's values is about the link between personal and the organizational values, and the dimension captures the workers' perceptions and attitudes toward the values of their organizations.

SW is presented and discussed as a new form organizational culture which has the capacity to improve employee attitudes and make a substantial contribution to organizational stability and growth. There is a clear link between success and spirituality in the new global economic order (Asher & Lane-Maher, 2004).

## 2.5 Spirituality at Work – Impacts

SW should influence the ability of individual to overcome obstacles, improving both efficiency and effectiveness. There is a positive relationship between SW and job resourcefulness, and on the other hand, job resourcefulness promote individual performance: a job-resourceful employee is able to accomplish their job-related tasks despite the presence of circumstances that limit the ability to successfully perform them (Licata et al., 2003).

SW showed a positive impact on organizational commitment (Ashmos & Duchon; Rego & Cunha, 2008; Joelle & Cunha, 2017). When workers perceive the presence of SW, they tend to feel more committed and tend to make a greater effort at work. As expected, job resourcefulness and affective commitment, are both mediating variables between SW, job performance and individual productivity (Joelle & Coelho, 2017).

The presence of a spiritual culture, include both spiritual practices (SPW) and SW, and introducing a new perspective on this topic: management art. The practice of management can be seen as an artistic activity, as the artist-leaders do when they are producing an art form (Atkinson, 2007). The implementation of spiritual programs at work can boost results at the individual level as self-efficacy and increase worker`s organizational commitment (Trott III, 1996; Daniel, 2015).

SW culture is related with several workers` attitudes like intent to quit (negative correlation), job involvement and work satisfaction (Milliman et al., 2003), and can help to prevent stress (Daniel, 2015). When workers experience or express their personal spirituality at work, this means that the workers are associated with the effective use of both problem-focused and emotion-focused coping strategies, so they overcome stressful situations successfully (Tombaugh et al., 2011).

Both Maslow (1970) and Neal (1997) have taken a deep interest in leadership in all the different dimensions (O`Connor & Yballe, 2007), including spirituality and meaning. O`Connor & Yballe (2007) showed that the understanding of spirituality is fundamental to find a human nature in the workplace and in the leadership, as a part of a whole society.

## **2.6 Spirituality at Work – Success Cases**

In the business world there are evidences of the interests in including SW on the organizations culture and human resource practices, that allows to create a “soul” by definition. There are identified in the academic literature (Karakas, 2010), some important brands that included SW in their daily activities: Coca-Cola, Intel, Boeing, Sears. Some of the practices mentioned by these authors that can be found in the organizations universe include: Bible reading and Koran, prayer groups, faith dialogue groups, thought groups, meditation, leadership programs, yoga and life balance for workers well-being.

In a SW approach, the practice of meditation is widely used and may reduce stress (Goyal et al., 2014; Shinde & Fleck, 2015) as shown by the authors Schneider et al. (2005) as an effective relaxation practice. The SW culture seems to exist with the respect of diversity between cultures and the employees’ individual values, and may be boosted using employee development programs, employee participation in decision making, impartial behavior from senior employees, and healthy employer-employee relations (Gupta et al., 2014). Other practices as the health programs, hygiene and food education, when introduced within organizations, promote a sense of community (SW dimension) reducing stress (Bishara & Schipani, 2010), one of the SW dimensions.

The contributions that some business people left in the world, whose brands have survived the biggest economic crises, are referred in academic literature as a result of the spirituality in a professional context (Rego et al., 2007; Karakas, 2010): James Burke on Johnson & Johnson; Robert Haas on Levi Strauss; and Anita Roddick on Body Shop are examples of a big commitment to spirituality.

## **2.7 Conclusion**

The chapter two introduces the drivers of this investigation, aiming to justify the dialogue between SW and management science. These drivers are the roots which provide the inclusion of spirituality in the management discourse as a new perspective to run organizations. However, the instrumental justification for spirituality at work is insufficient (Brophy, 2015) and empirical studies are need as a way to understand the

relationship between SW, attitudes and performance. Consequently, this chapter introduces the conceptual framework that supports the empirical investigation proposed.

## **CHAPTER III – METHODOLOGY**

### **3.1 Introduction**

This chapter describes the guidelines followed in the development of this investigation to achieve the proposed objectives, as well as the existing explanations for the phenomenon to be studied SW attending the conceptual complexity. The choice and definition of the research methodology was done in accordance with both objectives and issues research.

To test the three proposed research models as well as research hypothesis, a cross sectional study was developed, using data collected based on a structured questionnaire from a sample of Portuguese workers. Structural Equations Modeling was used to test de proposed hypotheses. Three partial models were on the basis of three different papers already submitted or published. Consequently, this chapter is organized as follows:

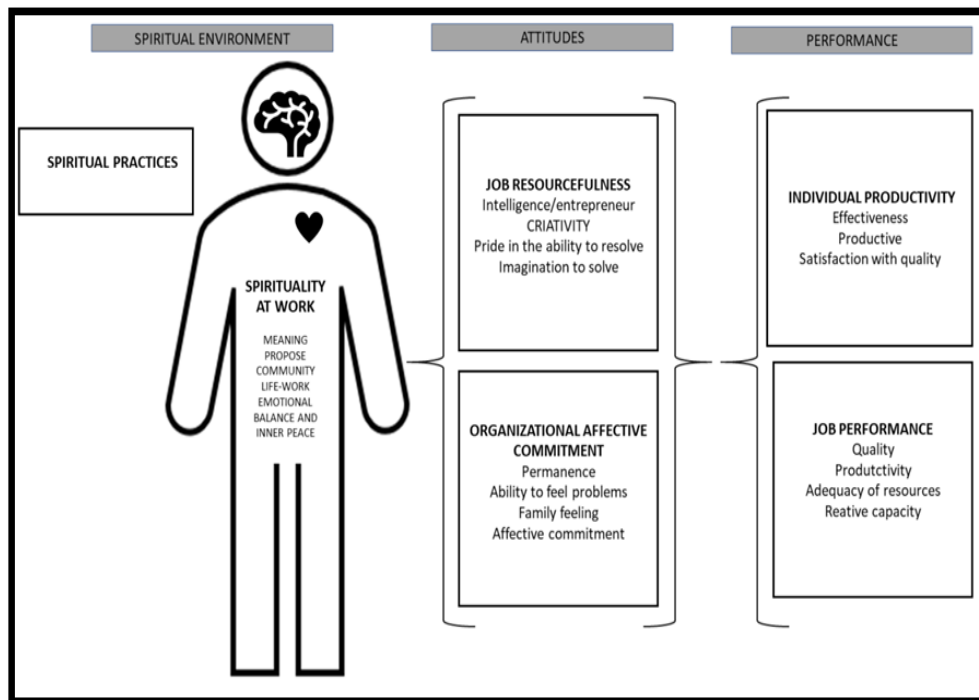
- Part I: introductory note, conceptual model and objectives, description of metrics and methodology.
- Part II: The investigation strategy: The papers developed.

### **3.2 The global conceptual model and research objectives**

The model showed in the next figure (Figure 1) represents the chain of effects between SW and the work related outcomes. The model expresses a set of hypotheses that are going to be tested on a quantitative approach.

This model was developed, tested and validated thought three different empirical sub models, giving place to three papers representing the main body (Part II) of the whole research work.

**Figure 1 – The global conceptual model**



The previous figure represents the fundamental concepts of this investigation, and expresses the development of the causal relationship, on other words, construction of research hypothesis. The purpose of this investigation is to contribute to the SW conceptualization and analysis of impacts. The proposed objectives are:

- The conceptualization and measurement of SW.
- Find the most consistent and explanatory SW measurement – adding a new dimension to traditional measurement and comparing consistency and explanatory capacity (with or without the new dimension);
- Know the impact of SW on attitudes and individual performance attending the presence of mediating attitudinal variables (job resourcefulness and organizational affective commitment) and moderating variables (organizational affective commitment)
- Identify a set of practices that may promote the presence of SW and contribute in a positive way to workers’ attitudes and behavior.

The answer to the set of relationships proposed in this model was equated from the partial and cumulative results that were tested in the three partial and complementary models corresponding to the three papers produced.



### **3.2.1 The research instrument and data collection**

In the statistical work, the analysis of the problem is divided into the following phases: definition of the objective (questions for which answers are searched), design of a procedure for sample selection, data collection, data analysis and inferences of conclusions about the population.

To test the proposed investigation model and the research hypotheses, data was collected based on a structured questionnaire, applied in Portugal. Questionnaires were sent out to individual workers and processed using the Internet. In total, 500 workers were emailed and 273 completed questionnaires were returned. The sample population in this study was made up of female and male individuals within the Portuguese territory, of various age groups and different levels of schooling and periods worked. No prerequisites were necessary to participate in this study. The technique used in this questionnaire was the snowball technique. Snowball sampling has a non-probabilistic nature.

Gupta et al. (2014) used a sample comprising workers from insurance companies and Komala and Ganesh (2007) used a sample based on healthcare workers. Rego and Cunha (2008) based their study on a cross-sector sample, Pawar (2014) used a sample of MBA participants to conduct his research and Daniel (2015) used a mixed sample of students and cross-sector workers. Accordingly, we adopted this sampling technique, a non-probabilistic one, with characteristics that may give at least a representability similar to other investigations. It was adopted a sample of cross-sector workers and no individual sector provided more than 10% of responses. The workers had different occupations (operator, technical expert, department director...). No gender differences were found in relation to spirituality variables or even behavior variables.

A closed answer questionnaire was developed, using the platform Google Docs as it seems to be an adequate and efficient instrument to gather information. The link was emailed to the potential respondents identified in a list of contacts using the referred snowball technique, departing from the professional list of contacts of the author. A network of contacts was defined that covered the largest possible number of cities considering continental Portugal, and both islands Madeira and Azores. The instrument was subject of a pretest, as recommended by Malhotra (2004) and was applied to 20 workers in order to assess its clarity and ambiguity.

After having produced its final version, the questionnaire was hosted in a web platform assuring the ease of responding and that all the questions were answered which means that there were no missing data.

Within this investigation, the questionnaire asks the respondents to make their characterization at the individual and organizational levels, to allow an identification of the sample and to assure results consistency, and a set of questions to measure the variables in the model, based on metrics already developed and tested on past investigation. Two new metrics were developed to add a new dimension to SW and to assess the level of spiritual practices adopted by the organization.

The set of demographic variables considered were as follows:

- at the individual level: age, gender, level of education, occupation.
- at the organizational level: sector industry, organization dimension.

The questionnaire includes a brief presentation to clarify the purpose of the investigation, as well as the author's contacts for any clarifications requested. Some emails were received from several respondents showing interest in the results of the present study.

### **3.2.2 Sample description**

The questionnaire was sent via email to 500 employees by snowball sampling proceeding and 273 answered, representing an answer rate of 54, 6 %. To ensure that the sample characteristics are not too “nested”, the diversity of the composition of the sample was taken into account in relation to gender, age, qualifications, functions, industry, worker tenure and size of the organization. The sample characterization is presented on table 4.

The respondents who are part of this sample have a mean age of 34.5 years and are mostly female (57%). Workers tenure shows an average of 7.2 years. More than half of the subjects included in the sample detain a university degree (68%) and, in terms of occupation, 64.1% are in management positions. The most representative sector of

activity in the sample are services, and the largest organizations (over 250 employees) are the ones that are most represented in this research.

**Table 4 - Sample characterization**

Gender	Male	43%
	Female	57%
Age	Average	34,5 years
Worker tenure	Average	7,2 years
Level of education	Primary school education only	0%
	Second and Third level of school	1%
	High School	31%
	University degree	43%
	Master's or PhD degree	25%
Position	CEO/Manager	9,9%
	Chief Executive	7,7%
	Supervisor	16,1%
	Office manager	19%
	Operators	11,4%
	Other positions	35,9%
Staff	1-10	18,3%
	11-30	18,3%
	31-50	11,7%
	51-100	9,9%
	101-250	12,1%
	≥ 251	29,7%
Sector of activity	Commerce	
	Industry	8,4%
	services	19,8%
		71,8%

### **3.2.3 Measures**

The metrics used in the questionnaire, for the data collection, were selected taking into account both the literature review and the gaps in several areas. Most of the variables used in this study are operationalized according to scales described in the literature. A new variable is added to the SW concept and a new measure was adopted to assess the level of spirituality practices adopted by the company. The measures were based on a five-point Likert scale from 1 (“strongly disagree”) to 5 (“strongly agree”).

#### **Spirituality at work**

In this framework SW is measured based on 22 questions sub-divided into the following five dimensions: sense of connection with community (Ashmos & Duchon, 2000; Milliman et al., 2003; Daniel 2015), alignment with organizational values (Ashmos & Duchon, 2000; Milliman et al., 2003; Rego et al.,2007), meaning and propose at work (Ashmos & Duchon, 2000; Milliman et al., 2003; Rego & Cunha, 2008; Daniel, 2015), opportunities for inner life (Ashmos & Duchon, 2000; Daniel, 2015) and emotional balance and inner peace, developed for this study (the scale was found to have excellent psychometric properties).

Sense of community was measured based on the traditional scales of the SW conceptualization (Ashmos & Duchon, 2000; Daniel, 2015; Milliman et al., 2003) and they are:

- The people of my group/team feel as if part of a family.
- My group/team increases a community spirit creation.
- I believe that the people of my group/team support each other.
- I believe that other members of my group/team care about each other.
- I feel that the people in my group / team are linked together for a common purpose.

Alignment with organizational values was measured using the following items (Ashmos & Duchon, 2000; Milliman et al., 2003; Rego et al., 2007):

- Feel well within the values that are predominant in my organization
- The people feel well about the future of the organization.
- My organization respects my inner life.
- My organization helps me to live in peace with myself.
- The leaders of my organizations worry about being useful for the society.

Opportunities for inner life was measured using the following items (Ashmos & Duchon, 2000; Daniel, 2015):

- My spiritual values are valued in my workplace.
- In my workplace there is place for spirituality.
- In my workplace I can nourish my spirituality.

Meaningful work was measured using the following items (Ashmos & Duchon, 2000; Milliman et al., 2003; Daniel, 2015; Rego & Cunha, 2008):

- The work I perform is related to what I consider important for my life.
- There is a connection between my work and the benefits for the society as a whole.
- When I work I feel useful for the society.

Emotional balance and inner peace was measured using items developed and tested in this investigation:

- My work helps me to feel in peace with myself.
- My work helps me to find a balance in my life.
- My work helps me to achieve my personal desires.
- My work helps me in my personal fulfillment.
- My work helps me to be happier.
- My work helps me feeling confident even when in trouble.

Spiritual practices were measured using items developed and tested in this investigation:

- In my organization, we practice physical activities.
- In my organization, we practice relaxation.
- In my organization, we practice meditation.
- In my organization, we practice reiki.
- In my organization, we practice health, hygiene and food education programs.
- In my organization, we practice yoga.
- In my organization, we practice pilates.
- In my organization, we practice dance.
- In my organization, there are policies that support diversity management (personality, ethnic, religion, culture differences)
- In my organization, music moments are provided.
- In my organization, we practice other kinds of activities. Indicate which.

Organizational affective commitment was measured using the following items (Meyer et al., 1993; Moore & Casper, 2006):

- I would like to spend the rest of my career in this organization.
- I feel that these organization's problems belong to me.
- I feel that "I am part of a family" in this organization.
- I don't feel emotionally connected in this organization.
- My organization has a great personal value to me.
- I don't feel a strong sense of belonging to this organization.

Job resourcefulness was measured using the following items (Licata et al., 2003) are:

- I am very intelligent and entrepreneur in my work.
- I am a very creative person to find ways to carry out my tasks.
- I am proud of getting success even when there are difficulties.
- I am imaginative when it is necessary to surpass obstacles in my work.

Individual productivity was measured using the following items (Staples et al., 1999; Rego et al., 2007):

- I am an efficient employee.
- My colleagues see me as a very productive employee.
- I am satisfied with the quality of my work.
- My manager sees me as an efficient employee.

Individual performance was measured using the following items (Mott, 1971; Vinit et al., 2005; Bamel et al., 2011) are:

- Which of the following options best describe the way your supervisor classified you in the last formal performance evaluation
- What is your productivity level in terms of quantity if compared to your colleagues' productivity level
- What is the quality of your work if you can compare to your colleagues
- What is the efficiency level of your work in comparison to your colleagues, in other words, you use adequately the available resources.
- In comparison to your colleagues how do you evaluate your capacity to prevent or minimize potential problems before they might occur
- In comparison to your colleagues what is your effectiveness to adapt to work changes
- How fast are you to adapt to work changes comparing to your colleagues
- How do you classify yourself to your work changes comparing to your colleagues
- How do you react in an emergency situation (crisis, short-term, unexpected personal issues, resource distribution, problems) comparing to your colleagues
- How do you evaluate your answer quality in emergency situations comparing to your colleagues



### **3.3. Statistical Approach**

The database collected was submitted to a debugging process. Exploratory factor analysis (EFA) is used with the purpose to determine how, and to what extent, the observed items are associated with their underlying factors (Byrne, 2010), testing unidimensionality. The EFA allows obtaining solutions according to the literature, through the dimensionality of each variable under analysis. The Cronbach alpha coefficient was used to measure the internal consistency of the measures under analysis.

Confirmatory factor analysis, will allow the analysis of the psychometric characteristics of the different measures used.

#### **3.3.1 Structural equation modeling (SEM)**

Confirmatory factor analysis was used to assess the psychometric properties of the scales and the measurement model fit, using SPSS AMOS 21.0, once CFA is appropriate when an underlying latent factor structure is assumed.

CFA focuses on the relationships between the indicators and latent variables and structural equation models (SEM) includes structural or causal paths between latent variables. CFA may be a stand-alone analysis or a component or preliminary step of a SEM (Harrington, 2009), on a two steps approach: CFA and path analysis. SEM is a covariance structure analysis technique (Hair et al., 2014), to explain the covariation among the observed variables.

The first goal of SEM analysis is to provide support to research hypotheses based on observed means, variances and covariance of a set of variables. SEM is often the best choice for social sciences, given the nature of their measures and data (Bowen & Guo, 2011). For social sciences, SEM has been seen as an approach to data analysis that combines simultaneous linear regression and factor analysis (Ecob & Cuttance, 1987). This statistical technique builds and tests statistical causal models, and starts with a hypothesis development based on a conceptual model. Among its advantages is to model constructs as latent variables, that are estimated in the model from observed variables and non-observed and measured directly, named the latent variables.

CFA can be used for different purposes, as development of new measures, evaluation of the psychometric properties of new and existing measures. This thesis used this methodology to develop and evaluate new measures (emotional balance and inner peace, spiritual practices at work) and evaluate the measures existing.

To examine the construct validity, we defined specific hypotheses and tested, about how any measure is related to other measures based on literature review, attending that researcher can postulate relations between the observed variables and the underlying factor structure (Byrne, 2010).

The modeling strategy may adopt three different alternatives in the application of structural equation modeling: confirmatory strategy, competing model strategy and model development strategy (Hair et al., 2014). In this present investigation, both confirmatory modeling strategy and model development strategy were considered. In the model development strategy, the literature review provides a starting point for the design of the conceptual model (Hair et al., 2014), and the confirmatory strategy is based on the specification of a set of relationships and its assessment on how well fits the data.

### **3.3.2 Specification, identification and estimation of the conceptual model**

The application of the SEM begins with the specification of the model to be estimated, in order to provide a significant and parsimonious explanation to the data (MacCallum, 1995). The specification of the conceptual model, requires that the researcher formulate a set of directional and non-directional relations between the variables which are being analyzed. So when a model that fits well with the data and give an interpretable solution, the researcher must conclude that this particular model is the plausible solution (Ibid., 1995).

It should be noted that in this thesis the specification of the second order measurement model has also been developed for the exogenous variable SW. The higher order construct SW, was postulated to explain the covariance of the five first order factors, corresponding to the SW five dimensions. So, SW it is a second order construct, it doesn't have its own set of measurement indicators, it is measured indirectly through the indicators of the first order factors.

Working with SEM identification is an important and complex step (Bollen, 1989; Byrne, 1998; Kline, 2011). The identification involves the analysis about the conditions to obtain a unique set of parameters that fit well with the data, associated with the transposition of the variance-covariance matrix of observed variables into the model parameters under study (Byrne, 2010). When a unique solution is found the model is considered to be just-identified (the number of data variances and covariances equals the number of parameters to be estimated). When the number of estimate parameters is less than the number of data variances and covariances observed (the sample moments), the model is considered overidentified. When there are more parameters to be estimated than sample moments, the model cannot be identified, so cannot be evaluated empirically (Marôco, 2010).

One of the necessary but not sufficient conditions to obtain a single solution is the t-rule, the following equation for degrees of freedom also referred to as t-rule shall be  $\geq$  zero:

$$df = v(v+1)/2 - t$$

$$df = \text{degrees of freedom}$$

$$v = \text{number of observed variables for the latent constructs } t \\ = \text{number of estimate parameters}$$

The models that violate this necessary condition for a particular model to be identified, are not identified, since there is not enough information in the sample to obtain a solution of estimable parameters, which leads to the under-identification of the model.

The following aspects can help the research to determine the identification status of the model, as well as help to avoid, recognize and solve identification problems:

- The conditions of “order and rank”, are both the two most basic rules of identification
- The conditions of “order and rank”, due to the difficulty in establishing the condition of classification, it is recommended to the rule “three indicator rule”: this rule happens when all the factors included in the model have at least three significant indicators.

- In the CFA with second order factors, which do not have direct effects on the observed variables, the criterion of identification of the model is based on the rule of at least three first order factors.
- The rule "2+ emitted path rule" (Bollen & Davis, 2009) is a necessary condition for identifying any model with latent variables, and assumes that each latent variable in the model emits at least two relations.
- When the second-order construct consists of two first-order factors, it is needed to fix its direct effects on the first-order factors (Kline, 2005).

After the specification of the model and identifying the parameters, the following step is to obtain estimates for each parameter based on the observed data. The estimation of the parameters is done through an iterative method that involves a series of attempts and comparisons between the covariance matrix,  $\Sigma(\Theta)^5$  and the covariance matrix of the sample,  $S$  (Hoyle, 1995). The methods that can be used to obtain model parameter estimates are: unweighted least squares, generalized least squares, maximum likelihood and asymptotic distribution free. The methods most commonly used by researchers are generalized least squares and maximum likelihood, that is the default method found in most of the softwares available for application of SEM (e.g. AMOS or LISREL) (Baumgartner & Homburg, 1996; Kline 2005). In the present investigation the maximum likelihood estimation method was used because it may provide more efficient and unbiased estimates under the assumption of normality and sufficient sample size (Byrne, 2010; Marôco, 2010; Kline, 2011).

The maximum likelihood method estimator has the following properties: the observed variables follow asymptotically a normal multivariate distribution; the adjustment function has an invariant and free scale; the estimates obtained through the adjustment function are consistent, unbiased and asymptotically efficient estimates. This method is based on assumptions (Kline, 2011): independence of the scores because the data are collected from distinct cases or subjects; independence of the exogenous variables and error terms; multivariate normality and correct specification of the model.

With the SEM applications, some difficulties may arise in obtaining the estimates that converge to the desired solution, but even if obtained this may not be

---

<sup>5</sup> matrix of variances and covariances implied by the model specification

optimal, since these estimated parameters are impossible to interpret for the population. The underlying causes for this are: model specification errors, sample size, model complexity, data imputation errors, outliers, undersized models and inadequate initial values (Rindskopf, 1984; Bentler & Chou, 1987; Anderson & Gerbing, 1988; Chen et al., 2001). In relation to the sample size, a sample with 150 or more observations is important in order to obtain estimates for the parameters that may be useful, to minimize error.

### **3.3.3 Construct validity and reliability**

For the conceptual model to be useful and appropriate, it must be parsimonious and comprehensible. The evaluation of the model adjustment quality should be centered on the estimated parameters, the measurement model and the complete model.

For the acceptance construct validity, the measures of a construct must be useful for making observable predictions derived from theoretical propositions, i.e., the measures must show nomological validity (Peter 1981; Hamann et al., 2013).

According to Byrne (1998, 2010), the initial researcher's analysis should focus on: viability of the estimated parameter, adequacy of the standard deviation, statistical significance of each parameter estimated. This initial work allows verifying if the coefficients have the signal and the magnitude that is expected from the literature review.

Construct validity exists when the indicators theoretically reflect the latent construct to be measured, and involves face and content validity, convergent and discriminant validity (Garver & Mentzer, 1999; Cozby & Bates, 2012). On the other hand, construct validity refers to the vertical correspondence between a construct which is an unobservable concept and the proposed measure at an operational level (Peter, 1981).

The convergent validity is related to the degree to which the items are reflecting a given construct and measures the degree of association between two measures of the same concept, which implies the existence of a strong and statistically significant association between the different measures of the same concept (Bollen, 1989).

The discriminant validity (or divergent validity) demonstrates that a given construct is different from other constructs that might be present in the study (Goodwin & Goodwin, 2012). The discriminant validity can be analyzed through two procedures: through the analysis of all pairs of constructs in a series of confirmatory factor analyzes; the second procedure is based on the comparison between the average variance extracted measure (AVE) and the shared variance between the pairs of constructs (Fornell & Larcker, 1981). Based on the latter procedure for discriminant validity between constructs, the shared variance must be less than the mean variance extracted. All factor loadings should be statistically significant and higher than 0,5 in terms of standardized estimates (Hair *et al.*, 2014). The AVE measure represents the average amount of variance that a construct explains in its indicator variables relative to the overall variance of its indicators ( $L_i$  is the standardized factor loading for item  $i$  and  $n$  represents the number of items):

$$AVE = \frac{\sum_{i=1}^n L_i^2}{n}$$

The square root of the AVE for each construct  $\sqrt{AVE_i}$  must be compared with the correlations with the other constructs in the model ( $\Phi_{ij}$ ). Discriminant validity exist when the square root of the AVE for a given construct is greater than all the correlations of this construct with other constructs in the measurement model (Fornell & Larcker, 1981), as follow:

$$\sqrt{AVE_i} \geq \Phi_{ij}, \forall i \neq j$$

The literature suggests the use of the alpha coefficient, but to ensure the reliability of the construct it is an insufficient measure. The software AMOS provides the reliability of each construct. The reliability of each indicator should exceed 0.5, which corresponds to a standardized coefficient of 0.7 (Hair *et al.*, 2006). In addition to the Cronbach's alpha coefficient, the composite reliability (CR) is also used as an indicator of reliability and internal consistency of the measurement items. This indicator provides the total amount of a scale variance that is accounted for all underlying factors (excluding the variance attributed to the error) (Fornell & Larcker,

1981). Values greater than 0,7 are considered to provide an acceptable degree of reliability.

The composite reliability (CR) is obtained according next equation ( $L_i$  represents the standardized factor loading for item  $i$  and  $e_i$  represents the respective error variance for the specific item. This variance error is estimated based on the standardized loading (+) as  $e_i = 1 - L_i^2$ ):

$$CR = \frac{(\sum_{i=1}^n L_i)^2}{(\sum_{i=1}^n L_i)^2 + (\sum_{i=1}^n e_i)}$$

After the previous description, the guidelines that must be followed to ensure the validity of the constructs are: the standardized coefficients must be 0.5 or higher and the ideal is 0.7 or higher; AVE must be 0.5 or higher to ensure adequate convergent validity; the AVE values should be higher than the shared variance between two factors; the composite reliability (CR) should be 0.7 or greater for adequate convergence or internal consistency of measurements.

After an exploratory factor analysis, followed by a confirmatory factor analysis, the dimension of spirituality at work and spiritual practices at work were computed as second order variables and the dimensions of attitudes and individual performance as first order variables. All the scales presented values, composite reliability (CR) and the average variance extracted (AVE), as recommended by Hair, Anderson, Tatham, and Black (2005).

Discriminant validity was established, all correlations between the constructs are significantly smaller than 1 and the squared correlations calculated for each pair of constructs is smaller than the variance extracted for corresponding constructs (Fornell & Larcker, 1981; Shiu et al., 2011), thereby confirming the discriminant validity.

### **3.3.4 Descriptive analysis of the variables**

The following table (Table 5) shows the means and respective standard deviation, according to the answers gathered in the context of this study that allows us to characterize the attitudes of the sample towards the variables of the global research model.

**Table 5 - Descriptive analysis 1**

<b>Variables</b>	<b>N</b>	<b>Average</b>	<b>Standard Deviation</b>
spirituality at work	273	3,2606	,73981
spiritual practices at work	273	1,4923	,57788
organizational affective commitment	273	2,8376	,51497
job resourcefulness	273	3,9240	,59055
job performance	273	3,9161	,47808
individual productivity	273	3,8663	,60594
<b>Spirituality at Work (dimensions)</b>			
	<b>N</b>	<b>Average</b>	<b>Standard Deviation</b>
sense of community	273	3,3187	,90341
alignment with organizational values	273	3,1568	,97861
meaningful work	273	3,7705	,84273
opportunities for inner life	273	2,5055	,95490
emotional balance and inner peace	273	3,4212	,94573



According to the previous table, results show that SW present values close to the average. Opportunities for inner life present the lowest value while meaningful work is the most valued dimension. Workers feel that in organizations there is still no structured space for the development of individual spirituality, but they recognize the existence of a sense of community in the team, as well as the concern of alignment of their values with the values of the organization. On the other hand, there is a clear perception of the importance of the work they perform for society in general, and the meaning and purpose of life at work, which must be taken into account in organizations, because is important for workers to feel useful to society. Apparently, the aspects closer to the individual, to his oneself are these that are more difficult to fulfill. At the same time, commitment presents a score below the average as well as the spiritual practices inside the company. Perhaps some clues can be found here to improve worker's inner life and increase their commitment to the organization.

Job resourcefulness and individual performance, present similar scores clearly above the average. In terms of attitudes, workers feel able to overcome obstacles, even if the affective connection is extremely fragile. They may be considered to be quite effective and productive in the execution of their professional tasks.

Student test for independent samples was applied to test the differences of means for the variables under analysis, based on demographic characteristics. No significant differences were found for gender, age, tenure and education level.

### **3.4 The investigation strategy**

Based on literature review and on existing appeals for future studies, the conceptual models developed and analyzed are part of the exploratory and instrumentalist approaches to SW (Gotzis & Kortezi, 2008). The objectives of this investigation and the investigation model were divided into three research models, in a complementary and incremental approach, corresponding to the 3 papers already submitted or published and that are part of this investigation. The investigation strategy intends to:

- Propose a different conceptualization and measurement for the SW concept, adding a new dimension, EBIP, to the traditional four dimensions' model inspired in Ashmos and Duchon (2000).
- Test the explanation capacity of the new measurement, compared to the traditional
- Investigate the chain of effects between a spiritual environment and individual performance, using the mediating effects of worker's attitudes like job resourcefulness and affective commitment

### **3.4.1 PAPER 1**

#### **Title and purpose**

*“Adding a new dimension to the spirituality at work concept: scale development and the impacts on individual performance”.*

Submitted to *“Management Decision Journal”* (waiting peers' evaluation).

The principal goals with this article were:

- to contribute to a better understanding and measure of the concept of spirituality at work by adding a new dimension to traditional conceptualizations labeled emotional balance and inner peace (EBIP), based on Maslow's ideas.
- to testing the effects of this new dimension, EBIP, on the overall concept of SW, to confirm if the impact of SW on individual productivity could be increased by adding EBIP to the SW concept.

#### **Design, methodology and approach**

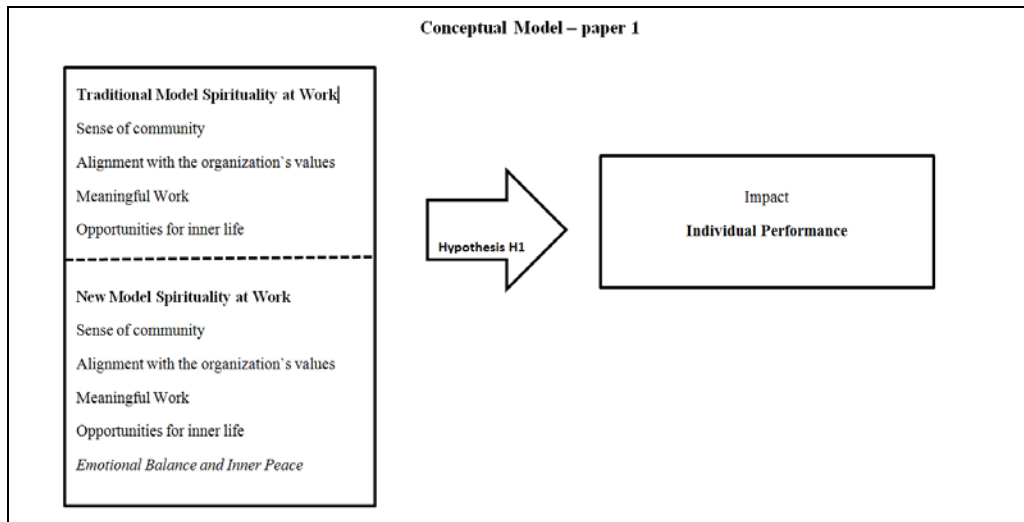
In this article a new dimension was created to measure SW: emotional balance and inner peace (EBIP). So, SW was conceptualized as second order variable and evaluated by its explanatory capacity in relation to individual productivity. Two models were tested: traditional and new model (including new metric).

To establish a causal relationship a hypothesis H1 was defined:

H1: there is a positive relationship between SW and Individual Productivity.

The next figure (Figure 2) represents the model conceptualization in the scope of this article.

**Figure 2 - Conceptual model of first paper**



For the investigation, deductive item generation was used (Hinkin, 1995) to create the first-order latent variable EBIP. Was conducted a thorough literature review going back to Maslow's ideas to confirm the need for this new dimension.

All measures were subjected to an evaluation of its dimensionality, reliability and validity. In other words all metrics were refined and analyzed as follows:

1. exploratory factorial analysis for latent variable EBIP and for superior order variable SW
2. application of maximum likelihood method – maximum likelihood for confirmatory factorial analysis of superior order constructions (traditional and new models) ensuring psychometric properties evaluation (Hair et al., 2005) through informatics program AMOS 21.0.

The information was a priori submitted to a debugging process to increase coherence of all the measures, applying exploratory factorial analysis extracting the main components and factors with eigenvalues bigger than 1. The varimax rotation was adopted to obtain solutions for the factors. The Cronback alpha was used to assess the coherence of analyze measures ensuring convergent validity.

This depurative process was equally applied to the new dimension (EBIP) to have a preliminary idea on dimensionality and to obtain a solution according to the suggested literature review and applied to the superior order SW.

Emphasizing that the obtained scores in terms of internal consistency are according to the suggested Nunnally and Bernstein's (1994) parameters.

According to defined objectives a confirmatory factorial analysis was performed to understand the psychometric behavior of examined constructs. Structural equations modelling was used which is appropriated to test a theory since it allows a simultaneous estimation of a separated set of independent multiple equations, similar to multiple regression (Hair et al., 2006), introducing non directly observed variables (latent variables).

The SEM requires thinking in terms of models which were specified and identified and this specification is the reflection of an established theory and hypothesis. In this conceptual model the exogenous latent variable is SW and the endogenous (dependent) is individual productivity. The statistical approach is constituted of two parts: the measurement model and the structural model. The measurement model, in other words, the confirmatory factorial analysis, specify the relationship between the observable indicators and the respective non observable independent or dependent constructs (Bollen, 1989). The SW construct is multidimensional:

- ✓ The traditional model: is composed of 4 dimensions (sense of community, meaning and purpose, sense of community, opportunities for inner life)
- ✓ The new model is composed with the 4 traditional dimensions adding a new developed dimension developed for this investigation (EBIP).

A second order specification model was performed in which the superior order construct SW was postulated to explain the first order factor covariance. In other words, a construction of second order does not have an own set of indicators but it is measured through first order factors.

This measurement model specifies the standards in which each indicator is extracted in a determined particular factor, evaluating the variable properties in terms of internal consistency and validity in relation to the concepts that are intended to be measured. (Andersom & Gerbing, 1988; Byrne, 1998).

The structural “*path model*” establishes causal relationships between independent and dependent latent variables, sustained by a theory and an investigation model. A comparison between the traditional and new model was performed and the purpose was to look for a model with more explanatory capacity. A chi-square test was used to test the differences between the two models. This statistic allowed realizing that:

- ✓ The models are significantly different.
- ✓ The new model offers a more significant explanatory capacity
- ✓ The introduction of the new dimension contributes to a higher balance between the different SW dimensions

### **Findings**

This work offers a new conceptualization for SW, inspired on Maslow`s ideas who played a key role in the human resource management. The hypothesis test supports the positive impact of SW on individual productivity, valid for both traditional and new models, but with an additional explanation capacity when we add EBIP. These findings, show us that there are good reasons to believe that SW is more than a trend, representing a potential contribution to a better understanding of the human work (Gotzis & Kortezi, 2008). The new dimension (EBIP) can reinforce both the balance of the traditional measurement and the explanation capacity of the impacts on employee outcomes, such as individual productivity.

This work, as well as the conclusions from Gotzis and Kortezi`s work (2008), show that all the dimensions of SW may be developed as universally-held aspects of virtue ethics framework.

### 3.4.2 PAPER 2

#### **Title and purpose**

“*The impact of spirituality at work on workers’ attitudes and individual performance*”,  
was published:

Article (the "Article") entitled:	The impact of spirituality at work on worker’s attitudes and individual performance
Article DOI:	10.1080/09585192.2017.1314312
Author(s):	Maria Joelle, Arnaldo Fernandes Coelho
To publish in the Journal:	The International Journal of Human Resource Management
Journal ISSN:	1466-4399

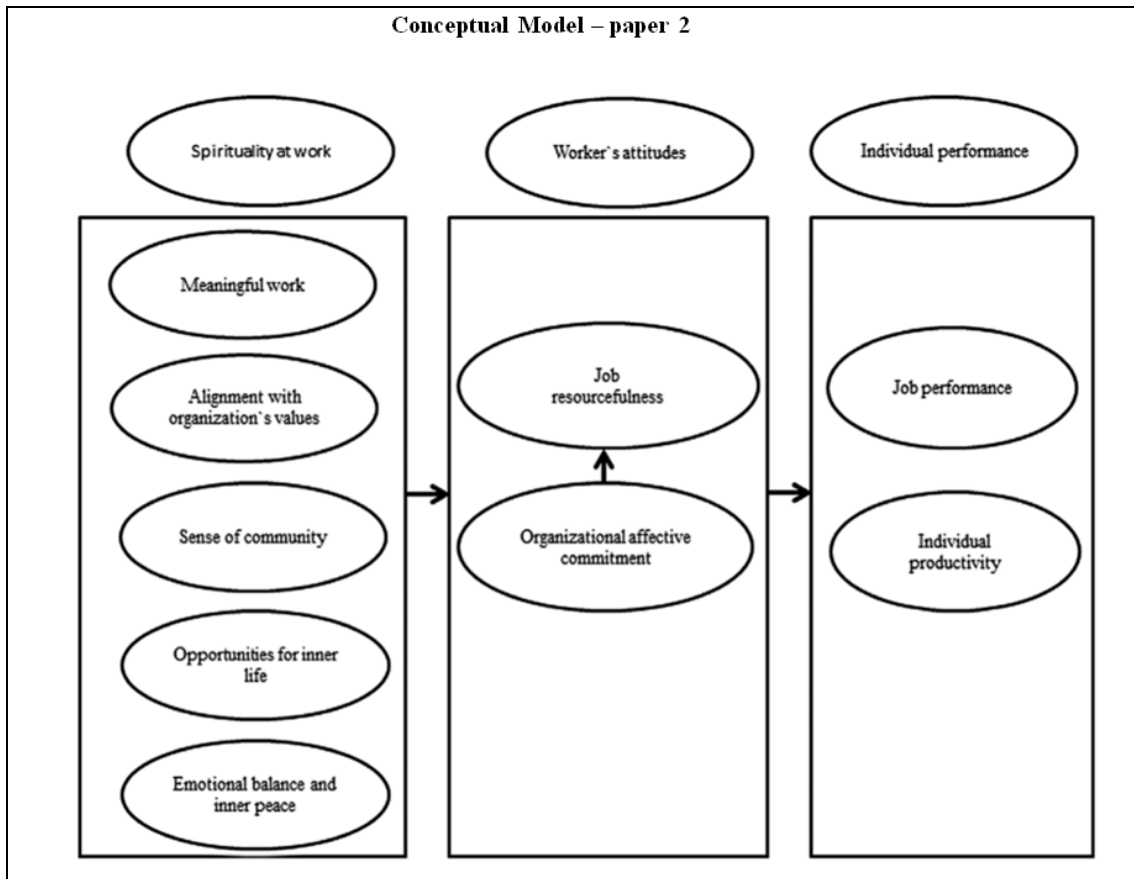
The principal goals with this article were:

- to contribute to a better understanding of the SW conceptualization, based on Maslow`s writings, using the new measure – emotional balance and inner peace
- to contribute to a better understanding of the relationship between SW and individual performance, considering job resourcefulness and affective commitment as mediating variables.

#### **Design, methodology and approach**

This investigation developed in paper 1 was the starting point for this article 2, as we can see in the next figure 3. The conceptual model is composed by five latent variables (SW, workers attitudes and individual performance), corresponding to 9 metrics and 46 items.

Figure 3 – Conceptual model of second paper



The hypothesis and sub-hypotheses proposed to establish the causal relationships were:

H1: There is a positive relationship between SW and job resourcefulness.

Assuming the five dimensions of the construct SW, we present the following five sub-hypotheses:

H1a: There is a positive relationship between opportunities for inner life at work and job resourcefulness.

H1b: There is a positive relationship between meaningful work and job resourcefulness.

H1c: There is a positive relationship between sense of community in the workplace and job resourcefulness.

H1d: There is a positive relationship between alignment with organizational values and job resourcefulness.

H1e: There is a positive relationship between EBIP in the workplace and job resourcefulness.

H2: Job resourcefulness has a positive relationship with job performance.

H3: Job resourcefulness has a positive relationship with individual productivity.

H4: There is a positive relationship between SW and organizational affective commitment.

H4a: There is a positive relationship between opportunities for inner life at work and organizational affective commitment.

H4b: There is a positive relationship between meaningful work and organizational affective commitment.

H4c: There is a positive relationship between sense of community in the workplace and organizational affective commitment.

H4d: There is a positive relationship between alignment with organizational values and organizational affective commitment.

H4e: There is a positive relationship between EBIP in the workplace and organizational affective commitment.

H5: Organizational affective commitment has a positive relationship with job performance.

H6: Organizational affective commitment has a positive relationship with individual productivity.

H7: Organizational commitment has a positive relationship with job resourcefulness.

All the measures were subjected to an evaluation of its dimensionality, reliability and validity. The initial measurement model was submitted to a confirmatory factor analysis was considered unsatisfactory. According to the theory's suggestions, an improvement was decided: the indicators with loadings below the accepted limits and those with higher cross-loadings were eliminated. The final results showed a good adjustment of the model to the collected data.

In the three papers the adjustment of the measurement model was evaluated using the following indexes:



- ✓ DELTA2 (IFI) (Bollen, 1989)
- ✓ Tucker-Lewis (TLI) (Tucker e Lewis, 1973)
- ✓ Comparative fit index (CFI) (Bentler, 1990)

These indexes are considered in literature the most stable (Gerbing & Anderson, 1992; Hu & Bentler, 1999). RMSEA and  $\chi^2$  were also taken into account with the respective degrees of freedom.

After clarifying that five the dimensions form the latent second order construct SW, 15 hypotheses were tested using the same methodology applied in the previous article.

Attitudinal variables were introduced (job resourcefulness and organizational affective commitment) that are simultaneous dependent and independent variables. In other words as suggested in literature review, both variables were included in conceptual model as mediators. The structural model allows the researcher to decompose the effects in a variable in direct, indirect or total effects. The direct effects consider the influence from a variable to another when there is no mediation. The indirect effects are those who are mediated by one (or more than one) variable. The total effects are the sum of all effects among the variables. The dependent variables considered were individual productivity and job performance to test the impact of SW on work related outcomes.

After clarifying that the five dimensions form the latent construction SW, the 15 hypothesis were tested using the same methodology applied in the previous article.

## **Findings**

This paper reinforces the work of the previous article, in relation to the SW concept, returning to Maslow`s theory of needs. Self-actualization implies the valence of the individual mind and spirit, both with the work component (More & Casper, 2006). This fact is demonstrated through the creation of the EBIP measure and SW impacts, with the inclusion of this new dimension. EBIP introduces more global coherence between the different dimensions of the SW concept, reinforcing the influence of SW on its outcomes.

When workers experience emotional balance and inner peace in their work, they become stronger to accomplish their job-related tasks and more committed and involved with the organization's goals. This positive impact on workers' attitudes in turn, has an equally positive impact on individual performance. When human resources are job-resourceful and highly committed employees, there is reciprocity with the organization, doing the best for it.

SW issues, reflected on the proposed five dimensions, corresponds to a holistic approach to the human nature, and may increase individual performance and job performance, when changes in workers' attitudes are achieved.

This second work provides scientific evidence for grounding the link between SW and individual performance, mediated through affective commitment and job resourcefulness.

### **3.4.3 PAPER 3**

#### **Title and purpose**

*“The impact of a spiritual environment on performance mediated by job resourcefulness”*

Submitted to the “The Leadership Quarterly” (waiting peers' evaluation).

The principal goals of this article were:

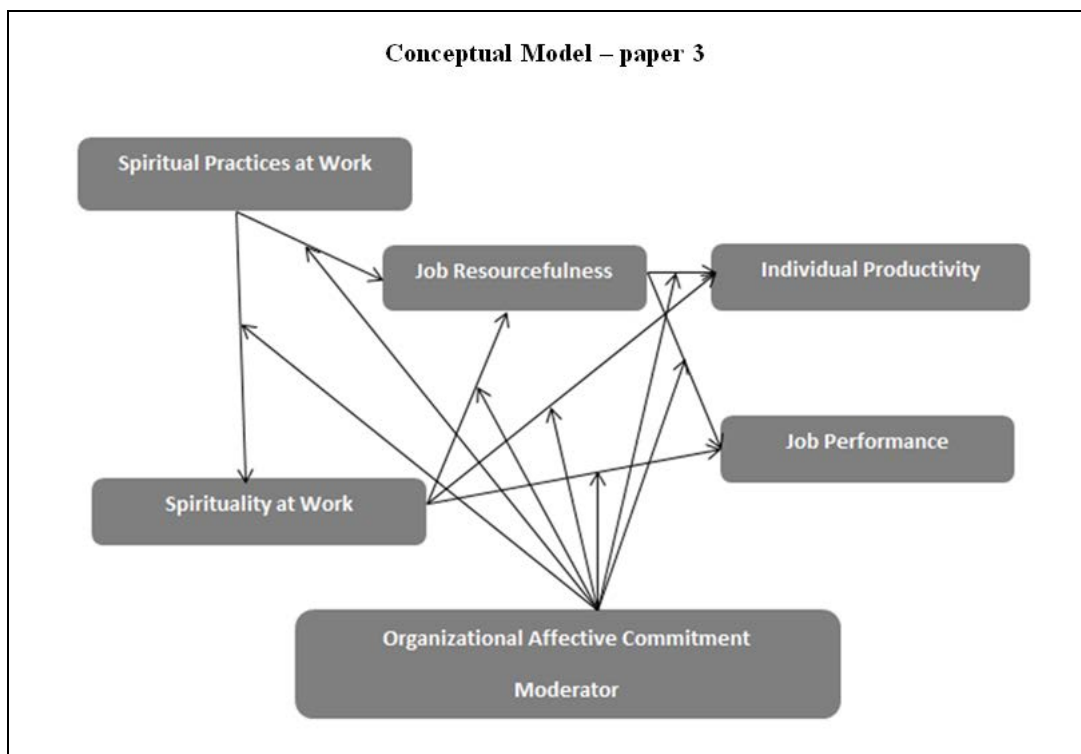
- to explore and present the process of management as viewed from the lens of spirituality in the workplace and also in a management art approach
- to give a basis for a “spirituality environment”, considering the practices that may contribute to increase SW
- to identify the influence of a spirituality environment on individual performance, mediated by job resourcefulness., considering the moderating role of affective commitment.

#### **Design, methodology and approach**

The conceptual model is composed by three groups of latent variables (SW, workers attitudes and individual performance), corresponding to 9 metrics and 46 items.

In this work, the previous conceptual models are considered but with a different explanatory dynamic. Attending to previous research results, job resourcefulness and organizational affective commitment were considered mediating variables. However, commitment revealed a weak performance and, in the present investigation is considered a moderator. A new variable was included spiritual practices at work (SPW), based on potential spirituality practices identified in the literature. The presence of both SW and SPW may give an idea of a “spirituality environment”. The conceptual model is shown in the following Figure 4, composed by 5 first order variables, plus moderator.

**Figure 4 – Conceptual model of third paper**



The hypotheses and sub-hypotheses proposed to establish the causal relationships were:

H1. There is a positive relationship between spiritual practices at work and spirituality at work.

H2. There is a positive relationship between spirituality at work and job resourcefulness.

H3. There is a positive relationship between spiritual practices at work and job resourcefulness.

H4. There is a positive relationship between job resourcefulness and individual productivity.

H5. There is a positive relationship between job resourcefulness and job performance.

H6. There is a positive relationship between spirituality at work and individual productivity.

H7. There is a positive relationship between spirituality at work and job performance.

The moderating role of OAC is considered and tested using multi-group analysis. The purpose of this article remains on confirmatory and explanatory approaches (Gotsis & Kortesis, 2008). It is introduced a new perspective with the development of the SPW measure. The presence of these practices may have a peacemaker role in society promoting peace and reducing violence and stress (Bishara & Shipani, 2010). The mediator role of job resourcefulness is supported in the literature review as well as moderator role of organizational affective commitment.

The creation of this new scale was developed through Hinkins`'s methodology (1995), and is composed of eleven items that were tested and validated.

As in the case of paper 1 and 2, the exploratory factor analysis was performed for the new variable SPW. Data were submitted through a debugging process to verify the coherence of this new measure, extracting the main components and factors with eigenvalues higher than 1. A varimax rotation was adopted to obtain one factor solution. Cronback alpha was used to test whether SPW is a reliable and viable construct.

According to the defined objectives a confirmatory factor analysis was performed to understand the psychometric behavior of examined constructs, using the same methodological tool as used in previous papers (SEM) introducing observable and not observable variables (latent variables). After refining the measurement model, the final one evaluated by the same indexes applied in the previous articles indicates a good adjustment of the model to data.

The constructs were evaluated taking into account its dimensionality, reliability and validity. The Cronbach alpha coefficients were considered adequate (Nunnally &

Bernstein, 1994). Reliability presented values between 0.78 and 0.96 and AVE varying between 0.50 and 0.74. The correlations between the constructs confirmed this discriminating validity, being significantly above 1 and less than the AVE square root of the corresponding variables.

The formulated hypotheses were tested using previous article methodologies. However, a multi group analysis was performed to test the moderating role of OAC. The sample was divided in two groups: group of workers with lower perceptions of organizational affective commitment; group of workers with higher perceptions of organizational affective commitment.

### **Findings**

This investigation shows that organizational affective commitment moderate some of the proposed relationships. The workers that feel less affective commitment to their employer are the ones that most value SPW, as an appeal to feel the presence of meaning and propose, sense of community, emotional balance and inner peace. This positive association means that workers are more able to overcome obstacles and achieve goals when they feel SW.

SPW and job resourcefulness tend to evolve together, and the effects of affective commitment isn't significant. The impact of job resourcefulness on individual productivity is bigger for the group with lower organizational affective commitment, and on job performance is bigger for the group with higher organizational affective commitment.

SW has a positive impact on individual productivity and job performance, but SW only promotes job performance indirectly, mediated by job resourcefulness. This fact means that SPW may help to boost SW and a spiritual culture will promote performance, mediated by job resourcefulness, attending to the organizational affective commitment role as a moderator variable.



## **CHAPTER IV – PAPER 1**

### **PART II – EMPIRICAL ESTUDIES**

#### **4.1 Title Page**

**Adding a new dimension to the spirituality at work concept: scale development and the impacts on individual productivity**

**Maria Joelle**

**School of Economics, University of Coimbra**

**Portugal**

**Arnaldo Matos Coelho**

**School of Economics, University of Coimbra**

**Portugal**

## 4.2 Abstract and Keywords

**Purpose** – The purpose of this study is to: contribute to a better understanding and measure of the concept of spirituality at work by adding a new dimension to traditional conceptualizations labeled emotional balance and inner peace (EBIP). While the traditional literature refers to the fulfillment of workers' spiritual needs, we propose a new approach based on Maslow's ideas that considers the impact of individual spirituality on the attitudes/feelings of workers in the workplace.

**Design/methodology/approach** - The methodological design is quantitative and includes item generation. Exploratory and confirmatory factor analysis were used to assess construct validity and 273 valid questionnaires were collected. The authors developed the EBIP dimension with six items based on previous studies, and the new second-order variable was compared with the traditional measurement using confirmatory factor analysis, based on AMOS 21.

**Findings** – The hypothesis test supports the positive impact of SW on individual productivity, valid for both models, but with an additional explanation capacity when we add EBIP.

**Originality/value** - This research offers a new conceptualization for SW, based on Maslow's ideas, who played a key role in the humanistic resource movement. This new dimension may be an important finding for scholars and practitioners since organizations have to take care of both the mind and spirit of their employees to establish a genuine balance between the meaning of their lives and their work.

**Keywords:** spirituality at work, Maslow, emotional balance and inner peace, individual productivity.



### 4.3 Introduction

Deep changes are taking place in the spirituality at work (SW) will be one of the main subjects to be developed (Ashmos & Duchon, 2000; Milliman et al., 2003; Moore & Casper, 2006; Rego & Cunha, 2008; Gupta et al., 2014; Roof, 2015; Mahakud & Gangai, 2015). Many researchers emphasize the importance of spirituality and SW (Ashmos & Duchon, 2000; Milliman et al., 2003; Duchon & Plowman, 2005; Sheep, 2006; Rego & Cunha, 2008; Pawar, 2009; Salarzahi et al., 2011; Gupta et al., 2014; Brophy, 2015). SW has become a topic of interest in the academic environment as well as among practitioners (Ashmos & Duchon, 2000; Duchon & Plowman, 2005; Pawar, 2009; Gupta et al., 2014) and this growing interest is helping to a better understanding of the concept, including measurement (Fornaciari et al., 2005; Tombaugh et al., 2011; Daniel, 2015). Organizations that promote spirituality experiences through human resources policies and program scan seriously improve performance (Paul et al., 2015).

However, further research is needed in this field and a quantitative approach would be particularly useful (Gupta et al., 2014; Roof, 2015). Our empirical study was prompted by this need for more empirical investigations on this topic, given that there is still much to be learned about the measures and impacts of SW (Gupta et al., 2014; Roof, 2015). The quantitative approach is important because it allows the dialogue between organizational researchers and practitioners (Benefiel, 2003; Gupta et al., 2014; Daniel, 2015).

Our research stems from the empirical work of Ashmos and Duchon (2000), based on four dimensions: sense of community, meaningful work, alignment with organizational values, opportunities for inner life. The major goal was to add a new dimension to the traditional measurement models like those provided by Ashmos and Duchon (2000), Milliman et al., (2003), Duchon and Plowman (2005), Rego and Cunha (2008), Tombaugh et al. (2011), Daniel (2015) and test its impact on individual productivity. The new dimension of emotional balance and inner peace (EBIP) sets out to capture the emotional balance and stability at an individual level when workers engage in meaningful work.

The conceptualization of this new dimension is inspired by Maslow's contributions (1970), explored by Cavanagh and Bandsuch (2002), O'Connor and Yballe (2007) and Tombaugh et al. (2011). Maslow saw spirituality as one of the

dimensions of self-actualization (O'Connor & Yballe, 2007). In Maslow's view, self-actualization is not an endpoint but an ongoing process, since self-actualizing people are deeply committed in action to core values such as truth, justice, goodness, beauty, order, simplicity, and meaning or purposefulness. Consequently this work of exploring the concept's extent and robustness is yet to be done and this dimension has never been fully explored (Koltko-Rivera, 2006).

Maslow started exploring the role of spirituality in personal psychology and in 1969 he helped to establish the Journal of Transpersonal Psychology (O'Connor & Yballe, 2007). This study can provide guidance to management and psychology students and practitioners, and aims to promote a dialogue between Maslow's theory and practice in the work context.

First of all, our investigation compares two measurement models for the concept of SW: the traditional one, based on Ashmos and Duchon (four dimensions), and the new one, adding this new dimension, EBIP, and considering this to be a second order concept. After comparing the two models through confirmatory factor analysis, the results show how this new dimension can contribute both theoretically and empirically to the overall coherence of the workplace spirituality concept. At the same time, we examine the impact on individual productivity before and after adding this new dimension.

#### **4.4 Theoretical background**

##### **4.4.1 Spirituality at work – the source and meaning**

SW is not about religion (Gupta et. al, 2014), conversion or about getting people to accept a specific belief system (Ashmos & Duchon, 2000; Roof, 2015) and “has taken many forms” (Gupta et al., 2014: 80). It is primarily identified with an open mind and involves connectedness (Daniel, 2015), and with the connection between others and the workplace environment, and it is related to self-actualization (Tischler, 1999; Deshpande, 2012).

SW is a construct of a multidimensional nature that is definable and measurable (Roof, 2015), and the literature shows different ways to define it, as summarized in Table 6.

**Table 6 – Dimensions of spirituality at work**

Authors	Dimensions of SW
Ashmos & Duchon, 2000	Inner life, meaningful work, sense of community
Milliman et al., 2003	Meaningful work, community, alignment with organizational values
Kinjerski & Skrypnek , 2004	One's work makes a contribution, sense of connection to others and common purpose, a sense of connection to something larger than self, and a sense of perfection and transcendence
Duchon & Plowman, 2005	Inner life, meaningful work, sense of community
Rego & Cunha, 2008	Team's sense of community, alignment with organizational values, sense of contribution to society, enjoyment at work, opportunities for inner life
Petchsawang & Duchon, 2009	Connection, compassion, mindfulness, meaningful work and transcendence
Karakas, 2010	Employee well-being, sense of meaning and purpose, sense of community and interconnectedness
Gupta et al., 2014	Meaningful work, sense of community, organizational values, and compassion.
Daniel, 2015	Inner life, meaningful work and sense of community

Source: Developed by the authors based on published literature

SW is the recognition that employees have an inner life that nourishes and is nourished by meaningful work that takes place in the context of a community (Ashmos & Duchon, 2000; Milliman et al., 2003; Duchon & Plowman, 2005; Rego et al., 2007; Rego & Cunha, 2008; Issa & Pick, 2010; Gupta et al., 2014; Daniel, 2015). Meaningful work is an important concept for business ethics and organizational scholars (Michaelson et al., 2014), because SW is implicit in an organization (Daniel, 2015) that

encompasses performing a job with meaning, thinking about others and being involved in a community context (Ashar & Lane-Maher, 2004).

Even though there are different approaches to SW in the literature (Pawar, 2009), the importance of SW in the management field is widely recognized (Pawar, 2009; Deshpande, 2012; Gupta et al., 2014; Daniel, 2015; Roof, 2015; Aravamudhan & Krishnaveni, 2015), attending that workers want to feel connected with their work and with their coworkers, and this new idea arises from Conger (1994) who noted the dissolution of many workers' support communities and their substitution by the working community.

SW is being explored as a multidimensional concept mostly derived from the work of Ashmos and Duchon (2000) and they have been considered the first authors to produce a serious approach to SW (Milliman et al., 2003; Fornaciari et al., 2005; Pawar, 2009; Tombaugh et al., 2011; Daniel, 2015; Brophy, 2015).

The best known conceptualization of SW comes from Ashmos and Duchon (2000) and relies on a set of four dimensions: sense of community within the team, alignment with organizational values, meaningful work, and opportunities for inner life. These dimensions can be organized in three different levels (Table 7) according to Milliman et al., (2003).

**Table 7 – Conceptualizing SW**

Individual level	<ul style="list-style-type: none"> <li>• Meaningful work involves a deep sense of meaning and purpose in one’s work, for workers and society as a whole (Ashmos &amp; Duchon, 2000; Milliman et al., 2003; Rego &amp; Cunha, 2008), including: sense of contribution to the community (items related to work that coincides with personal life values and is helpful for the community) and sense of enjoyment at work (items related to a sense of joy and pleasure at work).</li> <li>• Opportunities for inner life is about finding an opportunity at work to express many aspects of one’s being, not just the ability to perform physical or intellectual tasks (Ashmos &amp; Duchon, 2000).</li> </ul>
Group level	<ul style="list-style-type: none"> <li>• Sense of community. The sense of connection with coworkers is a human goal at work because although money is important it is not the most important goal for most people (Mitroff &amp; Denton, 2003). Sense of community is described as the feeling of connectedness that workers develop with other coworkers (Daniel, 2015).</li> </ul>
Organizational level	<ul style="list-style-type: none"> <li>• Alignment with organization’s values is about the link between personal values and organization’s mission and purpose (Rego &amp; Cunha, 2008). This dimension captures the workers’ perceptions and attitudes towards the values of their organizations (Ashmos &amp; Duchon, 2000).</li> </ul>

Source: Developed by the authors based on published literature

Opportunities for inner life (OIL), measures the degree to which organizations respect the spirituality and spiritual values of the workers (Rego & Cunha, 2008) and was identified by Ashmos and Duchon (2000) as spiritual identity, meaning “... an opportunity at work to express many aspects of one’s being, not merely the ability to perform physical or intellectual tasks” (p.136). SW begins by acknowledging that people have an inner and outer life (Ashmos & Duchon, 2000), and inner life exists when workers find their inner strengths and use them to perform their tasks at work (Daniel, 2015).

Meaning and purpose at work (MPW), is an important concept for academics and practitioners (Michaelson et al., 2014; Aravamudhan & Krishnaveni, 2015). Work is a way to understand the meaning of life (Ashmos & Duchon, 2000; Duchon & Plowman, 2005; Rego & Cunha, 2008; Yeoman, 2014; Roof, 2015). The meaning of this

latent variable is related to the degree to which people experience a deep sense of meaning when they perform their work (Rego & Cunha, 2008). In other words, people have an intrinsic drive and motivation to learn and find meaning in their work and to be a member of a group, where they feel valued for their contribution to the group's performance (Giacalone & Jurkiewicz, 2003).

All work has a meaning, but meaningful work extends the issue further (Michaelson et al., 2014) and it must be placed in the spirituality context (Milliman et al., 2003). Meaningful work is a dimension of SW (Rego & Cunha, 2008; Daniel, 2015), taken as a deep sense of meaning and purpose in one's work (Milliman et al., 2003), especially when work has a central position in one's life, which often serves as a primary source of purpose, belongingness and identity (Michaelson et al., 2014). Meaningful work may nourish a worker's inner life and lead to a more meaningful outer life (Brown, 2003; Daniel, 2015).

Sense of connection with community (SCC) is important "because people want to feel connected to work that is important and they want to feel connected to each other at work" (Ashmos & Duchon, 2000, p.138), since work is a source of spiritual growth and connection to others (Daniel, 2015). This concept includes items that capture the degree to which employees feel the existence of teamwork connects them as a family in the organization to which they belong, as well as the perception that the supervisors do their best to encourage the presence of spirit in the community.

Sense of community is described as the feeling of connectedness that workers develop with other coworkers (Ashmos & Duchon, 2000; Rego & Cunha, 2008), and success can be described using terms such as being connected, balanced and wholeness (Ashar & Lane-Maher, 2004). The sense of connection is a feeling far beyond oneself, with a genuine sense of community arising from the presence of affects (Milliman et al., 2003). SW derives from this concept of sense of connection and is better understood when we realize that work and colleagues take the place of family and social groups (Karakas, 2010).

Alignment with the organization's values (AOV) measures aspects of spirituality related to the leader's interests, particularly if there are concerns beyond financial issues. The items capture the worker's perceptions of and attitudes to the values of their organizations (Ashmos & Duchon, 2000), or as Rego and Cunha (2008) claim, the

congruence between personal values and the organization's mission and purpose, and explain commitment and intentions to quit (Milliman et al., 2003). It includes items that measure the degree to which the workers and the organization values are congruent, the perceptions about the organization's future, the way inner life and peace are respected, and finally, the leadership's attitudes to society.

However, this conceptualization does not seem to be complete without a dimension that captures the individual's well-being, their psychological balance and the inner peace achieved at the workplace. Emotional balance and inner peace may be the fifth dimension that could bring out a strong affiliation with this understanding of SW.

#### **4.4.2 Introducing a new dimension – EBIP**

The presence of SW can help relieve stress among individuals, thereby allowing them to find personal balance and happiness (Cavanagh & Bandsuch, 2002; Fry, 2003; Gupta et al., 2014), and this aspect is not captured by other conceptualizations. This dimension measures the importance of happiness in achieving an inner peace and in sustaining trust when something goes wrong.

The construct EBIP should reinforce the coherence of the overall concept and cover these aspects already anticipated by Maslow (1970), Cavanagh & Bandsuch (2002), O'Connor & Yballe (2007) and Tombaugh et al. (2011), and it is expected to enrich the traditional approaches of SW and reinforce the overall coherence of the concept, currently based on four dimensions: inner life, meaningful work, sense of community and values alignment.

Wright et al. (2004) conducted a study to find the answer to the following question: what is the relative contribution of psychological well-being to increasing performance? They conclude that there is, in fact, a positive relationship between psychological well-being and performance. Nevertheless, this link is anticipated by the positive impact of SW on the employee's behaviors and attitudes (Krishnakumar & Neck, 2002; Aravamudhan & Krishnaveni, 2015).

A better understanding of the meaning of spirituality is needed as well as further investigation to assess SW (Kolodinsky et al., 2008; Tombaugh et al., 2011), and our work aims to make use of the previous contributions and introduce a new dimension

into the concept of SW, given the recognition of the importance of individual spirituality in people's behaviors.

Accordingly, the conceptualization of spirituality in an organizational context should take into consideration the contribution of the organization and the work to employees' emotional balance and well-being. Thus, this study suggests adding this new dimension, EBIP, for a more balanced operationalization of the concept. Data from our work shows that these five dimensions fit well as a second-order variable. The objectives for this empirical study are: to develop a measure for the new dimension EBIP; to test the second-order latent variable SW, and compare the second order construct before and after the addition of EBIP; to test the impact on individual productivity, comparing the two conceptualizations.

#### **4.4.3 The outcomes of spirituality at work**

In recent years we have seen a substantial change in work conditions and this call for a better understanding of how major investment in work conditions affects well-being and job performance (Shimazu et al., 2015). This relationship cannot be understood out of the SW concept and the impacts on employee behavior and attitudes (Krishnakumar & Neck, 2002). In fact, different studies identify significant relationships between SW and different organizational outcomes (Ashmos & Duchon, 2000; Milliman et al., 2003; Duchon & Plowman, 2005; Rego & Cunha, 2008; Tombaugh et al., 2011; Mahakud & Gangai, 2015), as listed in Table 8.



**Table 8 – SW and outcomes**

Milliman et al., 2003	SW is related to several employee attitudes, including organizational commitment, intent to quit (negative correlation), job involvement, and work satisfaction.
Duchon & Plowman, 2005	Work unit performance is positively impacted when the work group climate met the employees' spiritual needs and values.
Rego & Cunha, 2008	Strong positive relationship between values-based SW and both the affective and normative organizational commitment expressed by employees.
Issa & Pick, 2010	Delineated an ethical mindset and spirituality was one of the components identified.
Gupta et al., 2014	Positive relationship between SW and satisfied employees. SW based on 4 dimensions: meaningful work, sense of community, organizational values, and compassion.
Daniel, 2015	SW based on meaningful work, sense of community and inner life, can provide guidance for human resources managers to help prevent stress.

Source: Developed by the authors based on published literature

SW seems to have impacts at two levels: nurturing creativity, imagination and intuition, and improving trust and honesty; and promoting organization performance (Aravamudhan & Krishnaveni, 2015). When workers express their spirituality through their work, performance is better and well-being increases (Mitroff & Denton, 1999) because they become more responsible, more ethical, more collaborative and more creative (Gull & Doh, 2004), and specific spiritual practices can, over time, expand consciousness and value creation (Pavlovich & Corner, 2014).

Workers thus transfer their physical, mental, emotional and spiritual existence to the organization which can improve job performance (Gavin & Mason, 2004; Rego et al., 2007; Khan, 2015). Psychological well-being and happiness, has been found to be

related to productive work (Luthans & Youssef, 2007). SW can help individual members of the organization to exceed their limits and give a little more to the organization (Rego & Cunha, 2008; Paul et al., 2015; Aravamudhan & Krishnaveni, 2015), since spirituality is relevant to the well-being of individuals, organizations and societies (Sheep, 2006). It is assumed that workers perform better when they can satisfy their spiritual needs (Milliman et al., 2003; Aravamudhan & Krishnaveni, 2015).

Therefore, the following hypothesis is proposed:

H1: There is a positive relationship between SW and individual productivity.

Moreover, because we were testing the effects of this new dimension, EBIP, on the overall concept of SW, we tried to confirm if the impact of SW on individual productivity could be increased by adding EBIP to the SW concept.

## **4.5 Method**

### **4.5.1 Overall, analytic strategy**

The purpose of this investigation was to confirm the coherence and reflexive character of the traditional conceptualizations of SW, adding a new dimension that seems to be absent of the actual concept: EBIP.

The research adopts Hinkin's (1995) methodology for item and scale development. To test the first-order latent variable EBIP we developed a six-item scale based on a literature review and on the contributions of a group of workers (30), managers (10) and academics in this field (4).

To develop this new scale we first used exploratory factor analysis to confirm the factor structure of each latent variable, using principal components analysis and Cronbach's alpha to analyze the internal consistency. Then we performed a confirmatory factor analysis using maximum likelihood estimation (AMOS 21.0), to test the measurement of each model and the psychometric properties of the used scales.

We tested the impact of SW on individual productivity (new and traditional model) by means of structural equation modeling.

### **4.5.2 Sample size and data collection**

To test the proposed investigation model and the research hypothesis, data collection was based on a structured questionnaire. Questionnaires were delivered to and collected from individual workers via the internet. In total, 500 workers were emailed of whom 273 returned completed questionnaires, a response rate of 54.6%. There is no exact rule for the number of participants needed, but 10 per estimated parameter appears to be consensual (Schreiber et al., 2006). In this investigation 22 parameters (new model) and 16 parameters (traditional model) had to be analyzed, so we have an acceptable ratio: 12.4 (new model) and 17.6 (traditional model).

The sample population comprises people with an average age of 34.5 years, 43% had a bachelor's degree or higher and 25% were college graduates. The average working period within the organization was 7.2 years.

### **4.5.3 Measures**

#### **Spirituality at work**

The SW framework is measured based on 22 questions divided into the following five dimensions: sense of community using five items (Ashmos & Duchon, 2000; Milliman et al., 2003; Daniel, 2015); alignment with organizational values using five items (Ashmos & Duchon, 2000; Milliman et al., 2003; Rego et al., 2007); meaningful work using three items (Ashmos & Duchon, 2000; Milliman et al., 2003; Rego & Cunha, 2008; Daniel, 2015); opportunities for inner life using three items (Ashmos & Duchon, 2000; Daniel, 2015), and emotional balance and inner peace, developed for this study (the scale showed excellent psychometric properties) using six items.

Table 5 shows the construct SW, with the twenty-two items according to the literature review used in this study.

### **The EBIP dimension**

For this study we used deductive item generation to create the first-order latent variable EBIP. We conducted a thorough literature review going back to Maslow's ideas to confirm the need for this new dimension, to set its boundaries and to provide a basic identification of the possible items for this scale. We also interviewed a number of workers, managers and academics to find the items to measure the new dimension. To test whether EBIP is a viable construct, we initially developed a six-item scale consistent with spirituality as a dynamic process.

To explore the factor structure of first-order latent variable EBIP, an exploratory factor analysis using principal components analysis and varimax rotation with Kaiser normalization were performed. The reliability of the six-item (EBIP) scale was assessed using Cronbach's alpha ( $\alpha=0.941$ ) and all the items were loading over 0.5 (Hair, Anderson, Tatham & Black, 2005). The convergent validity was evaluated using factor loadings and the inspection of the eigenvalue and the scree plot indicated a marked gap between the first factor (eigenvalue=4.643) and the next closest factor (eigenvalue=0.562). The first factor accounted for 77 per cent of the total variance. All item loadings ranged from 0.826 to 0.917 (Table 9). The factor structure based upon the exploratory factor analysis adequately fit the data (Table 10).

**Table 9 – EBIP loadings**

<b>Survey item</b>	<b>Factor loading</b>
1 my work helps me feel at peace with myself	0.826
2 my work helps me find the right balance in my life	0.875
3 my work helps me achieve a sense of accomplishment	0.891
4 my work helps me achieve my full potential	0.893
5 my work helps me to be happier	0.917
6 my work helps me to be more self-confident even when everything goes wrong	0.874
Notes: n= 273; eigenvalue= 4.643; 77 % variance explained by the factor	

Source: Developed by the authors based on published literature

### **The second-order variable – SW**

To explore the factor structure of the new conceptualization of SW (with five first-order latent variables of the construct) we performed an exploratory factor analysis of the twenty-two items. The inspection of the eigenvalue and scree plot is consistent with the literature review since five factors were extracted, which contribute 76% of the total variance reported in Table 10, and all the items were loading over 0.5.

**Table 10 – Exploratory factor analysis of SW**

<b>Rotated Component Matrix<sup>a</sup></b>					
Items SW					
	EBIP	SCC	AOV	MPW	OIL
	<b>Cronbach Alpha Coefficient</b>				
	0.941	0.916	0.889	0.832	0.854
My work team feels part of a family in my immediate workplace		0.798			
My supervisor encourages the presence of community spirit		0.839			
I believe that my work team members support one another		0.851			
I believe that my work members really care about one another		0.834			
I feel that that my team is connected to the same purpose at work		0.68			
I feel good about the organization's values			0.65		
My team works well for organization's future			0.666		
My organization respects my inner life			0.793		
My organization helps me to live at peace			0.75		
My organization's leadership cares about society			0.699		
The work I do is connected to what I think is important in life				0.729	
I see a connection between my work and the greater social good of my community				0.812	
When I work I feel that I am useful to society				0.789	
My spiritual values are valued in my					0.629

workplace						
In my work there is a place for spirituality						0.879
In my workplace I can “nourish” my own spirituality						0.857
My work helps me feel at peace with myself	0.815					
My work helps me find the right balance in my life	0.854					
My work helps me achieve a sense of accomplishment	0.76					
My work helps me achieve my full potential	0.728					
My work helps me to be happier	0.763					
My work helps me to be more self-confident even when everything goes wrong	0.702					
Extraction Method: Principal Component Analysis.						
Rotation Method: Varimax with Kaiser normalization.						

Source: developed by the authors

### **Individual productivity**

Individual productivity measures productivity through self-description by respondents, using the scale developed by Staples et al. (1999), and adapted by Rego et al. (2007). Contrary to job performance, individual productivity seeks to measure the absolute productivity self-reported by respondents. The scale includes items like “I’m an effective employee”. The Cronbach alpha coefficient is 0.800.

## **4.6 Results**

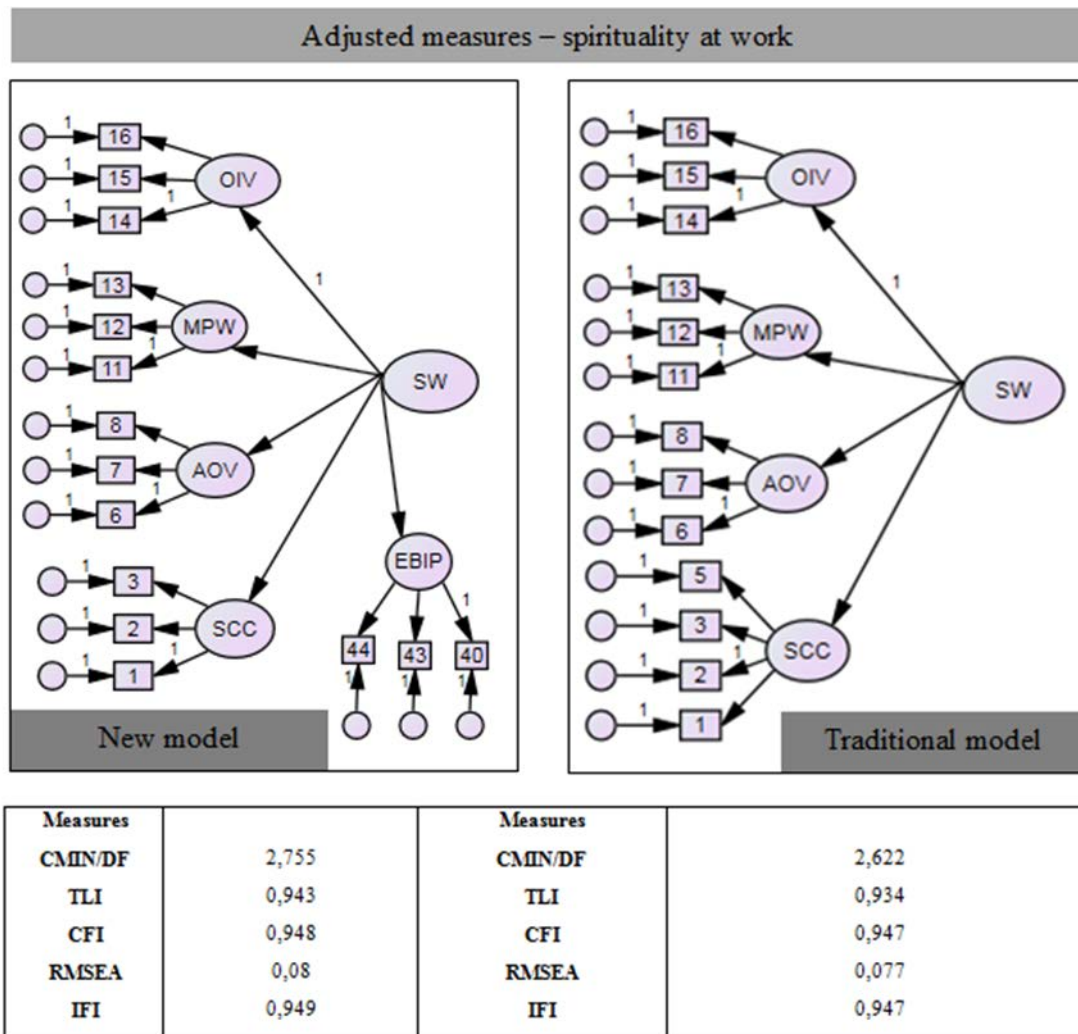
### **4.6.1 Spirituality at work: the search for the better model**

The researchers used the maximum likelihood estimation in AMOS 21 to perform the confirmatory factor analysis between the two models (traditional model and

the model with the new dimension, EBIP) to test the measurement of each model and the psychometric properties of the scales used (Hair et al., 2005). We analyzed the standardized residuals and modification indices for the sources of misspecification, and a few items were removed and a well-fitting model emerged (Figure 1).

The next step was to establish the construct validity of SW, using confirmatory analysis to compare the psychometric properties of the competitive models (traditional model and new model). Figure 5 shows the adjusted measures for each model, which seem to be good according to the benchmarks (Hair et al., 2005).

Figure 5 – New and traditional model



Source: developed by the authors

For the modified second-order confirmatory factor analysis using both models, the new model was found to have a marginally better fit and better conceptual



consistency. A statistical chi-square test was performed to determine whether there was a significant difference between the traditional model and the new model. The value of the statistical chi-square for the traditional model was 168.045 with 61 degrees of freedom, for the new model the value was 222.837 with 85 degrees of freedom. Accordingly, using the chi-square difference test, we have a chi-square of 54.792 and 24 degrees of freedom, which is above the critical value of 36.42 at the .05 level of significance. The null hypothesis is rejected and the results show that the traditional and new models are significantly different. The new conceptualization we are proposing to add to the global coherence also contributes to a better balance of the different dimensions of the concept. The introduction of this new dimension makes the factor loadings more homogeneous, as shown in Table 11.

**Table 11 – Factor loadings of the second-order latent variable, SW**

	<b>EBIP</b>	<b>SCC</b>	<b>AOV</b>	<b>MPW</b>	<b>OIL</b>
<b>New Model</b>	0.804	0.703	0.885	0.653	0.649
<b>Traditional Model</b>		0.764	0.93	0.523	0.665

Source: developed by the authors

#### **4.6.2 Hypothesis test**

Hypothesis H1 was tested using structural equation modeling, based on AMOS 21. The next table (Table 12) shows the fits of both models.

**Table 12 – Hypothesis Test**

	Traditional model	New model
<b>FIT</b>		
CMIN/DF	2.609	2.69
TLI	0.91	0.909
CFI	0.923	0.924
RMSEA	0.077	0.079
IFI	0.924	0.924
<b>TEST H1</b>		
Coefficients	0.382	0.426
t value	5.557	5.839
Significance	***	***

Source: developed by the authors

When relationships between each dimension and the outcome are tested, individual productivity, based on a first-order model, the results apparently seem consistent, providing support to our hypothesis, as shown in Table 13.

**Table 13 – Results of the first order model**

		New model			Traditional model		
		<i>Coefficients</i>	<i>t Value</i>	<i>Significance</i>	<i>Coefficients</i>	<i>t Value</i>	<i>Significance</i>
←	Individual productivity	0.002	0.046	0.482	-0.002	-0.042	0.483
	← Opportunities inner life						
	Individual productivity	0.122	1.977	0.024	0.193	3.989	***
	← Meaning and propose at work						
	Individual productivity	-0.121	-1.884	0.030	-0.069	-1.255	0.105
	← Alignment with the organization`s values						
	Individual productivity	0.235	4.596	***	0.243	4.665	***
	← Sense of connection with community						
	Individual productivity	0.127	2.047	0.021			
	← Emotional balance inner peace						

Source: developed by the authors

There is a positive relationship between SW and individual productivity, thus supporting H1, and this relationship is valid for both models and both conceptualizations ( $\beta = 0.426$ ;  $P \leq 0.01$  and  $\beta = 0.380$ ;  $P \leq 0.01$ ). The results are in line with the literature review and when employees perceive the presence of spirituality within their workplace they perform better (Rego & Cunha, 2008; Khan, 2015). However, when we add the EBIP dimension to the traditional construct, the coefficient shows a higher impact on individual productivity, which supports our initial proposition that EBIP contributes to increase the coherence of the construct and its capacity to explain the effects of SW.

According to the literature, meaningful work, a sense of connection with community and emotional balance and inner peace impact significantly on individual performance. The results show that SW experiences improve performance, and can be

stimulated through human resources policies and programs (Burack, 1999; Fry, 2003; Giacalone & Jurkiewicz, 2003; Paul et al., 2015).

Opportunities for inner life and alignment with the organization's values either do not impact significantly on individual productivity, or the impact is negative, in both cases. Maybe this is because workers tend to underestimate their own performance and overestimate their obligations, looking to continuously improve their individual efforts to enhance their performance

We can confirm that the impact of SW on individual productivity can be increased by adding EBIP to the concept. When a worker experiences the feelings expressed by this dimension they achieve an inner peace and trust, even in situations when things go wrong, and they are able to accomplish their job-related tasks, despite any challenging circumstances that would normally limit the ability to successfully achieve the proposed goals (Licata et al., 2003).

## **4.7 Conclusions, contributions and limitations**

### **4.7.1 Conclusions**

Maslow (1970) stated that humankind expected the development of SW. This study shows that when there is a spiritual environment at work, employees tend to feel intelligent and enterprising in the execution of their work. Therefore, they become more creative when it comes to find ways to perform better their jobs, and empowered to make things happen even when there are difficulties.

This study confirms the coherence and the reflexive character of the traditional SW concept, adds a new dimension, EBIP, and shows that the five dimensions fit well as a second-order variable. The modified model has a better fit and reinforces conceptual consistency. With the development and introduction of EBIP we have a more balanced operationalization of the concept and an additional explanation capacity.

The hypothesis test supports the positive impact of SW on individual productivity, valid for both models, but with an additional explanation capacity when we add EBIP.

### **4.7.2 Contributions**

The present research offers a new conceptualization for SW, adding the new dimension, EBIP, based on Maslow's ideas, who played a key role in the humanistic psychology movement with this more holistic picture of human being (O'Connor & Yballe, 2007). This new dimension may be an important finding for scholars and practitioners since organizations have to take care of both the mind and spirit of their employees to establish a genuine balance between the meaning of their lives and their work (Ashmos & Duchon, 2000). Getting back to Maslow's theory of needs, he recognizes that self-actualization implies the valences of the individual mind and spirit with the work component and this study confirms this fact. Second, this investigation shows that the traditional and the new model are significantly different and the new one reveals better conceptual consistency. Finally, the new dimension contributes to increase the coherence of the construct and its capacity to explain the effects of SW.

Our work suggests that the conceptualization of SW needs a new dimension to ensure the theoretical and practical consistency and balance of the concept. The final results show how this new dimension can reinforce both the balance of the traditional measurement and the explanation capacity of the impacts on employee outcomes such as individual productivity.

These findings are also important for managers in that they show new ways to run a company and to improve the ties between workers and their companies. Workers and managers alike are becoming independent brokers of their services and knowledge. Consequently, they are looking for values such as meaning, and personal, professional and even spiritual growth to better integrate their work, their lives and their personal expectations.

### **4.7.3 Limitations and recommendations for future work**

There are methodological limitations in this study, because the work is based on 'perceptions'. A perception is the process by which the individual organizes and interprets sensory impressions to give meaning to the surrounding environment. Consequently, individuals can perceive a reality other than the objective reality. Another limitation relates to the concept SW. The concept is still subject to different

perspectives and definitions, and this affects construct operationalization and measurement.

At the same time, predictive validity can be assessed using a dependent variable to test both measurement models and its predictive capacity. This limitation raises the opportunity for new research to ascertain the impacts of these measures on different samples, to test the presence of SW on the workers attitudes and behavior.

Future studies could adopt this conceptualization and these metrics to identify the impacts of SW on dependent variables such as absenteeism, burnout, organizational citizenship behavior, turnover, creativity, individual performance, and others. Variables such as trust, perceived organizational support, positive emotions, stress, can be tested as mediating variables. Another field where further research is needed is that of identifying the drivers of SW and finding the forces capable of reinforcing it.

## 4.8 References

- Aravamudhan, N. R. and Krishnaveni, R. (2015), "Spirituality at Work Place—An Emerging Template for Organization Capacity Building?", *Purushartha: A Journal of Management Ethics and Spirituality*, Vol. 7, pp. 1.
- Ashar, H. and Lane-Maher, M. (2004), "Success and spirituality in the New Business Paradigm", *Journal of Management Inquiry*, Vol. 13(3), pp. 249.
- Ashmos, D.P. and Duchon, D. (2000), "Spirituality at work: a conceptualization and measure", *Journal of Management Inquiry*, Vol. 9(2), pp. 134-145.
- Benefiel, M. (2003), "Mapping the terrain of spirituality in organizations research", *Journal of Organizational Change Management*, Vol. 16(4), pp. 367-377.
- Brophy, M. (2015), "Spirituality incorporated: Including convergent spiritual values in business", *Journal of Business Ethics*, Vol. 132(4), pp. 779-794.
- Burack, E. H. (1999), "Spirituality in the workplace", *Journal of Organizational Change Management*, Vol. 12(4), pp. 280-291.
- Cavanagh, G.F. and Bandsuch, M. R. (2002), "Virtue as a benchmark for spirituality in business", *Journal of Business Ethics*, Vol. 38(1), pp. 109-117.
- Conger, J.A. and Associates (1994), *Spirit at work: Discovering the Spirituality in Leadership*, San Francisco: Jossey-Bass Publishers.
- Daniel, J. L. (2015), "Workplace spirituality and stress: Evidence from Mexico and US", *Management Research Review*, Vol. (38), pp. 1, 29.
- Deshpande, A. (2012), "Workplace spirituality, organizational learning capabilities and mass customization: An integrated framework", *International Journal of Business and Management*, Vol. 7(5), pp. 3-18.
- Duchon, D. and Plowman D. A. (2005), "Nurturing the Spirit at Work: Impact on Work Unit Performance". *Leadership Quarterly*, Vol. 16(5), pp. 807–833.
- Fornaciari, C. J., Sherlock, J. J., Ritchie, W. J. and Kathy, L. D. (2005), "Scale Development Practices in the measurement of spirituality", *International Journal of Organizational Analysis*, Vol. 13(1), pp. 28-49.
- Fry, L. W. (2003), "Toward a theory of spiritual leadership", *Leadership Quarterly*, Vol. 14(6), pp. 693-727.

- Gavin, J.H. and Mason, R.O. (2004), "The virtuous organization: the value of happiness in the workplace", *Organizational Dynamics*, Vol. 33(4), pp. 379-92.
- Giacalone, R. A. and Jurkiewicz C.L. (2003), *The handbook of Workplace Spirituality and Organizational Performance*, M. E. Sharpe, Armonk, NY.
- Gull, G.A. and Doh, J. (2004), "The "Transmutation" of the Organization: Toward a More Spiritual work-place", *Journal of Management Inquiry*, Vol. 13(2), pp. 128.
- Gupta, M., Kumar, V. and Singh, M. (2014), "Creating Satisfied Employees through Workplace Spirituality: a study of the Private Insurance Sector in Punjab (India)" *Journal of Business Ethics*, Vol. 122, pp. 79-88.
- Hair, J. F. Jr., Anderson, R. E., Tatham, R. L. and Black, W.C. (2005), *Análise multivariada de dados*, (5a. ed.). Porto Alegre: Bookman, 2005.
- Hinkin, T.R. (1995), "A review of scale development practices in the study of organizations", *Journal of Management*, Vol. 21(5), pp. 967-88.
- Issa, T. and Pick, D. (2010), "Ethical mindsets: An australian study", *Journal of Business Ethics*, Vol. 96(4), pp. 613-629.
- Kaiser, H.F. (1974), "An Index of Factorial Simplicity", *Psychometrika*, Vol. 30(1), pp. 31-36.
- Khan, S. I. (2015), "Does affective commitment positively predict employee performance? Evidence from the banking industry of Bangladesh", *Journal of Developing Areas*, Vol. 49(6), pp. 429-439.
- Karakas, F. (2010), "Spirituality and Performance in Organizations: A Literature Review", *Journal of Business Ethics*, Vol. 94, pp. 89-106.
- Kinjerski, V. M. and Skrypnek, B. J. (2004), "Defining spirit at work: Finding common ground", *Journal of Organizational Change Management*, Vol. 17(1), pp. 26-42.
- Kolodinsky, R. W., Giacalone, R. A. and Jurkiewicz, C. L. (2008), "Workplace values and outcomes: Exploring personal, organizational, and interactive workplace spirituality", *Journal of Business Ethics*, Vol. 81(2), pp. 465-480.
- Koltko-Rivera, M.E. (2006), "Rediscovering the later version of Maslow's hierarchy of needs: self-transcendence and opportunities for theory, research, and unification", *Review of General Psychology*, Vol. 4, pp. 302-17.
- Krishnakumar, S. and Neck, C. P. (2002), "The "what", "why" and "how" of spirituality in the workplace". *Journal of Managerial Psychology*, Vol. 17(3), pp. 153-164.



- Licata, J. W., Mowen, J. C., Harris, E. G. and Brown, T. J. (2003), "On the trait antecedents and outcomes of service worker job resourcefulness: a hierarchical model approach", *Journal of the Academy of Marketing Science*, Vol. 31(3), pp. 256.
- Luthans, F. and Youssef, C. M. (2007), "Emerging positive organizational behavior", *Journal of Management*, Vol. 33(3), pp. 321-349.
- Mahakud, G. C. and Gangai, K. N. (2015), "The influence of workplace spirituality on organisational commitment among public sector employees", *Journal of Organisation and Human Behaviour*, Vol. 4(1)
- Maslow, A. (1970), *Religions, Values and Peak-Experiences*, Penguin Books, New York, U.S.A.
- Michaelson, C., Pratt, M.G., Grant, A.M. and Dunn, C.P. (2014), "Meaningful work: connecting Business Ethics and Organization Studies", *Journal Business Ethics*, Vol. 121, pp. 77-90.
- Milliman, J., Czaplewski, A. J., and Ferguson, J. (2003), "Workplace spirituality and employee work attitudes: An exploratory empirical assessment", *Journal of Organizational Change Management*, Vol. 16(4), pp. 426-447.
- Mitroff, I.I., and Denton, E.A. (1999), "A study of spirituality in the workplace", *Sloan Management Review*, Vol. 40, pp. 83-92.
- Moore, T.W. and Casper, W. J. (2006), "An examination of proxy measures of workplace spirituality: A profile model of multidimensional constructs", *Journal of Leadership and Organizational Studies*, Vol. 12(4), pp. 109-118.
- O'Connor, D. and Yballe, L. (2007), "Maslow Revised: Constructing a road map of human nature", *Journal of Management Education*, Vol. 31(6), pp. 738-756.
- Paul, M., Dutta, A. and Saha, P. (2015), "Workplace Spirituality and Work-Life Balance: A Study among Women Executives of IT Sector Companies", *International Journal of Management and Behavioral Sciences*, Vol. 6, pp. 267.
- Pavlovich, K. and Corner, P.D. (2014), "Specific spiritual practices can, over time, expanded consciousness, whereby, shared value creation becomes the focus of business", *Journal of Business Ethics*, 121. 341-351.
- Pawar, B. S. (2009), "Workplace Spirituality Facilitation: A Comprehensive Model", *Journal of Business Ethics*, Vol. 90, pp. 375-386.

- Petchsawang, P. and Duchon, D. (2009), "Measuring workplace spirituality in an Asian context", *Human resource development international*, Vol. 12(4), pp. 459-468.
- Rego, A., Souto, S. and Cunha, M.P. (2007), "Espiritualidade nas organizações, positividade e desempenho", *Comportamento Organizacional e Gestão*, Vol. 13(1), pp. 7-36.
- Rego, A. and Cunha M. P. (2008), "Workplace spirituality and organizational commitment: an empirical study", *Journal of Organizational Change Management*, Vol. 21(1), pp. 53-75.
- Roof, R. A. (2015), "The association of individual spirituality on employee engagement: The spirit at work", *Journal of Business Ethics*, Vol. 130(3), pp. 585-599.
- Shimazu, A., Schaufeli, W. B., Kamiyama, K. and Kawakami, N. (2015), "Workaholism vs. work engagement: the two different predictors of future well-being and performance", *International journal of behavioral medicine*, Vol. 22(1), pp. 18-23.
- Salarzahi, H., Aramesh, H. and Mohammadi, M. (2011), "Organizational spirituality and its impact on consumption model of employees in governmental organizations in Iran (case study)", *International Journal of Business and Management*, Vol. 6(1), pp. 137-144.
- Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A. and King, J. (2006), "Reporting structural equation modeling and confirmatory factor analysis results: A review", *The Journal of Educational Research*, 99(6), 323-337.
- Sheep, M. L. (2006), "Nurturing the whole person: the ethics of workplace spirituality in a society of organizations", *Journal of Business Ethics*, Vol. 66(4), pp. 357-375.
- Staples, D. S., Hulland, J. S. and Higgins, C.A. (1999), "A self-efficacy theory explanation for the management of remote workers in virtual organizations" *Organization Science*, Vol. 10(6), pp.758-776.
- Tischler, L. (1999), "The growing interest in spirituality in business. A long-term socio-economic explanation", *Journal of Organizational Change Management*, Vol. 12(4), pp. 273-279.
- Tombaugh, J. R., Mayfield, C. and Durand, R. (2011), "Spiritual expression at work: Exploring the active voice of workplace spirituality", *International Journal of Organizational Analysis*, Vol. 19(2), pp. 146-170.

Wright, T.A., Cropanzano, R. and Meyer, D.G. (2004), "State and Trait Correlates of the Job Performance: A Tale of Two Perspectives", *Journal of Business and Psychology*, Vol. 18(3), pp. 365.

Yeoman, R. (2014), "Conceptualizing meaningful work as a fundamental human need", *Journal of Business Ethics*, Vol. 125(2), pp. 235-251.



## **CHAPTER V – PAPER 2**

### **5.1 Title page**

**The impact of spirituality at work on workers' attitudes and individual performance**

**Maria Joelle Gonçalves**

**School of Economics, University of Coimbra**

**Portugal**

**Arnaldo Matos Coelho**

**School of Economics, University of Coimbra**

**Portugal**

## 5.2 Abstract and Keywords

### Abstract

This research aims to contribute to a better understanding of the concept of spirituality at work, based on Maslow's writings, introducing a new dimension, emotional balance and inner peace (EBIP) to enrich the traditional conceptualizations and a new mediator, job resourcefulness, in its relationship with performance. The final goal is to investigate how spirituality at work influences workers' attitudes. The proposed research model was tested using structural equation modeling and 273 valid questionnaires were collected.

According to the literature review and to the concept of spirituality, we concluded that there is room for the new dimension (EBIP), and we found that this new dimension influences job resourcefulness and affective commitment.

Job resourcefulness has a strong impact on individual performance and receives the impacts of spirituality at work and affective commitment. Job resourcefulness appears to be a better mediator in the relationship between SW and individual performance.

**Keywords:** spirituality at work, emotional balance and inner peace, attitudes, individual performance, Maslow.

## 5.3 Introduction

Many researchers emphasize the importance of spirituality at work (SW) within organizations (Burack, 1999; Butts, 1999; Ashmos & Duchon, 2000; Cavanagh & Bandsuch, 2002; Benefiel, 2003; Fry, 2003; Milliman, Czaplewski & Ferguson, 2003; Kinjerski & Skrypnek, 2004; Duchon & Plowman, 2005; Pawar, 2009; Karakas, 2010; Deshpande, 2012; Rego, Souto & Cunha, 2007; Rego & Cunha 2008; Gupta, Kumar & Singh, 2014; Pawar, 2014; Daniel, 2015), and this growing interest among academics, managers and the general public. Some authors state that this can be seen as a new paradigm change inside the organizational sciences and management thinking (Rego & Cunha, 2008; Karakas, 2010). This empirical study is expected to respond to the need

for more empirical work on this topic (Jurkiewicz & Giacalone, 2004; Geigle, 2012), knowing that there is still much disagreement and controversy about the concept, about the measures and about the impact of SW (Gupta et al., 2014). This study contributes to a better understanding of the concept, including conceptual issues, measurement and impacts on individual performance.

Our research set out to address some of these limitations in the following ways. First, we add a new dimension, named emotional balance and inner peace (EBIP) to traditional measurement models like those provided by Ashmos and Duchon (2000), Milliman et al. (2003), Duchon and Plowman (2005), Rego et al. (2007), Tombaugh et al. (2011). This new dimension is inspired by the writings of Maslow (1970), also explored by Cavanagh and Bandsuch (2002), O'Connor and Yballe (2007) and Tombaugh et al. (2011). Second, we develop a set of formal hypotheses in this new field concerning the relationship between SW and individual performance mediated by two attitudinal variables, affective commitment and job resourcefulness, a variable yet to be explored in this field. Specifically, from the worker perspective three aspects of organizations are examined: perceptions of SW, employees' attitudes and individual performance.

## **5.4 Research background and hypothesis development**

### **5.4.1 Spirituality at work and meaning**

Maslow's reflections in the human side of organizations may help address the critical role of spirituality and its meaning in the workplace, because there are several identifiable and distinct dimensions to self-actualization in Maslow's writings: the unique self, the peak experience and transcendence, spirituality and meaning, and the aesthetic-creative element (O'Connor & Yballe, 2007). For Maslow, self-actualization is not an endpoint but rather an ongoing process that involves dozens of small growth choices and a process that entails risk and requires courage (Ibid., 2007). The roots of our SW concept is based on Maslow's (1979) thinking which holds that the study of SW is appropriate in the field of science and establishes the border between spirituality and religion, as we quote:

I want to demonstrate that spiritual values have naturalistic meaning, that they are not the exclusive possession of organized churches, that they do not need supernatural concepts to validate them, that they are well within the jurisdiction of a suitable enlarged science, and that, therefore, they are the general responsibility of all mankind" ( p.4). The study of SW has its place in the management context as well, and it can be seen as an extension of the self-actualization dimension (Tischler, 1999).

Commenting upon the spirituality trend in global organizations, Ashmos and Duchon (2000: 134) stated: "Corporate America's growing interest in SW can be understood in relation to several trends in our society". Several factors underlie the call for this concept within organizations (Gotzis & Kortezi, 2008; Roof, 2015) and it may be seen as a reaction or an adaptation to a troubled environment (Shinde & Fleck, 2015).

The SW concept adopted in this study comes from the most well-known conceptualization developed by Ashmos and Duchon (2000) who established one of the first measures for the construct. They achieved an important foundational work (Benefiel, 2003), and the concept relies on four dimensions: sense of community within the team, alignment with organizational values, meaningful work, and opportunities for inner life. Meaning and purpose at work is about the connection between soul and work, based on the understanding of the job's meaning to workers and society as a whole. Sense of community is about the feeling of connectedness people develop with their coworkers. The alignment with organizational values is about the link between personal values and the organization's mission and purpose. Opportunities for inner life is about finding an opportunity at work to express many aspects of one's being, not just the ability to perform physical or intellectual tasks.

This multidimensional concept can be organized in three levels (Table 14) according to Milliman et al. (2003): the individual level, the group level and the organizational level. The individual level is the effort to find meaning and goals in working life, including the opportunities for inner life dimension. The group level is the strong relationship between employees and all other people who have any type of cooperation with them, corresponding to the sense of community dimension. And the organizational level is the link between the organization's beliefs, faith, and values (Salarzahi et al., 2011), corresponding to the alignment with organizational values dimension.



**Table 14 – The three SW levels**

Individual level	<ul style="list-style-type: none"> <li>• Meaningful work involves a deep sense of meaning and purpose in one’s work for workers and society as a whole (Ashmos &amp; Duchon, 2000; Milliman et al., 2003; Rego &amp; Cunha, 2008), including: sense of contribution to the community (items related to work that is congruent with personal life values and is helpful for the community) and sense of enjoyment at work (items related with a sense of joy and pleasure at work).</li> <li>• Opportunities for inner life is about finding an opportunity at work to express many aspects of one’s being, not just the ability to perform physical or intellectual tasks (Ashmos &amp; Duchon, 2000).</li> </ul>
Group level	<ul style="list-style-type: none"> <li>• Sense of connection with community. Work is a source of spiritual growth and connection to others (Rego &amp; Cunha, 2008; Daniel, 2015). The sense of connection with coworkers is a human goal at work (Pfeffer, 2003) because while money is important, it is not the most important goal for most people (Mitroff, 2003). Sense of community is described as the feeling of connectedness that workers develop with other coworkers (Daniel, 2015). Success can be described using terms such as being connected, balanced and wholeness (Ashar &amp; Lane-Maher, 2004).</li> </ul>
Organizational level	<ul style="list-style-type: none"> <li>• Alignment with an organization’s values is about the link between personal values and the organization’s mission and purpose (Rego &amp; Cunha, 2008). This dimension captures the workers’ perceptions and attitudes towards the values of their organizations (Ashmos &amp; Duchon, 2000).</li> </ul>

Source: developed by the authors based on literature review

Our study is in line with this framework, according to which SW is defined as the recognition that employees have an inner life that nourishes and is nourished by meaningful work that takes place in the context of a community (Ashmos & Duchon, 2000; Milliman et al. , 2003; Ashar & Lane-Maher, 2004; Duchon & Plowman, 2005; Rego et al., 2007; Rego & Cunha, 2008; Issa & Pick, 2010; Gupta et al., 2014; Daniel, 2015) to create a sense of connectedness, increasing collaboration between and within organizations, avoiding workaholic behavior and modeling a more balanced life (Ashar & Lane-Maher, 2004).

Work is a central question here because it is a way to understand the meaning of life (Ashmos & Duchon, 2000; Duchon & Plowman, 2005; Rego & Cunha, 2008; Yeoman, 2014; Roof, 2015) and organizational commitment can increase in a context where people experience SW (Rego & Cunha, 2008; Mahakud & Gangai, 2015). Every job has a particular meaning, but in this topic meaningful work goes beyond this question (Michaelson et al., 2014) and must be placed in the spirituality context (Milliman et al., 2003). Meaningful work is a dimension of SW (Rego & Cunha, 2008; Daniel, 2015), as it involves a deep sense of meaning and purpose in one's work (Milliman et al., 2003), especially when work occupies a central position in one's life, which often serves as a primary source of purpose, belongingness and identity (Michaelson et al., 2014). Meaningful work can nourish the worker's inner life and lead to a more meaningful outer life (Brown, 2003; Daniel, 2015). Meaningful work is an important concept for business ethics and organizational scholars (Michaelson et al., 2014), because SW is implicit in an organization (Brooke & Parker, 2009) where it encompasses doing a job with meaning, thinking about others, being involved in a community context (Ashar & Lane-Maher, 2004).

Disciplines such as human resource management and workplace spirituality have much to say about meaningful work (Michaelson et al., 2014). Schmidt-Wilk et al. (2000), found three domains in academic studies about spirituality: the first defines spirituality in personal terms, the second in applied aspects and the third in the characteristics of the spiritual organization. Ashar and Lane-Maher (2004) found a common element in these different domains: "spirituality is an innate and universal search for transcendent meaning in one's life" (2004: 5). Researchers and practitioners identify this new concept of SW by starting with the following questions:

How should spirituality in organizations be defined? What correlation can be established between an organization's spirituality and its financial performance? How is spirituality different from religion? What research methods are most appropriate for this work: quantitative, qualitative? Is it appropriate to measure spirituality in quantifiable units? (Benefiel, 2003: 367).

However, most recent research concentrates on spirituality outcomes such as productivity, commitment, job satisfaction and financial performance (Roof, 2015).

#### **5.4.2 Emotional balance and inner peace – A new dimension**

Literature shows evidence of different approaches to the concept SW (Pawar, 2009; Karakas, 2010; Gupta et al., 2014; Shinde & Fleck, 2014). Karakas (2010) found more than 70 definitions of SW and a lack of consensus is more than evident. However, perhaps because of this, the importance of SW is widely recognized in the human resources literature (Karakas, 2010; Deshpande, 2012; Brophy, 2015; Daniel, 2015) and further empirical investigation is needed to make the concept more robust and coherent (Rego & Cunha, 2008; Geigle, 2012; Gupta et al., 2014; Roof, 2015).

Our study is particularly concerned with the association of SW and human resources management and examines the impact of SW on employee attitudes. This can help managers to become better at improving the working conditions of their employees as well as furthering the quality of life of customers and society as a whole, when this new technology is used for monitoring and control (Rego & Cunha, 2008). In the human resources context, spirituality enhances employee well-being and quality of life, considering that the work-family balance is being seen as an important issue (Karakas, 2010). This study makes a particular contribution in this field, with relevant advances creating a new dimension for the SW concept based on Maslow's thinking, associated with aspects of an individual's life with the work life, looking for the right balance to insure emotional equilibrium and inner peace. The extension and robustness concept has never been fully explored (Koltko-Rivera, 2006). According to Cavanagh and Bandsuch (2002) and Fry and Altman (2009), personal well-being, life satisfaction, life balance and mental health are all expressions of SW but are not considered in the conceptualization or the measures.

Emotional balance and inner peace (EBIP) could be the fifth dimension that may bring out a strong affiliation with this understanding of spirituality. The presence of SW can help relieve stress among employees (Daniel, 2015), thereby enabling them to find personal balance and happiness (Cavanagh & Bandsuch, 2002; Fry, 2003; Fry & Altman, 2009), as well as to meet higher order needs (Quatro, 2004); these issues are not captured by other conceptualizations. This dimension measures the importance of happiness in achieving an inner peace and in sustaining trust when something goes wrong. If this dimension is added to the concept of SW we can create a clear connection between the individual and organizational levels, since employees with higher welfare

and better life balance are stronger and more persevering (Sanders III, Hopkins & Geroy, 2003).

Maslow's theory of needs recognizes that self-actualization implies the valences of the individual mind and spirit involved with the work component (Tischler, 1999; Moore & Casper, 2006). Butts (1999) employing the term "self-achievement" when referring to human growth and development, based on work.

SW is a source of energy empowering and transforming the life of daily work (Ottaway, 2003) and enhancing the well-being of the worker and their quality of life. If the organizational culture highlights these values, the employee's experience of transcendence through the working process will improve, and so their sense of being connected in a way that provides feelings of completeness and joy will be facilitated (Giacalone & Jurkiewicz, 2003).

Spirituality can provide an enormous source of energy, passion, and direction that gives meaning to a worker's life and provides an empowered feeling of success in both work and home life (Kauanui et al., 2010).

Accordingly, the conceptualization of spirituality in the organizational context should take into consideration the contribution of the organization and the work it provides to the employee's emotional balance and well-being. Thus, the introduction of this new dimension of emotional balance and inner peace, within this study, is expected to contribute to a more balanced operationalization of the concept. Data from this investigation show that adding this fifth dimension brings the expected balance and this five-dimension conceptualization fits well as a second order variable.

#### **5.4.3 The outcomes of spirituality at work**

There are clear links between success and spirituality in the new global economic order (Ashar & Lane-Maher, 2004). This focus on SW has been productive, showing significant relationships between SW and different organizational outcomes (Ashmos & Duchon, 2000; Milliman et al, 2003; Duchon & Plowman, 2005; Rego & Cunha, 2008; Crawford et al., 2009; Tombaugh et al., 2011; Mahakud & Gangai, 2015). Ashmos and Duchon (2000) developed this relationship from the first surveys of value-based SW. However, several variations of their approach have been incorporated into at

least five other investigations that have empirically assessed spirituality in organizations (Tombaugh et al., 2011) as can be seen in Table 15.

**Table 15 - SW impacts**

Milliman et al., 2003	Found that SW was related to several employee attitudes, including organizational commitment, intent to quit (negative correlation), job involvement, and work satisfaction.
Duchon & Plowman, 2005	Work unit performance was positively impacted when the work group climate met the employees' spiritual needs and values.
Rego & Cunha, 2008	Found a strong positive relationship between value-based SW and both the affective and normative organizational commitment expressed by employees.
Crawford et al., 2009	Reported significant correlations between a composite score of SW and several outcomes, including organizational commitment, intent to quit (negative correlation), intrinsic job satisfaction, job involvement and organization-based self-esteem
Stevision Dent & White, 2009	Found significant positive relationships between value-based SW and job attitudes, including job satisfaction and commitment.
Issa & Pick, 2010	Delineated an ethical mindset, and spirituality was one of the components identified.
Gupta et al., 2014	The authors found a positive relationship between SW and satisfied employees. SW based on 4 dimensions: Meaningful work, sense of community, organizational values and compassion.
Daniel, 2015	SW based on a 3-dimension conceptualization (Meaningful work, sense of community and inner life) can provide guidance for human resources managers to help prevent stress.

Source: developed by the authors based on literature review

SW has a positive impact on employee behavior and attitudes (Krishnakumar & Neck, 2002). SW extends beyond the logic and rational thoughts required in business: it lies deeper within the person, it deals with the perception of the mission and values, and it is the source of the best in each one of us (Lee & Zemke, 1993). On the other hand, specific spiritual practices like yoga may, over time, expand consciousness and with this knowledge shared value creation becomes the focus of business and could even lead companies to engage in social causes (Pavlovich & Corner, 2014).

#### **5.4.4 Spirituality at work and employee's attitudes**

Karakas (2010), in his descriptive study states that given the centrality of work to people's lives, it is understandable that individual well-being can suffer substantial problems from stress, boredom and workaholism, all of which can decrease productivity and increase levels of absenteeism and turnover. Increasingly, the world can be described as a 'society of organizations' and SW is a young area of research, potentially with strong relevance to the well-being of individuals, organizations, and societies (Sheep, 2006).

SW is related to employees' attitudes, organizational commitment, job involvement, and work satisfaction (Ashmos & Duchon, 2000; Milliman et al., 2003; Rego & Cunha, 2008; Crawford et al., 2009; Tombaugh et al., 2011). Several studies identify the role of job resourcefulness in such job outcomes as performance, satisfaction, and turnover intentions (Licata et al., 2003; Harris et al., 2006). However, although the relationship between SW and job resourcefulness has been suggested in these previous studies, this relationship is yet to be explored.

#### **5.4.5 Spirituality at work, job resourcefulness and performance**

An important personality trait that is applicable to the workplace context is job resourcefulness, which has been explained as "the enduring disposition to garner scarce resources in the pursuit of job-related goals" (Michel & Ashill, 2009). The same authors state that job resourcefulness is important to improving both efficiency and

effectiveness. Job resourcefulness is the ability of individuals to overcome obstacles and to achieve goals at work (Licata et al., 2003).

Organizations that promote SW create an environment where workers may find a meaning for their lives, and provide more hope, optimism, resilience, efficacy and efficiency (Rego et al., 2007). They also claim that the development of this personality trait creates opportunities for setting more ambitious targets, increasing availability to make further efforts, and for dealing better with stress and the problems and obstacles that arise in an organizational context. This means that SW could stimulate all the features that define job resourcefulness.

Licata et al. (2003) suggest that external influences such as work environment or organizational culture may influence job resourcefulness. Workers with more spirituality are expected to be more conscious about the meaning of life, stronger and persevering (Sanders III et al., 2003).

Consequently, SW should influence job resourcefulness insofar as it contributes to a different internal culture and to a different work environment, based on people's welfare, on a better balance between meaningful work and the meaning of life, and on an individual's involvement with the organization (Licata et al., 2003; Rego et al., 2007; Michel & Ashill, 2009). Therefore, the following hypothesis and sub-hypotheses are proposed:

H1: There is a positive relationship between SW and job resourcefulness.

Assuming the 5 dimensions of the construct SW, we can then present the following 5 sub-hypotheses:

H1a: There is a positive relationship between opportunities for inner life at work and job resourcefulness.

H1b: There is a positive relationship between meaningful work and job resourcefulness.

H1c: There is a positive relationship between sense of community in the workplace and job resourcefulness.

H1d: There is a positive relationship between alignment with organizational values and job resourcefulness.

H1e: There is a positive relationship between emotional balance and inner peace in the workplace and job resourcefulness.



The academic literature shows evidence of the influence of job resourcefulness on job performance. A job-resourceful employee is able to accomplish their job-related tasks despite the presence of challenging circumstances that would normally limit the ability to successfully perform those (Licata et al., 2003). Additionally, job resourcefulness may be, by definition, the right mediator in the relationship between SW and performance, because job resourcefulness corresponds to this willingness to make an extra effort to overcome difficulties and obstacles, and this can be translated into increased efficiency and effectiveness (Rego et al., 2007). It seems the right link to understand how SW transposes its effects to performance.

Job resourcefulness has been shown to significantly predict both self and supervisor ratings of work performance (Licata et al., 2003; Harris et al., 2006). Job resourcefulness also exerts a significant positive effect on service recovery performance (Michel & Ashill, 2009) and plays an important role in delivering higher performance services when dealing with service failures and customer dissatisfaction. We took a conceptualization of work performance divided into two main dimensions, taking absolute productivity as developed by Staples et al. (1999) and Rego et al. (2007) and measure of a relative performance, job performance, as suggested by Mott (1971) and Bamel, Rangnekar and Rastogi (2011), considering the need for studies that adopt productivity as a dependent variable (Rego & Cunha, 2008). Therefore, the following hypothesis is proposed:

H2: Job resourcefulness has a positive relationship with job performance.

H3: Job resourcefulness has a positive relationship with individual productivity.

#### **5.4.6 Spirituality at work, commitment and performance**

Academics as well as practitioners are attaching great importance to organizational commitment (Mowday & McDade, 1979; Allen & Meyer, 1990; McCaul et al., 1995; Wang, 2004; Rego et al., 2007; Khan, 2015; Mory et al., 2016). Organizational commitment is defined as “a psychological state that characterizes the relationship between an employee and the organization and reduces the likelihood that he/she will leave it” (Rego & Cunha, 2008: 59). According to Allen and Meyer (1990), the conceptualization of organizational commitment should comprise three major

dimensions: affective commitment, understood as an involvement with the organization and its values and goals, leading to the willingness to outperform on its behalf; continuance commitment, is the employee's perception of the cost of leaving the organization; and normative commitment, when the employee perceives they have an obligation to stay in the organization. Their work shows that organizational commitment entails emotional bonds and emotional ties among workers that foster loyalty and other related outcomes to the organization to which they belong.

Most of the literature gives priority to affective commitment as it stresses "the feelings of belonging and the sense of attachment to the organization" and is "related to the personal characteristics, leadership behaviors, and the organizational structures" (Demirtas & Akdogan, 2015: 61). Affective commitment is related to turnover intention (Chiu & Francesco, 2003), which may overlap with continuance commitment. Affective commitment is frequently the dimension adopted to mediate different variables' relationships with work related outcomes (Chiu & Francesco, 2003).

Apparently, affective commitment is considered the most important component of organizational commitment (Demirtas & Akdogan, 2015). Affective commitment is positively related to in-role performance because, being an emotional attachment, willingness to make an extra effort for the organization increases with it (Casimir et al., 2014). Moreover, according to the same authors, affective commitment leads to continuance intentions and also to normative commitment. Consequently, affective commitment is the dimension used in this study to express the effects of organizational commitment in the relationship between SW and performance, as in Milliman et al. (2003).

Several empirical studies show that SW has a positive impact on organizational commitment (Ashmos & Duchon, 2000; Milliman et al., 2003; Rego & Cunha, 2008; Kolodinsky et al., 2008; Fry & Altman, 2009). The implementation of spirituality programs in the workplace can have results at the individual level, increasing a worker's organizational commitment (Burack, 1999; Fry, 2003; Giacalone & Jurkiewicz, 2003). Karakas (2010) states that SW should be encouraged in order to enhance employee morale, commitment and productivity. Therefore, the following hypothesis is proposed:

H4: There is a positive relationship between SW and organizational affective commitment.

Assuming the 5 dimensions of the variable SW we should then present the following 5 sub hypotheses:

H4a: There is a positive relationship between opportunities for inner life at work and organizational affective commitment.

H4b: There is a positive relationship between meaningful work and organizational affective commitment.

H4c: There is a positive relationship between sense of community in the workplace and organizational affective commitment.

H4d: There is a positive relationship between alignment with organizational values and organizational affective commitment.

H4e: There is a positive relationship between emotional balance and inner peace in the workplace and organizational affective commitment.

Several studies show strong relationships between affective commitment and a broad range of desirable outcomes such as attendance and performance (Meyer et al., 2002; Rego & Cunha, 2008; Casimir et al., 2014; Solís et al., 2015). When employees are highly committed they tend to reciprocate by adopting more cooperative behaviors and actions like work effort and willingness to do their best for the organization (Casimir et al., 2014; Solís et al., 2015). According to the same authors, commitment and in-role performance are closely related. Consequently, Rego et al. (2007), Thamrin (2012), Fu and Deshpand (2014), Mahakud and Gangai (2015) and Solís et al. (2015) show that organizational commitment exerts an important influence on job performance and on individual productivity. Therefore, the following relationship is suggested:

H5: Organizational affective commitment has a positive relationship with job performance.

H6: Organizational affective commitment has a positive relationship with individual productivity.

#### **5.4.7 Organizational commitment and job resourcefulness**

The effects of organizational variables on self-rated individual performance are mediated through job resourcefulness and organizational commitment (Licata et al., 2003). In management discourse, commitment is a central variable, given that more committed people tend to make a greater effort at work, thus contributing to organizational performance when they perceive the presence of SW (Rego & Cunha, 2008). At the same time, job resourcefulness can be seen as the willingness to overcome all circumstances to accomplish job related tasks (Licata et al., 2003). According to Lankau et al. (2006), organizational commitment and job resourcefulness tend to evolve together. Individuals with higher organizational commitment are more likely to engage in behaviors which will benefit their organizations, as observed by Cullinan et al. (2008), who also state that organizational commitment has a positive impact on job resourcefulness.

This research proposes affective commitment as a mediator variable between SW and job resourcefulness, considering that with the encouragement of SW workers tend to be more honest and courageous, and these characteristics of job resourcefulness can promote commitment, which ultimately promotes performance (O'Connor & Yballe, 2007), through a climate of trust in the workplace (Burack, 1999), which is captured by the new EBIP dimension. Consequently, the following hypothesis is proposed:

H7: Organizational commitment has a positive relationship with job resourcefulness.

SW has been proposed to be positively related to employee work attitudes (Milliman et al., 2003) and individual performance (Rego et al., 2007). The conceptual model and the set of proposed hypotheses tested in our study are presented in Figure 1.

### **5.5 Method**

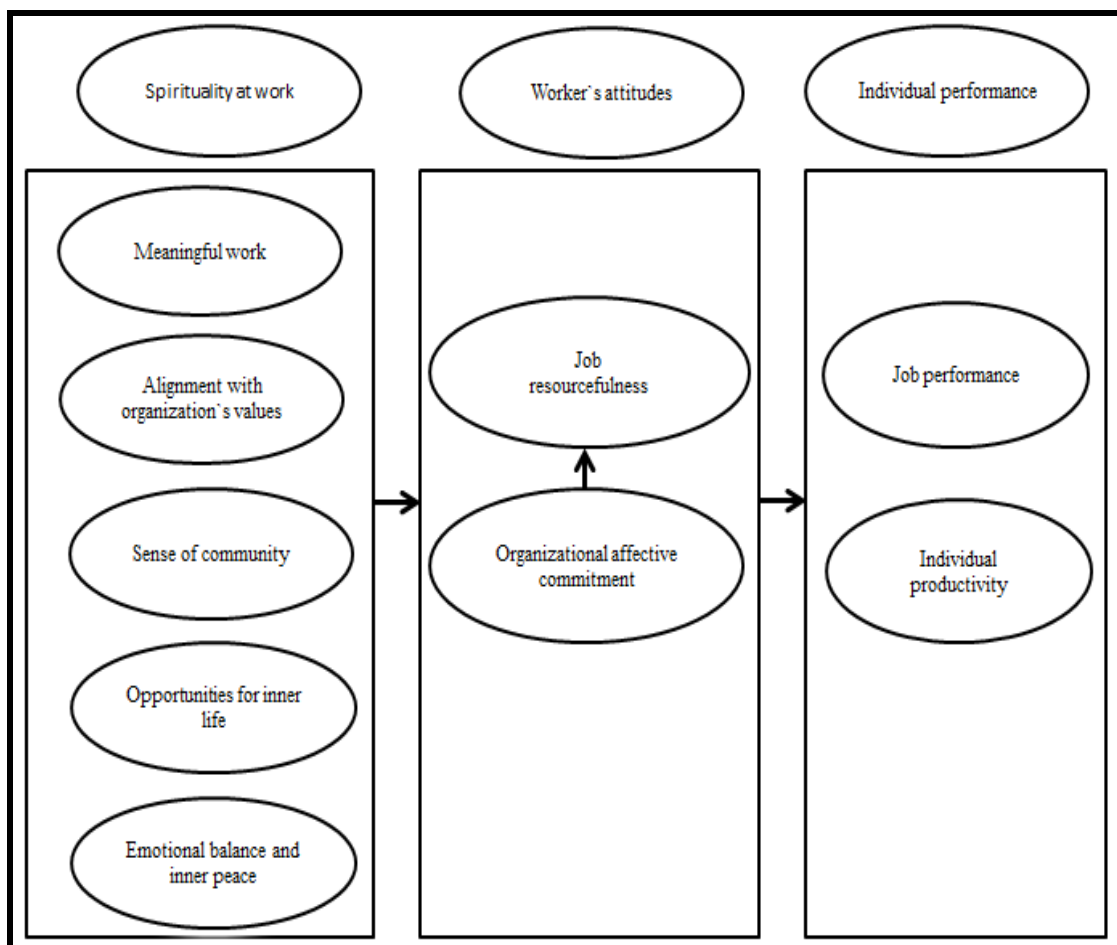
#### **5.5.1 Sample and data collection**

To test the proposed investigation model and the research hypotheses, data was collected based on a structured questionnaire, applied in Portugal. Questionnaires were sent out to individual workers and processed using the Internet. In total, 500 workers

were emailed, based on snowball sampling, and 273 completed questionnaires were returned, a response rate of 54.6%. Gupta et al. (2014) used a sample comprising workers from insurance companies and Komala and Ganesh (2007) used a sample based on healthcare workers. Rego and Cunha (2008) based their study on a cross-sector sample, Pawar (2014) used a sample of MBA participants to conduct his research and Daniel (2015) used a mixed sample of students and cross-sector workers. Accordingly, to test the new conceptualization we adopted a sample of cross-sector workers and no individual sector provided more than 10% of responses. The workers had different occupations (operator, technical expert, department director...). No gender differences were found in relation to spirituality variables or even behavior variables.

The sample population consists of people with an average age of 34.5 years, 43% had a bachelor's degree or higher and 25% were college graduates. The average period worked in the organization was 7.2 years. Figure 6 represents the conceptual model for this investigation.

**Figure 6 – Conceptual model**



Source: developed by the authors

### **5.5.2 Measures**

The variables used in this study are operationalized according to scales described in the literature. A new variable is added to the SW variable. The measures were based on a five-point Likert scale from 1 (“strongly disagree”) to 5 (“strongly agree”).

#### **Spirituality at work**

In this framework SW is measured based on 22 questions sub-divided into the following five dimensions: sense of connection with community (Ashmos & Duchon, 2000; Milliman et al., 2003; Daniel 2015), alignment with organizational values (Ashmos & Duchon, 2000; Milliman et al., 2003; Rego et al., 2007), meaning and purpose at work (Ashmos & Duchon, 2000; Milliman et al., 2003; Rego & Cunha, 2008; Daniel, 2015), opportunities for inner life (Ashmos & Duchon, 2000; Daniel, 2015) and emotional balance and inner peace, developed for this study (the scale was found to have excellent psychometric properties).

The sense of connection with community dimension within the team consists of five items, which are related to team spirit, mutual care between members, sense of community and sense of common purpose (Rego & Cunha, 2008). Statements like “the people in my team feel part of a family” or “my team work promotes the creation of a community spirit” were used. Cronbach’s alpha coefficient was 0.916.

The alignment with organizational values dimension consists of five items which are related to congruence between organizational values and the inner life of individuals (Ashmos & Duchon, 2000). Statements like “I feel good about the values that predominate in my organization” or “people feel good about their future in the organization” and “my organization respects my inner life” are used. Cronbach’s alpha coefficient is 0.889.

The meaningful work dimension was used by Milliman et al. (2003) and includes items that evaluate whether the work done by employees is considered to be important in their life and whether their work provides benefits for the whole society. Statements like “the work I perform is related to what I consider important for my life” or “when I work I feel that I am useful to society” are used. Cronbach’s alpha coefficient is 0.832.

The opportunities for inner life dimension measures employees' perceptions of the conditions for the development of spirituality in their companies. Statements like "my spiritual values are valued in my workplace" or "in my workplace there is no place for spirituality" are used. Cronbach's alpha coefficient is 0.854.

The dimension of emotional balance and inner peace includes six items to measure the psychological well-being nurtured by feelings such as happiness, peace and trust, felt by employees in their organizational context. Statements like "my work helps me feel at peace with myself" or "my work helps me to achieve my personal aspirations" are used. Cronbach's alpha coefficient is 0.941. Based on our conceptualization of SW, we developed an instrument that would enable us to observe and measure EBIP. The instrument was created based on a review of the literature. The next table (Table 16) shows the SW construct with the twenty-two items according to the literature review used in this study.

**Table 16 – SW Construct**

Emotional balance and inner peace	Sense of connection with community	Alignment with the organization's values	Meaning and purpose at work	Opportunities for inner life
My work helps me feeling at peace with myself	Feel there is a sense of being a part of a family	I feel positive about the values of the organization	Work is connected to what I think is important in life	My spiritual values are appreciated in my work
My work helps me find the right balance in my life	My team work encourages the presence of community spirit	I feel positive about my future with this organization	I see a connection between my work and the larger social good of my community	There is a room for spirituality in the workplace
My work helps me achieve a sense of accomplishment	I believe people support each other	My organization respects my inner life	When I work I feel that I am useful to society	In my workplace I can “nourish” my own spirituality
My work helps me achieve my full potential	I believe employees genuinely care about each other.	My organization help me to live at peace		
My work helps me to be more happy	I think employees are linked by a common purpose	My leadership cares about society		
My work helps me to be more self-confident even when everything goes wrong				

Source: developed by the authors based on literature review



We used deductive item generation to create the dimension, EBIP, based on a thorough literature review going back to Maslow, to confirm the need for this new dimension, to set its boundaries and to provide a basic identification of the possible items on this scale. At the same time, we conducted an investigation with several workers, managers and academicians to identify, confirm and test the items of the new dimension. To test whether EBIP was a viable construct, a six-item scale consistent with spirituality as a dynamic process was initially developed.

We performed an exploratory and confirmatory factor analysis to explore the factor structure of first-order latent variable EBIP. Discriminant and convergent validity were assessed, as shown in Table 17. We tested the new conceptualization we are proposing by performing a confirmatory factor analysis, taking SW as a second-order variable using four and then five dimensions. Comparing the results of the two conceptualizations, the addition of the EBIP dimension seems to introduce greater global coherence to the concept, and it presents one of the greatest factor loadings and contributes to a better balance between the different dimensions of the concept, too. The introduction of this new dimension makes the factor loadings more homogeneous.

**Table 17 - Discriminant Validity**

Standard Deviation; Square Correlations; Cronbach's Alpha; Composite Reliability; Average Variance Extrated								
	SD	X1	X2	X3	X4	X5	CR	AVE
<b>X1</b> Meaningful Work	0,775	0,832					0,84	0,64
<b>X2</b> Alignment with the Organization's Values	1,009	0,476	0,889				0,82	0,61
<b>X3</b> Sense of Community	0,912	0,388	0,692	0,916			0,89	0,74
<b>X4</b> Opportunities for Inner Life	0,914	0,413	0,627	0,454	0,854		0,86	0,68
<b>X5</b> Emotional Balance and Inner Peace	0,932	0,709	0,681	0,523	0,460	0,941	0,90	0,75

Obs: The principal diagonal presents Cronbach's Alpha; SD= Standard Deviation; CC= Composite reliability; VE= Variance extracted

Source: developed by the authors

### **Workers' attitudes**

Organizational affective commitment is measured using the scale developed by Meyer et al. (1993) and used by Moore and Casper (2006). Statements like "I would be very happy to spend the rest of my career with my organization" or "I really feel as if

this organization's problems are my own" are used. Cronbach's alpha coefficient is 0.813.

Job resourcefulness is measured using the scale developed by Licata et al., (2003), which is based on four items that are intended to capture the additional efforts that respondents are capable of making in their organizational context, when needed. Items like "I'm very clever and enterprising in doing my job" and "I'm a very resourceful person in finding ways to do my job" are used. Cronbach's alpha coefficient is 0.937.

### **Individual performance**

Job performance is measured using an adaptation of the scale of organizational effectiveness developed by Mott (1971) and used in recent studies (Vinit et al., 2005; Bamel et al., 2011). This scale is usually composed of three sub-scales - productivity, adaptability, and flexibility - with ten items. Participants were asked to rate their work relative to that of their co-workers. In our study, this scale was shown to have only one dimension. The scale is composed of items like "compared with your co-workers, who is more effective in adapting to changes in the workplace?" Cronbach's alpha coefficient is 0.886.

Individual productivity intends to measure productivity through self-description by respondents, using the scale developed by Staples et al., (1999), and adapted by Rego et al. (2007). Contrary to job performance, individual productivity seeks to measure the absolute productivity self-reported by respondents. The scale includes items like "I'm an effective employee". Cronbach's alpha coefficient is 0.800.

### **5.5.3 Model assessment**

Confirmatory factor analysis was used to assess the psychometric properties of the scales and the measurement model fit, using SPSS AMOS 21.0. Running a first confirmatory factor analysis considering the model with all variables, the fit indices were considered unsatisfactory. By analyzing the standardized residuals and modification indices related to misspecifications, a well-fitted 31-item model with nine dimensions emerged. The final model shows a good fit (IFI=0.941; TLI=0.932; CFI=0.940; RMSEA=0.049).

Composite reliability (CR) and the average variance extracted (AVE) were computed. All the scales showed values up to 0.7 on CR and up to 0.6 on AVE, which are in line with the recommendations (Hair et al., 2005). Discriminant validity is established when all correlations between the constructs are significantly smaller than 1 and the squared correlations calculated for each pair of constructs is always smaller than the variance extracted for corresponding constructs (Fornell & Larcker, 1981; Shiu et al., 2011), thereby confirming the discriminant validity presented in Table 4.

The new conceptualization we are proposing in addition to the global coherence introduced also contributes to a better balance of the different dimensions of the concept. We performed a second order model to compare the two conceptualizations. The introduction of this new dimension makes the factor loadings more homogeneous and more balanced, as shown in Table 18.

**Table 18 – Factor loadings of the second-order latent variable**

Factor loadings of the second-order latent variable, spirituality at work					
	Emotional balance and inner peace	Sense of community	Alignment with the organization's values	Meaningful work	Opportunities for inner life
New Model	0.804	0.703	0.885	0.653	0.649
Traditional Model		0.764	0.93	0.523	0.665

Source: developed by the authors

#### **5.5.4 Common method bias**

When self-administered questionnaires are used, a common variance bias problem can emerge or increase (Podsakoff et al., 2003). According to Podsakoff et al. (2003), the common method variance (CMV) tests will help with identifying the

existence of variables that can cause measurement errors and systematic biases in the estimation of the relationships between constructs.

Several statistical techniques and other procedures can be used to deal with this problem. These possibilities were taken care of when the measurement instrument was being developed. Each part of the questionnaire was clearly identified and information was given about the nature of the problem being measured and the wording of the statements was very carefully developed and tested. Finally, the respondents' anonymity was completely assured.

Additionally, the statistical procedures were developed to test for bias in the dataset caused by external factors. Based on the suggestions by Podsakoff and Organ (1986), a Harman's single factor test and a common latent factor (CLF) analysis were performed to capture the common variance among all observed variables in the model. The Harman's test showed that any factor could explain more than 22% of the variance and there were 13 factors with eigenvalues greater than 1, explaining 73% of the total variance. A confirmatory factor analysis was estimated restricting all items of the model to load on a common single factor (Podsakoff et al., 2003). The resulting fit indices show the model did not provide a good fit for the data: CMIN/DF=5.6; IFI=0.568; TLI=0.534; CFI=0.565, while the measurement model shows good fit indices (IFI=0.941; TLI=0.932; CFI=0.940; RMSEA=0.049). It therefore does not seem that common method variance influences the measurement and the estimation of the relationships.

## **5.6 Hypotheses test**

All hypotheses were tested using structural equation modeling, based on AMOS 21 (Table 19).

**Table 19 - Findings**

				Coefficients	t value	Significance
H1a	Job resourcefulness	←	Opportunities for inner life	.002	.026	not supported
H1b	Job resourcefulness	←	Meaningful work	.086	1.181	not supported
H1c	Job resourcefulness	←	Sense of community	.094	1.486	not supported
H1d	Job resourcefulness	←	Alignment with the organization's values	-.135	-2.632	**
H1e	Job resourcefulness	←	Emotional balance and inner peace	.190	2.110	*
H2	Job performance	←	Job resourcefulness	.498	6.753	***
H3	Individual productivity	←	Job resourcefulness	.719	9.813	***
H4a	Organizational affective commitment	←	Opportunities for inner life	-.089	-1.230	not supported
H4b	Organizational affective commitment	←	Meaningful work	.210	2.426	**
H4c	Organizational affective commitment	←	Sense of community	.146	1.848	*
H4d	Organizational affective commitment	←	Alignment with the organization's values	.523	4.304	***
H4e	Organizational affective commitment	←	Emotional balance and inner peace	.271	2.462	**
H5	Job performance	←	Organizational affective commitment	-.055	-1.647	*
H6	Individual productivity	←	Organizational affective commitment	.027	.762	not supported
H7	Job resourcefulness	←	Organizational affective commitment	.284	2.423	**

Note: Structural equation modeling analysis for the proposed model. GFI = .940, IFI = .941, TLI = .932, RMSEA = .049; \*\*\* $p < 0.001$ , \*\* $p < .01$ , \* $p < .05$ .

Source: developed by the authors

Note: structural equation modeling analysis for the proposed model.

Hypothesis H1 is only partially supported because only one dimension of SW shows a positive impact on job resourcefulness: EBIP ( $\beta = .19$ ;  $t = 2.11$ ;  $P \leq .05$ ), thus supporting H1e. Consequently, H1a, H1b, H1c, and H1d were not supported. However, alignment with organizational values has a significant but negative effect on job resourcefulness ( $\beta = -.315$ ;  $t = -2.632$ ;  $P \leq .01$ ).

Hypotheses H2 and H3 are supported. Job resourcefulness has a positive impact on job performance ( $\beta = .498$ ;  $t = 6.753$ ;  $P \leq .001$ ) and a positive impact on individual productivity ( $\beta = .719$ ;  $t = 9.813$ ;  $P \leq .001$ ).

Hypothesis H4 also receives only partial support because only four dimensions have a positive effect on organizational affective commitment: meaningful work ( $\beta = .21$ ;  $t = 2.426$ ;  $P \leq .01$ ); sense of community ( $\beta = .146$ ;  $t = 1.848$ ;  $P \leq .05$ ); alignment with organization's values ( $\beta = .523$ ;  $t = 4.304$ ;  $P \leq .001$ ); EMIP ( $\beta = .271$ ;  $t = 2.462$ ;

$P \leq .01$ ). These dimensions have a significant and positive effect on organizational affective commitment, thus supporting H4b, H4c, H4d, and H4e. Consequently, H4a is not supported.

Hypotheses H5 and H6 are not supported. In this study, organizational commitment has a significant but negative effect on job performance ( $\beta = -.055$ ;  $t = -1.647$ ;  $P \leq .05$ ) and no significant effect on individual productivity ( $\beta = .027$ ;  $t = .762$ ;  $P = .223$ ).

Hypothesis H7 is supported. In this study, organizational commitment has a significant and positive effect on job resourcefulness ( $\beta = .284$ ;  $t = 2.423$ ;  $P \leq .01$ ).

## **5.7 Discussion**

According to the tested hypotheses, H1 and H4, concerning SW, the results show that organizations do value SW and that this has a significant impact both on job resourcefulness and on affective commitment. These results were expected and are in keeping with the related literature (Ashmos & Duchon, 2000), and spirituality plays a significant role on the individual's welfare and on the work environment within organizations (Sheep, 2006; Rego & Cunha, 2008; Roof, 2015). The influence on job resourcefulness is both direct and via organizational commitment.

This research proposes affective commitment as a mediator variable because its impacts seem to be fairly indirect (Chiu & Francesco, 2003) and the results seem to support this idea. The findings of this study are in agreement with the literature review.

The new dimension proposed, EBIP, shows a positive impact on job resourcefulness and organizational affective commitment, confirming that when workers experience the feelings expressed in this dimension they achieve an inner peace and trust, even in situations when things go wrong. According to the literature and to this empirical study, if employees feel a higher welfare and a better life balance, they are more persevering (Sanders III et al., 2003) and better able to accomplish their job-related tasks, even in the presence of challenging circumstances that would normally limit the ability to successfully achieve the proposed goals (Licata et al., 2003). At the same time, EBIP seems to introduce more global coherence between the different dimensions of the SW concept, reinforcing the influence of SW on its outcomes and

supporting those who argue for a better SW conceptualization and measurement (Ashmos & Duchon 2000; Jurkiewicz & Giacalone, 2004; Rego & Cunha, 2008).

Considering the hypotheses related to job resourcefulness, the results show that those employees who revealed higher levels of job resourcefulness were also those who considered themselves to have greater individual performance and productivity, in line with previous studies (Licata et al., 2003; Harris et al., 2006).

Companies that report higher levels of SW are those in which employees may feel an affective commitment to the organization. According to the literature review, when employees are more affectively committed, they have an emotional attachment to the organization to which they belong and simultaneously feel stronger and more intelligent and creative in the execution of their work. Lankau et al. (2006) assume that organizational commitment and job resourcefulness tend to evolve together. When there's an emotional attachment, employees are more willing to make an extra effort, to exceed their own limits, and to do their best for the organization (Casimir et al., 2014; Licata et al., 2003).

The findings from the present research are very interesting since they show a significant and positive impact of job resourcefulness on individual performance, as expected. According to Sanders III et al. (2003), individuals with higher spirituality are more conscious about the meaning of life are stronger and persevering, and more willing to accomplish their tasks no matter how challenging the circumstances may be. Individuals with higher levels of job resource fullness how higher levels of individual productivity and job performance. However, this study did not corroborate the hypothesis concerning the relationship between affective commitment and job performance, which is not in line with the literature. The negative relationship found between these two variables is nevertheless understandable, because when employees feel very committed to the organization, they can tend to underestimate their own performance and overestimate their obligations, looking to continuously improve their individual efforts to enhance their performance. In fact, affective commitment showed a significant and strong impact on job resourcefulness, which means that the workers feel stronger and are motivated to overcome obstacles in pursuit of job related goals and hence to increase individual productivity and individual performance.

According to Khan (2015), the role of affective commitment can be contingent on context and there are different circumstances where affective commitment might not

predict individual performance, or just act as a mediator (Rego et al., 2007). As a matter of fact, according to our hypothesis, job resourcefulness (better than affective commitment, which didn't show a direct impact on performance) appears to be a better mediator than affective commitment, in this relationship between SW and performance. And EBIP seems to be the SW dimension that best expresses this impact on performance by measuring individual wellbeing and emotional balance. Consequently, this relationship between SW, affective commitment, and performance may be an indirect one, mediated by job resourcefulness. Job resourcefulness, by its nature, is a variable that seems particularly appropriate to understand how spirituality transfers its influence to job-related outcomes like individual performance and productivity. Adding the new dimension EBIP, we have shown that the concept is more homogeneous and balanced, and better predicts the two mediators, affective commitment and job resourcefulness.

## **5.8 Conclusions**

This investigation proposes a new conceptualization for SW, adding a new dimension that captures the importance of work on individual happiness and the achievement of inner peace. Although this has been addressed in the literature, it has not yet been operationalized (Sanders III et al., 2003). Ashmos and Duchon (2000) argue that organizations must take care of both the mind and spirit of their employees in order to establish a genuine balance between the meaning of their work and their life. Returning to Maslow's theory of needs, it can be seen that he recognizes that self-actualization implies the valences of the individual mind and spirit involved with the work component (Moore & Casper, 2006; Tischler, 1999) and our study confirms this fact. The research focus on work/life balance has revealed problems such as stress, boredom, and workaholism that are found when the work/life balance is not in equilibrium and that act to decrease productivity and increase levels of absenteeism (Karakas, 2010).

This investigation also found significant relationships between workplace spirituality and various organizational outcomes, such as job resourcefulness and affective commitment. The role of job resourcefulness in mediating the impacts of SW and individual performance seems particularly interesting. Affective commitment



becomes especially important when stimulating workers to overcome their limitations and be prepared to do their best for the organization, increasing their job resourcefulness in pursuit of their job-related goals.

In this study, SW is presented and discussed in the context of a new form of organizational culture which has the capacity to improve employee attitudes and make a substantial contribution to organizational stability and growth. It seems that there is a new paradigm in organizational sciences, particularly in management theory and practice (Karakas, 2010), one that is concerned with the need to find a sustainable, authentic, meaningful, holistic, and profound understanding of the existential self at work.

## **5.9 Contributions**

We set out to address some of the limitations identified in the literature in the following ways. First, we have added a new dimension, called EBIP to traditional measurement models like those provided by Ashmos and Duchon (2000), Milliman et al. (2003), Duchon and Plowman (2005), Rego et al. (2007), Tombaugh et al. (2011); it is inspired by the contributions of Maslow (1970), also explored by Cavanagh and Bandsuch (2002), O'Connor and Yballe (2007) and Tombaugh et al. (2011). Second, we have developed a set of formal hypotheses in this new field concerning the relationship between SW and individual performance, mediated by two attitudinal variables, affective commitment and job resourcefulness, the latter a variable yet to be explored in this field. Specifically, from the worker perspective, three aspects of organizations are examined: perceptions of SW, employees' attitudes, and individual performance.

This investigation provides a more complete conceptualization for SW based on the propositions of Ashmos and Duchon (2000), we have added a fifth dimension, EBIP, to their four-dimension proposal. The introduction of this new dimension seems to bring the SW concept more homogeneity and balance, on both the theoretical and practical sides, and reinforces the direct influence on workers' attitudes and the indirect influence on work-related outcomes like individual productivity. At the same time, we have introduced job resourcefulness as a mediator, and it seems a particularly appropriate variable to understand the chain of effects between SW and performance.

Additionally, human resources practitioners may find here additional reasons to use SW creatively. Moreover, we provide an explanation of how SW can be converted into effective outcomes like affective commitment and job resourcefulness, and thus into job performance. The implementation of spirituality programs in the workplace can increase workers' organizational commitment and job resourcefulness, and boost results at an individual and organizational level (Burack, 1999; Fry, 2003; Giacalone & Jurkiewicz, 2003; Rego & Cunha, 2008; Daniel, 2015).

### **5.10 Limitations and future investigation**

There are certain methodological limitations in this study, the first being that the work is based entirely on perceptions. A perception is the process by which the individual organizes and interprets sensory impressions in order to provide meaning to the surrounding environment. Consequently, individuals can perceive a reality in ways which are different from the objective reality. The second limitation is that the study collects dependent and independent variables from the same source. The third is that the concept of SW is itself still subject to different approaches and definitions that can affect how the construct is operationalized and measured.

Future studies could adopt other dependent variables such as absenteeism, burnout, organizational citizenship behavior, turnover, and wellbeing to test the impact of SW, while variables, such as trust, perceived organizational support, positive emotions, stress, can be considered as mediating variables. Equally, identifying the drivers of SW and finding the forces capable of reinforcing its effects represent another avenue where further research is needed.

## 5.11 References

- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63, 1–18.
- Ashar, H., & Lane-Maher, M. (2004). Success and spirituality in the new business paradigm. *Journal of Management Inquiry*, 13, 249–260.
- Ashmos, D. P., & Duchon, D. (2000). Spirituality at work: A conceptualization and measure. *Journal of Management Inquiry*, 9, 134–145.
- Bamel, U. K., Rangnekar, S., & Rastogi, R. (2011). Managerial effectiveness in Indian organizations: Reexamining an instrument in an Indian context. *Research & Practice in Human Resource Management*, 19, 69–79.
- Benefiel, M. (2003). Mapping the terrain of spirituality in organizations research. *Journal of Organizational Change Management*, 16, 367–377.
- Brooke, C., & Parker, S. (2009). Researching spirituality and meaning in the workplace. *The Electronic Journal of Business Research Methods*, 7(1), 1–10.
- Brophy, M. (2015). Spirituality incorporated: Including convergent spiritual values in business. *Journal of Business Ethics*, 132, 779–794.
- Brown, R. B. (2003). *Organizational spirituality: The sceptic's version*. *Organization*, 10, 393–400.
- Burack, E. H. (1999). Spirituality in the workplace. *Journal of Organizational Change Management*, 12, 280–291.
- Butts, D. (1999). Spirituality at work: An overview. *Journal of Organizational Change Management*, 12, 328–331.
- Casimir, G., Ngee, K. N., Yuan, W. K., & Ooi, G. (2014). The relationships amongst leader-member exchange, perceived organizational support, affective commitment, and in-role performance. *Leadership & Organization Development Journal*, 35, 366–385.
- Cavanagh, G. F., & Bandsuch, M. R. (2002). Virtue as a benchmark for spirituality in business. *Journal of Business Ethics*, 38, 109–117.
- Chiu, R. K., & Francesco, A. M. (2003). Dispositional traits and turnover intention: Examining the mediating role of job satisfaction and affective commitment. *International Journal of Manpower*, 24, 284–298.

- Crawford, A., Hubbard, S. S., Lonis-Shumate, S. R., & O'Neill, M. (2009). Workplace spirituality and employee attitudes within the lodging environment. *Journal of Human Resources in Hospitality and Tourism*, 8, 64–81.
- Cullinan, C. B. D., Farrar, R., & Lowe, D. (2008). Organization-harm vs. organization-gain ethical issues: An exploratory examination of the effects of organizational commitment. *Journal of Business Ethics*, 80, 225–235.
- Daniel, J. L. (2015). Workplace spirituality and stress: Evidence from Mexico and US. *Management Research Review*, 38, 29–43.
- Demirtas, O., & Akdogan, A. A. (2015). The effect of ethical leadership behavior on ethical climate, turnover intention, and affective commitment. *Journal of Business Ethics*, 130, 59–67.
- Deshpande, A. (2012). Workplace spirituality, organizational learning capabilities and mass customization: An integrated framework. *International Journal of Business and Management*, 7, 3–18.
- Duchon, D., & Plowman, D. A. (2005). Nurturing the spirit at work: Impact on work unit performance. *Leadership Quarterly*, 16, 807–833.
- Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39–50.
- Fry, L. W. (2003). Toward a theory of spiritual leadership. *Leadership Quarterly*, 14, 693–727.
- Fry, L. W., & Altman, Y. (2009). Maximizing the triple bottom line & spiritual leadership: The CEL story. Academy of Management. Retrieved 10, 2011, from <http://www.iispiritualleadership.com/files/SLTCELLAOM.pdf>
- Fu, W., & Deshpand, S. P. (2014). The impact of caring climate, job satisfaction, and organizational commitment on job performance of employees in a China's insurance company. *Journal of Business Ethics*, 124, 339–349.
- Geigle, D. (2012). Workplace spirituality empirical research: A literature review. *Business and Management Review*, 2, 14–27.
- Giacalone, R. A., & Jurkiewicz, C. L. (2003). The handbook of workplace spirituality and organizational performance. Armonk, NY: M. E. Sharpe. Gotzis, G., & Kortezi, Z.

(2008). Philosophical foundations of workplace spirituality: A critical approach. *Journal of Business Ethics*, 78, 575–600.

Gupta, M., Kumar, V., & Singh, M. (2014). Creating satisfied employees through workplace spirituality: A study of the private insurance sector in Punjab (India). *Journal of Business Ethics*, 122, 79–88.

Hair, J. F., Jr, Anderson, R. E., Tatham, R. L., & Black, W. C. (2005). *Análise multivariada de dados (5a ed.)* [Multivariate data analysis] 7th ed. (2010). Upper Saddle River: Prentice Hall. Porto Alegre: Bookman.

Harris, E. G., Artis, A. B., Walters, J. H., & Licata, J. W. (2006). Role stressors, service worker job resourcefulness, and job outcomes: An empirical analysis. *Journal of Business Research*, 59, 407–415. Issa, T., & Pick, D. (2010). Ethical mindsets: An Australian study. *Journal of Business Ethics*, 96, 613–629.

Jurkiewicz, C. L., & Giacalone, R. A. (2004). A values framework for measuring the impact of workplace spirituality. *Journal of Business Ethics*, 49, 129.

Karakas, F. (2010). Spirituality and performance in organizations: A literature review. *Journal of Business Ethics*, 94, 89–106.

Kauanui, S. K., Thomas, K. D., Rubens, A., & Sherman, C. L. (2010). Entrepreneurship and spirituality: A comparative analysis of entrepreneurs' motivation. *Journal of Small Business and Entrepreneurship*, 23, 621–635.

Khan, S. I. (2015). Does affective commitment positively predict employee performance? Evidence from the banking industry of Bangladesh. *Journal of Developing Areas*, 49, 429–439.

Kinjerski, V. M., & Skrypnek, B. J. (2004). Defining spirit at work: Finding common ground. *Journal of Organizational Change Management*, 17, 26–42.

Kolodinsky, R. W., Giacalone, R. A., & Jurkiewicz, C. L. (2008). Workplace values and outcomes: Exploring personal, organizational, and interactive workplace spirituality. *Journal of Business Ethics*, 81, 465–480.

Koltko-Rivera, M. E. (2006). Rediscovering the later version of Maslow's hierarchy of needs: Self-transcendence and opportunities for theory, research, and unification. *Review of General Psychology*, 10, 302–317.

- Komala, K., & Ganesh, L. S. (2007). Individual spirituality at work and its relationship with job satisfaction and burnout: An exploratory study among healthcare professionals. *The Business Review*, 7, 124–129.
- Krishnakumar, S., & Neck, C. P. (2002). The “what”, “why” and “how” of spirituality in the workplace”. *Journal of Managerial Psychology*, 17, 153–164.
- Lankau, M., Carlson, D. S., & Nielson, T. R. (2006). The mediating influence of role stressors in the relationship between mentoring and job attitudes. *Journal of Vocational Behavior*, 68, 308–322.
- Lee, C., & Zemke, R. (1993). The search for spirit in the workplace. *Training*, 30, 21–27.
- Licata, J. W., Mowen, J. C., Harris, E. G., & Brown, T. J. (2003). On the trait antecedents and outcomes of service worker job resourcefulness: A hierarchical model approach. *Journal of the Academy of Marketing Science*, 31, 256–271.
- Mahakud, G. C., & Gangai, K. N. (2015). The influence of workplace spirituality on organisational commitment among public sector employees. *Journal of Organisation and Human Behaviour*, 4, 37–46.
- Maslow, A. H. (1970). New introduction: Religious, values, and peak-experiences (new edition). *The Journal of Transpersonal Psychology*, 2, 83–90.
- McCaul, H. S., Hinsz, V. B., & McCaul, K. D. (1995). Assessing organizational commitment: An employee’s global attitude toward the organization. *The Journal of Applied Behavioral Science*, 31, 80–90.
- Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extensions and a test of a three-component conceptualization. *Journal of Applied Psychology*, 78, 538–551.
- Meyer, J. P., Stanley, D. J., & Topolnytsky, L. (2002). Affective, continuance and normative commitment to the organization: A meta-analysis of antecedents, correlates and consequences. *Journal of Vocational Behavior*, 61, 20–52.
- Michaelson, C., Pratt, M. G., Grant, A. M., & Dunn, C. P. (2014). Meaningful work: Connecting business ethics and organization studies. *Journal Business Ethics*, 121, 77–90.

- Michel, R., & Ashill, N. J. (2009). Symptoms of burnout and service recovery performance. *Managing Service Quality*, 19, 60–84.
- Milliman, J., Czaplewski, A. J., & Ferguson, J. (2003). Workplace spirituality and employee work attitudes: An exploratory empirical assessment. *Journal of Organizational Change Management*, 16, 426–447.
- Mitroff, I. I. (2003). Do not promote religion under the guise of spirituality. *Organization*, 10, 375–382.
- Moore, T. W., & Casper, W. J. (2006). An examination of proxy measures of workplace spirituality: A profile model of multidimensional constructs. *Journal of Leadership & Organizational Studies*, 12, 109–118.
- Mory, L., Wirtz, B. W., & Göttel, V. (2016). Factors of internal corporate social responsibility and the effect on organizational commitment. *The International Journal of Human Resource Management*, 27, 1393–1425.
- Mott, P. E. (1971). *The characteristics of effective organizations*. New York, NY: Harper and Row.
- Mowday, R. T., & McDade, T. W. (1979). Linking behavioral and attitudinal commitment: A longitudinal analysis of job choice and job attitudes. *Academy of Management Proceedings*, 1, 84–88.
- O'Connor, D., & Yballe, L. (2007). Maslow revised: Constructing a road map of human nature. *Journal of Management Education*, 31, 738–756.
- Ottaway, R. N. (2003). Defining spirituality of work. *International Journal of Value – Based Management*, 16, 23–23.
- Pavlovich, K., & Corner, P. D. (2014). Conscious enterprise emergence: Shared value creation through expanded conscious awareness. *Journal of Business Ethics*, 121, 341–351.
- Pawar, B. S. (2009). Workplace spirituality facilitation: A comprehensive model. *Journal of Business Ethics*, 90, 375–386.
- Pawar, B. S. (2014). Leadership spiritual behaviors towards subordinates: An empirical examination of the effects of a leader's individual spirituality and organizational spirituality. *Journal of Business Ethics*, 122, 439–452.

- Pfeffer, J. (2003). "Business and spirit: Management practices that sustain values." In R. A. Giacalone & C. L. Jurkiewicz (Eds.), *The handbook of workplace spirituality and organizational performance* (pp. 27–43). Armonk, NY: M.E. Sharpe.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879–903.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12, 531–544.
- Quatro, S. A. (2004). New age or age old: Classical management theory and traditional organized religion as underpinnings of the contemporary organizational spirituality movement. *Human Resource Development Review*, 3, 228–249.
- Rego, A., & Cunha, M. P. (2008). Workplace spirituality and organizational commitment: An empirical study. *Journal of Organizational Change Management*, 21, 53–75.
- Rego, A., Souto, S., & Cunha, M. P. (2007). Spirituality in organizations, positivity and performance. *Organizational Behavior and Management*, 13, 7–36.
- Roof, R. A. (2015). The association of individual spirituality on employee engagement: The spirit at work. *Journal of Business Ethics*, 130, 585–599.
- Salarzahi, H., Aramesh, H., & Mohammadi, M. (2011). Organizational spirituality and its impact on consumption model of employees in governmental organizations in Iran (case study). *International Journal of Business and Management*, 6, 137–144.
- Sanders III, J. E., Hopkins, W. E., & Geroy, G. D. (2003). From transactional to transcendental: Toward a and integrated theory of leadership. *Journal of Leadership and Organizational Studies*, 9, 21–31.
- Schmidt-Wilk, J., Heaton, D. P., & Steingard, D. (2000). Higher education for higher consciousness: Maharishi University of management as a model for spirituality. *Journal of Management Education*, 24, 580–612.
- Sheep, M. L. (2006). Nurturing the whole person: The ethics of workplace spirituality in a society of organizations. *Journal of Business Ethics*, 66, 357–375.



- Shinde, U., & Fleck, E. (2015). What spirituality can bring to leaders and managers: Enabling creativity, empathy and a stress free workplace. *Journal of Organizational Psychology*, 15, 101.
- Shiu, E. M. K., Walsh, G., Hassan, L. M., & Shaw, D. (2011). Consumer uncertainty, revisited. *Psychology and Marketing*, 28, 584–607.
- Solís, E., Rogelio, R., & Monroy, V. I. B. (2015). Between love and war: The effects of affective commitment in organizational politics and organizational performance. *Journal of Organizational Culture, Communication and Conflict*, 19, 69–92.
- Staples, D. S., Hulland, J. S., & Higgins, C. A. (1999). A self-efficacy theory explanation for the management of remote workers in virtual organizations. *Organization Science*, 10, 758–776.
- Stevision, M., Dent, E., & White, D. (2009). Toward a greater understanding of spirit at work: a model of spirit at work and outcomes. *Academy of Management Proceedings*, 1, 1–6.
- Thamrin, H. M. (2012). The influence of transformational leadership and organizational commitment on job satisfaction and employee performance. *International Journal of Innovation, Management and Technology*, 3, 566–572.
- Tischler, L. (1999). The growing interest in spirituality in business a long-term socio-economic explanation. *Journal of Organizational Change Management*, 12, 273–279.
- Tombaugh, J. R., Mayfield, C., & Durand, R. (2011). Spiritual expression at work: Exploring the active voice of workplace spirituality. *International Journal of Organizational Analysis*, 19, 146–170.
- Vinit, S. C., Dhar, U., & Pathak, R. D. (2005). Factorial constitution of managerial effectiveness: Re-examining an instrument in Indian context. *Journal of Managerial Psychology*, 20, 164–177.
- Wang, Y. (2004). Observations on the organizational commitment of Chinese employees: Comparative studies of state-owned enterprises and foreign-invested enterprises. *International Journal of Human Resource Management*, 15, 649–669.
- Yeoman, R. (2014). Conceptualizing meaningful work as a fundamental human need. *Journal of Business Ethics*, 125, 235–251.



## **CHAPTER VI – PAPER 3**

### **6.1 Title page**

**The impact of a spiritual environment on performance mediated by job resourcefulness**

**Maria Joelle**

**School of Economics, University of Coimbra**

**Portugal**

**Arnaldo Matos Coelho**

**School of Economics, University of Coimbra**

**Portugal**

## 6.2 Abstract and keywords

### Abstract

**Purpose** – The present study was developed as a response to the call for investigation on spirituality at work. The purpose of the current paper is to explore and present the process of management as viewed through the lens of spirituality in the workplace.

The aim is to identify the influence of a spiritual environment on individual performance, mediated by job resourcefulness. The moderate role of affective commitment was considered.

**Design/methodology/approach** – Structural equation modeling was used as the statistical tool. The total sample size consisted of 273 individuals from Portugal.

**Findings** – The results show that with the implementation of a spirituality culture, this fact increases the presence of spirituality at work and the individual performance, mediated by job resourcefulness.

**Research limitations/implications** – There are methodological limitations in this study, because the work is based on ‘perceptions’. Consequently, individuals can perceive a reality other than the objective reality. Another limitation is about the concept of spirituality at work, considering it is still subject to different perspectives and definitions, and this affects construct operationalization and measurement.

**Practical implications** – The findings can provide fundamental guidance for managers, academics and business specialists to implement a set of practices that promote the presence of spirituality at work as a new management tool to run a company.

**Originality/value** – This study contributes to the understanding of the concept of spirituality at work which, together with spiritual practices, contributes to a spiritual

environment, impacting on different work related outcomes like individual performance, mediated by job resourcefulness.

**Keywords:** Spiritual practices, spirituality at work, Maslow, attitudes, individual performance.

**Paper type:** Research paper

### 6.3 Introduction

The purpose of the current paper is to explore and present the management process as viewed through the lens of spirituality in the workplace, where it has become increasingly important in recent times (Neal, 2013; Shinde & Fleck, 2015). It also aims to compensate for the lack of empirical studies, analyzing key areas of the more comprehensive framework of spirituality at work (SW) and spiritual practices at work (SPW), measures, performance variables, mediating and moderating variables. It introduces a new perspective on this topic, based on a literature review: management art. The SW literature review aims to explore how some practices can improve SW, such as job resourcefulness (JR), and the impact on job performance (JP) and individual productivity (IP) mediating by JR and moderating by organizational affective commitment (OAC).

The context of this investigation is about “life at work” and the new forms of organizational culture required to improve the human experience at work and to reach stability and organizational performance. In the past few years, SW has been seen as a critical multidimensional concept in academic and workplace contexts (Ashmos & Duchon, 2000; Milliman et al., 2003; Rego & Cunha, 2008; Karakas, 2010; Daniel, 2015). This fact could be explained by the findings of different studies that demonstrated how SW can be measured and defined (Ashmos & Duchon, 2000; Milliman et al., 2003; Gupta et al., 2014), as the positive impacts on workers’ attitudes and performance (Rego & Cunha, 2008; Salarzahi et al., 2011; Daniel, 2015).

SW has been seen as a prominent topic in the contemporary business world, as well as in the academic context (Quatro, 2004). This research aims to respond to the

need for more empirical studies in the following way. First, we have added a new dimension we call SPW, inspired by the literature review and developed in previous research (Schmidt-Wilk et al., 2000; Joelle & Coelho, 2017). Second, we have developed a set of formal hypotheses in this new field concerning the relationship between SPW and SW and IP mediated by JR. And we have chosen affective commitment as the dimension to express the effects of organizational commitment, as a moderator variable, in the relationships between the dimensions of the conceptual model. Specifically, the aspects of organizations are examined from the worker perspective: perceptions of SPW and SW, employees' attitudes and IP.

## **6.4 Theoretical background**

### **6.4.1 Spirituality at work definition**

There are many ways to define the SW concept (Sheep, 2006; Karakas, 2010; Gupta et al., 2014). Despite numerous efforts to understand its meaning in an academic context, most researchers do not yet know what it really means (Shinde & Fleck, 2015), and several authors have proposed definitions for SW (Daniel, 2015).

SW is not about religion (Gupta et al., 2014), conversion or about getting people to accept a specific belief system (Ashmos & Duchon, 2000; Roof, 2015). SW is a construct of a multidimensional nature that is definable and measurable (Rego & Cunha, 2008; Roof, 2015), and the literature shows different ways to define and understand it.

The roots of our SW concept are based on Maslow's (1970) thinking which holds that the study of SW is appropriate in the field of science and establishes the boundary between spirituality and religion, as we quote:

I want to demonstrate that spiritual values have naturalistic meaning, that they are not the exclusive possession of organized churches, that they do not need supernatural concepts to validate them, that they are well within the jurisdiction of a suitable enlarged science, and that, therefore, they are the general responsibility of all mankind" (Maslow, 1970: 4).

SW has its place in the management context with a special interest (Roof, 2015), and it can be seen as an extension of the self-actualization dimension (Tischler, 1999). Maslow's theory of needs recognizes that self-actualization implies the valences of the individual mind and spirit involved with the work component (Tischler, 1999; Moore &

Casper, 2006). Considering this fact, this research adopts a multidimensional concept, like other authors (Rego & Cunha, 2008; Gupta et al., 2014; Daniel, 2015).

SW is the recognition that employees have an inner life that nourishes and is nourished by meaningful work that takes place in the context of a community and a sense of alignment of the team with organizational values (Ashmos & Duchon, 2000; Milliman et al., 2003; Duchon & Plowman, 2005; Rego & Cunha, 2008; Issa & Pick, 2010; Gupta et al., 2014; Daniel, 2015; Joelle & Coelho, 2017) with a strong sense of emotional balance and inner peace (Ibid, 2017).

There are different approaches to SW in the literature (Pawar, 2009), and the importance of SW in the management field is widely recognized (Pawar, 2009; Deshpande, 2012; Gupta et al., 2014; Daniel, 2015; Roof, 2015; Aravamudhan & Krishnaveni, 2015). There are more than 70 SW definitions in the literature (Karakas, 2010), but SW is being explored as a multidimensional concept mostly derived from the work of Ashmos and Duchon (2000). They explored this topic and developed an empirical study containing new ways to measure SW, and they have been considered the first authors to produce a serious approach to SW (Milliman et al., 2003; Tombaugh et al., 2011; Brophy, 2015). Table 20 summarizes the main conceptualizations of SW.

**Table 20 – Dimensions of SW**

<b>Authors</b>	<b>Dimensions of SW</b>
Ashmos & Duchon, 2000	Inner life, meaningful work, sense of community.
Milliman et al., 2003	Meaningful work, community, alignment with organizational values.
Kinjerski & Skrypnek , 2004	One's work makes a contribution, sense of connection to others and common purpose, a sense of connection to something larger than self, and a sense of perfection and transcendence.
Duchon & Plowman, 2005	Inner life, meaningful work, sense of community.
Rego & Cunha, 2008	Team's sense of community, alignment with organizational values, sense of contribution to society, enjoyment at work, opportunities for inner life.
Petchsawang & Duchon, 2009	Connection, compassion, mindfulness, meaningful work and transcendence.
Karakas, 2010	Employee well-being, sense of meaning and purpose, sense of community and interconnectedness.
Gupta et al., 2014	Meaningful work, sense of community, organizational values, and compassion.
Daniel, 2015	Inner life, meaningful work and sense of community.
Joelle & Coelho, 2017	Inner life, meaningful work, sense of community, alignment with organizational values, emotional balance and inner peace.

Source: Developed by the authors based on published literature



The concept of SW may rely on a set of five dimensions, sense of community within the team, alignment with organizational values, meaningful work, opportunities for inner life, emotional and inner peace organized in three different levels (Table 21).

**Table 21 – Conceptualizing SW**

Individual level	<p>Meaningful work involves a deep sense of meaning and purpose in one’s work, for workers and society as a whole (Ashmos and Duchon, 2000; Milliman et al., 2003; Rego &amp; Cunha, 2008), including: sense of contribution to the community (items related to work that coincides with personal life values and is helpful for the community) and sense of enjoyment at work (items related to a sense of joy and pleasure at work).</p> <p>Opportunities for inner life is about finding an opportunity at work to express many aspects of one’s being, not just the ability to perform physical or intellectual tasks (Ashmos &amp; Duchon, 2000).</p>
Group level	<p>Sense of community. The sense of connection with coworkers is a human goal at work because although money is important it is not the most important goal for most people (Mitroff, 2003). Sense of community is described as the feeling of connectedness that workers develop with other coworkers (Daniel, 2015).</p>
Organizational level	<p>Alignment with organization’s values is about the link between personal values and organization’s mission and purpose (Rego &amp; Cunha, 2008). This dimension captures the workers’ perceptions and attitudes towards the values of their organizations (Ashmos &amp; Duchon, 2000).</p> <p>Emotional balance and inner peace is connection between the individual and organizational levels, since employees with higher welfare and better life balance are stronger and more persevering (Sanders III, Hopkins &amp; Geroy,2003; Joelle &amp; Coelho, 2017). This dimension measures the importance of happiness in achieving an inner peace and in sustaining trust when something goes wrong (Joelle &amp; Coelho, 2017)</p>

Source: Developed by the authors based on published literature (Milliman et al. 2003)

#### **6.4.2 Management art, spiritual practices at work (SPW) and SW**

Business and workplaces can play a fundamental role in promoting more peaceful societies and in reducing violence in society through various practices that increase the presence of SW to create a sense of community (Bishara & Schipani,

2010). They can also develop the view of management as “management art” (Atkinson, 2008).

The practice of management can be seen as an artistic activity rather than a rationalist picture (Degot, 1987). Atkinson (2007) explained the relation between art and management using an arts-based metaphor for the practice of management. In the context of management or leading an organization, this approach is not concerned with a set of skills and competences but with developing an aesthetic sensibility, necessary for a successful “managers art”, as the artist-leaders do when they are producing an art form (Atkinson, 2007).

The implementation of spiritual programs in the workplace can boost results at the individual level, such as self-efficacy, greater willingness to cooperate, grow, learn and adapt to challenges (Trott III, 1996), and increase organizational commitment of workers (Trott III, 1996; Burack, 1999; Fry, 2003; Giacalone & Jurkiewicz, 2003). A growing number of organizations have implemented spiritual practices that include rooms for Bible, Quran or Torah study, prayer groups, having “higher power lunches”, forming interfaith groups, organizing reflection groups and offering meditation exercises, in companies like Intel and Coca-Cola (Karakas, 2010). A recent meta-analysis published in the Journal of American Medical Association suggests meditation as a spiritual practice that can reduce stress (Goyal et al., 2014; Shinde & Fleck, 2015) as shown by Schneider, Alexander, Salerno, Rainforth and Nidich (2005) as an effective relaxation practice.

A spiritual work is created when company respects diversity in cultures and the personal values of employees, and implements employee development programs, employee participation in decision making, impartial behavior from senior employees, and healthy employer-employee relations (Gupta et al., 2014), essential for management art. In addition, health programs, hygiene and food education, when introduced within organizations, promote a sense of community (SW dimension) living with less stress (Bishara & Schipani, 2010), one of the dimensions of spirituality.

Literature lacks an assessment of the adoption of these spiritual practices as well as an empirical investigation of its impacts on SW and other work related attitudes, like JR or organizational commitment (Rego & Cunha, 2008; Karakas, 2010). Practices such as fitness (SPW1), relaxation practice (SPW2), meditation (SPW3), reiki (SPW4), health programs, hygiene and food education (SPW5), yoga (SPW6), pilates (SPW7),

dance (SPW8), diversity support programs (SPW9), music (SPW10), are being progressively adopted by companies such as Coca-Cola, Intel, Boeing and Sears (Karakas, 2010).

These practices individually or all together stimulate well-being and quality life in the workplace, job satisfaction and SW (Sirgy et al., 2008; Karakas, 2010). The practices adopted by each organization depend on its approach and on its beliefs as to what may be most effective to boost SW. According to Mitroff (2003) spirituality is inclusive, tolerant, universal and open-minded, and there are different ways to stimulate and increase SW. None of the practices identified here belong to any specific belief system but they all seem to lead organizations in the right direction, towards a stronger SW (Ashforth & Pratt, 2003; Karakas, 2010; Gupta et al., 2014)

#### **6.4.3 Spirituality at work impacts**

In this paper the authors propose SPW as a key antecedent for the development of SW and JR, as other authors have demonstrated that voluntary programs have had higher profits and success (Karakas, 2010).

SW has a positive impact on employee behavior and attitude (Krishnakumar & Neck, 2002). SW extends beyond the logic and rational thoughts required in business: it lies deeper within the person, it deals with the perception of the mission and values, and it is the source of the best in each one of us (Lee & Zemke, 1993). That is why specific spiritual practices like yoga may over time expand consciousness, and with this knowledge shared value creation becomes the focus of business and could even lead companies to engage in social causes (Pavlovich & Corner, 2014).

Therefore, as claimed by Jurkiewicz and Giacalone (2004), Karakas (2010), Shinde and Fleck (2015) there are many forms, meaning spiritual practices that increase the company SW:

H1. There is a positive relationship between SPW and SW

#### **6.4.4 SPW, SW and JR**

##### **The mediating role of JR**

JR is the ability of individuals to overcome obstacles and to achieve goals at work (Licata et al., 2003) and an important personality trait that is applicable to the workplace context (Michel & Ashill, 2009). The same authors state that JR is important for improving both efficiency and effectiveness, given that this personality trait results from the combination of the effects of elemental traits (e.g. extroversion/introversion, conscientiousness, openness to experience, emotional stability and agreeableness), compound traits (e.g. need for activity) and the enduring pressures to act resulting from the influence of the situational context.

SW is related to employees' attitudes, organizational commitment, job involvement and work satisfaction (Ashmos & Duchon, 2000; Milliman et al., 2003; Crawford et al., 2009; Rego & Cunha, 2008; Tombaugh et al., 2011). Several studies identify the role of JR in job outcomes such as performance, satisfaction, and turnover intentions (Licata et al., 2003; Harris et al., 2006).

Organizations that promote SW create an environment where workers can find a meaning for their lives, and provide more hope, optimism, resilience, efficacy and efficiency (Rego et al., 2007) as a fundamental human need (Yeoman, 2014). They also claim that the development of this personality trait creates opportunities for setting more ambitious targets, increasing availability to make further efforts, and for dealing better with stress and the problems and obstacles that arise in an organizational context. This means that SW could stimulate all the features that define JR.

Licata et al. (2003) suggest that external influences such as work environment or organizational culture can influence JR. Workers with more spirituality are expected to be more conscious about the meaning of life, stronger and persevering (Sanders III et al., 2003). Consequently, SW should influence JR insofar as it contributes to a different internal culture and to a different work environment, based on people's welfare, on a better balance between meaningful work and the meaning of life, and on the involvement of the individual with the organization (Licata et al., 2003; Rego et al., 2007; Michel & Ashill, 2009). Therefore, the following hypothesis is proposed:

H2. There is a positive relationship between SW and JR.

Spiritual practices in general, such as meditation, yoga or dance, can make workers more resilient (Michel & Ashill, 2009) and better able to carry out their tasks (Lutz et al., 2008), given that they feel fulfilled, producing more and absencing themselves less (Suárez, 2015). Therefore, the following hypothesis is proposed:

H3. There is a positive relationship between SPW and JR.

### **JR and performance**

Perceptions about the presence of a spiritual culture can explain job performance and productivity (Rego et al., 2007), but as those authors suggested, more empirical studies are needed to understand how this culture can influence the attitudes of workers. This empirical study includes this lack (hypotheses H4 and H5). When workers are confronted with obstacles and difficulties, it is essential for the managers that the workers are able to get around and successfully solve them (Licata et al., 2003). JR may be, by definition, the right mediator in the relationship between SW and performance, because JR corresponds to this willingness to make an extra effort to overcome difficulties and obstacles, and this can be translated into increased efficiency and effectiveness (Rego et al., 2007). It seems to be the right link to understand how SW transposes its effects to performance.

JR has been shown to significantly predict both self and supervisor ratings of work performance (Licata et al., 2003; Harris et al., 2006). We took a conceptualization of work performance divided into two main dimensions, taking absolute productivity as developed by Staples et al. (1999) and Rego et al. (2007) and the measurement of relative performance, JP as suggested by Mott (1971) and Bamel et al. (2011).

The mediating role of JR between SW and IP has already been explored (Joelle & Coelho, 2017) and JR has a strong impact on IP and receives the impacts of SW and affective commitment. It is expected that the individual personality trait JR should act as a personal resource, and have a significant positive impact on IP and JP. According to the preceding discussion, we advance the following hypotheses:

H4. There is a positive relationship between JR and IP.

H5. There is a positive relationship between JR and JP.

This focus on SW has been productive, showing significant relationships between SW and different organizational outcomes (Ashmos & Duchon, 2000; Milliman et al., 2003; Duchon & Plowman, 2005; Rego & Cunha, 2008; Crawford et al., 2009; Tombaugh et al., 2011; Mahakud & Gangai, 2015). The academic literature includes several empirical studies that show a positive relationship between SW and performance/productivity (Duchon & Plowman, 2005; Geigle, 2012). From this point, it is hypothesized as:

H6. There is a positive relationship between SW and IP.

H7. There is a positive relationship between SW and JP.

### **The moderating role of OAC**

Organizational commitment is defined as “a psychological state that characterizes the relationship between an employee and the organization and reduces the likelihood that he/she will leave it” (Rego & Cunha, 2008: 59). According to Allen and Meyer (1990), the conceptualization of organizational commitment should comprise three major dimensions: affective commitment, understood as an involvement with the organization and its values and goals, leading to the willingness to outperform on its behalf; continuance commitment, which is the perception the employee has of the cost of leaving the organization; and normative commitment, when the employee perceives they have an obligation to stay in the organization. Apparently, affective commitment is considered the most used component of organizational commitment (Demirtas & Akdogan, 2015), and is frequently the dimension adopted to mediate different variable relationships with work-related outcomes (Chiu & Francesco, 2003).

The implementation of spirituality programs in the workplace can have results on an individual level, increasing the affective commitment of the worker (Burack, 1999; Fry, 2003; Giacalone & Jurkiewicz, 2003). Consequently, affective commitment is the dimension used in this study to express the effects of organizational commitment in the relationship between the dimensions of the conceptual model, as a moderator variable, bearing in mind that it is important to identify and show the effects of commitment on the way workers transform an SW environment into work related

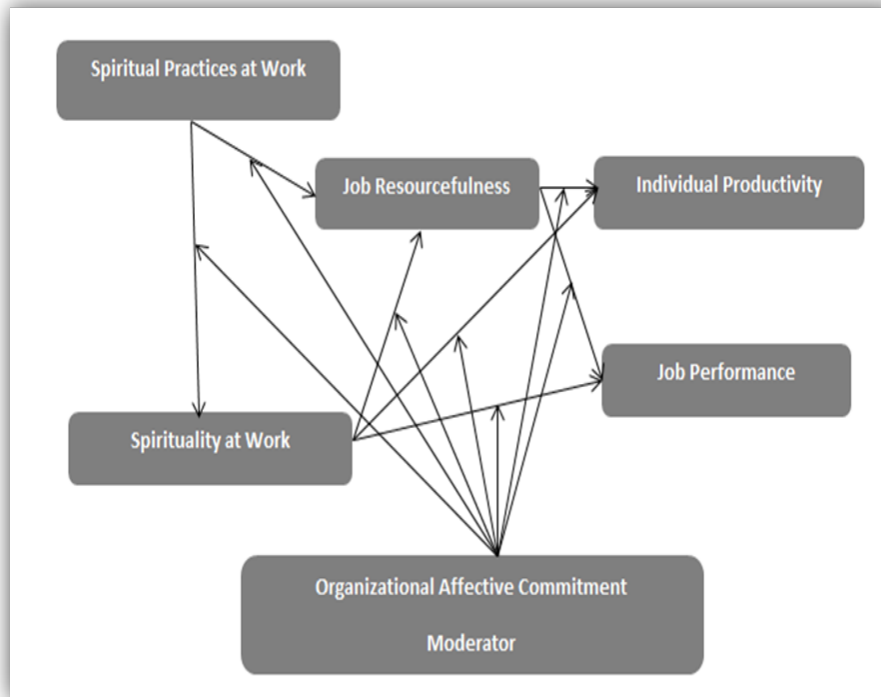
outcomes (Jurkiewicz & Giacalone, 2004). In the management discourse commitment is a central mediating variable, considering that workers more affectively attached to their organizations can promote individual and organizational performance (Rego & Cunha, 2008; Thamrin, 2012; Solí et al., 2015). However, affective commitment was proposed as a buffering moderator between day-specific work-related self-control demands and psychological well-being (Rivkin et al., 2015). In the present paper, more affective committed workers are more likely to enjoy an SW environment and to transform it in personal positive behaviors like JR, IP and JP.

## **6.5 Methodology**

### **6.5.1 Conceptual model, sample and data collection**

To test the proposed investigation model and the research hypotheses, data was collected based on a structured questionnaire, applied in Portugal. This study aims to explore the role of OAC as a moderator variable on the set of hypotheses developed and to understand the influence on the relationship, which has never been fully explored. Consequently, two groups were created to consider the moderator role of OAC, the low OAC group (below the average) and the high OAC group (above the average), to test their influence on the different relationships established in this study. The following research model (Figure 7) presents the set of hypotheses developed as well as the impact of the OAC.

**Figure 7 – Conceptual Model**



Source: developed by the authors

In this study, the population taken from the sample was constituted of female and male individuals within the Portuguese territory, of various age groups and different levels of schooling and periods worked. No prerequisites were necessary to participate in this study. The technique used in this questionnaire was the snowball technique. Snowball sampling has a non-probabilistic nature. In order to test the proposed investigation model and the research hypotheses, data was gathered based on a structured questionnaire. Roof (2015) used a convenience sample drawn from the researcher's social media LinkedIn with distribution of the survey to the participants' contacts (snowballing).

Gupta et al. (2014) used a sample comprising workers from insurance companies and Komala and Ganesh (2007) used a sample based on healthcare workers. Rego and Cunha (2008) based their study on a cross-sector sample, Pawar (2014) used a sample of MBA participants to conduct his research and Daniel (2015) used a mixed sample of students and cross-sector workers.



For this study, 500 workers were emailed, based on snowball sampling, and 273 completed questionnaires were returned, a response rate of 54.6%. Accordingly, to test the new conceptualization we used a sample of cross-sector workers and no individual sector provided more than 10% of responses. The workers had different occupations (operator, technical expert, department director...). No gender differences were found in relation to spirituality variables or even behavior variables.

The sample population consisted of people with an average age of 34.5 years, 43% had a first degree or higher and 25% were college graduates. The average period worked in the organization was 7.2 years.

### **6.5.2 Measures**

The variables used in this study were operationalized according to scales described in the literature. The measures were based on a five-point Likert scale from 1 (“strongly disagree”) to 5 (“strongly agree”).

#### **Spiritual Practices at Work**

We used deductive item generation to create the dimension, SPW, based on a thorough literature review, to confirm the need for this new variable, to set its boundaries and to provide a basic identification of the possible items on this scale. At the same time, we conducted an investigation with several workers, managers and academics to identify, confirm and test the items of the new dimension. To test whether SPW is a viable construct, a ten-item scale consistent with SW (Table 22) was developed, and Cronbach’s alpha coefficient was 0.933. The intensity of use of these practices was measured on a 5-point Likert-type scale, from never=1 to frequently=5. SPW was treated as a reflexive variable because the choice of the practices had to be consistent with the spirituality concept and not the reverse. They are spiritual practices because of the concept.

**Table 22 – SPW scale**

SPW1	Fitness	0.707
SPW2	Relaxation exercises	0.805
SPW3	Meditation	0.814
SPW4	Reiki	0.560
SPW5	Health programs, hygiene and food education	0.649
SPW6	Yoga	0.802
SPW7	Pilates	0.798
SPW8	Dance	0.775
SPW9	Diversity support programs	0.568
SPW10	Music	0.471

Source: developed by the authors

All the practices have loadings above 0.5 with the exception of music that is marginally lower 0.5.

We performed an exploratory and confirmatory factor analysis to explore the factor structure of the conceptual model, including SPW and SW as a second order variable. Discriminant and convergent validity were assessed, as shown in Table 24.

### **Spirituality at work**

In this framework SW was used as a second-order variable (table 23), measured based on 22 questions grouped into the following five dimensions: sense of community (Ashmos & Duchon, 2000; Milliman et al., 2003; Daniel 2015), alignment with organizational values (Ashmos & Duchon, 2000; Milliman et al., 2003; Rego et al., 2007), meaningful work (Ashmos & Duchon, 2000; Milliman et al., 2003; Rego & Cunha, 2008; Daniel, 2015), opportunities for inner life (Ashmos & Duchon, 2000; Daniel, 2015) and emotional balance and inner peace (Joelle & Coelho, 2017).

**Table 23 - SW construct**

Emotional balance and inner peace	Sense of community	Alignment with the organization's values	Meaningful work	Opportunities for inner life
My work helps me to feel at peace with myself	Feel there is a sense of being part of a family	I feel positive about the values of the organization	Work is connected to what I think is important in life	My spiritual values are appreciated in my work
My work helps me find the right balance in my life	My team work encourages the presence of community spirit	I feel positive about my future with this organization	I see a connection between my work and the broader social good of my community	There is a room for spirituality in the workplace
My work helps me achieve a sense of accomplishment	I believe people support each other	My organization respects my inner life	When I work I feel that I am useful to society	In my workplace I can "nourish" my own spirituality
My work helps me achieve my full potential	I believe employees genuinely care about each other.	My organization helps me to live at peace		
My work helps me to be happy	I think employees are linked by a common purpose	My leadership cares about society		
My work helps me to be more self-confident even when everything goes wrong				

Source: developed by the authors

### **Workers' attitudes**

Organizational affective commitment is measured using the scale developed by Meyer et al. (1993) and used by Moore and Casper (2006). Statements like "I would be very happy to spend the rest of my career with my organization" or "I really feel as if this organization's problems are my own" were used. Cronbach's alpha coefficient is 0.813.

JR is measured using the scale developed by Licata et al. (2003), which is based on four items that are intended to capture the additional efforts that respondents are capable of making in their organizational context, when needed. Items like "I'm very clever and enterprising in doing my job" and "I'm a very resourceful person in finding ways to do my job" were used. Cronbach's alpha coefficient is 0.824.

### **Job performance**

JP was measured using an adaptation of the scale of organizational effectiveness developed by Mott (1971) and used in recent studies (Vinit et al., 2005; Bamel et al., 2011). This scale is usually composed of three sub-scales - productivity, adaptability, and flexibility - with ten items. Participants were asked to rate their work relative to that of their co-workers. In our study, this scale was shown to have only one dimension. The scale is composed of items like "Compared with your co-workers, who is more effective in adapting to changes in the workplace?" Cronbach's alpha coefficient is 0.866.

Individual productivity intends to measure productivity through self-description by respondents, using the scale developed by Staples et al. (1999), and adapted by Rego et al. (2007). Contrary to JP, IP seeks to measure the absolute productivity self-reported by respondents. The scale includes items like "I'm an effective employee". Cronbach's alpha coefficient is 0.800.

### **6.5.3 Model assessment**

Confirmatory factor analysis was used to assess the psychometric properties of the scales and the measurement model fit, using SPSS AMOS 21.0. Running a first confirmatory factor analysis on the model with all variables, the fit indices were

considered unsatisfactory. By analyzing the standardized residuals and modification indices related to misspecifications, a well-fitting thirty-five-item model with five dimensions emerged. The final model shows a good fit (IFI=0,918; TLI=0.910; CFI=0.917; RMSEA=0.056).

Composite reliability (CR) and the average variance extracted (AVE) were computed. All the scales showed values up to 0.7 on CR and up to 0.5 on AVE, which are in line with the recommendations (Hair et al., 2005). Discriminant validity is established when all correlations between the constructs are significantly smaller than 1 and the squared correlations calculated for each pair of constructs is always smaller than the variance extracted for corresponding constructs (Fornell & Larcker, 1981; Shiu et al., 2011), thereby confirming the discriminant validity presented in table 24.

**Table 24 - Discriminant validity**

	<b>SD</b>	<b>X1</b>	<b>X2</b>	<b>X3</b>	<b>X4</b>	<b>X5</b>	<b>CR</b>	<b>AVE</b>
<b>X1 SW</b>	<b>0.607</b>	<b>0.933</b>					<b>0.91</b>	<b>0.54</b>
<b>X2 SPW</b>	<b>0.550</b>	0.158	<b>0.792</b>				<b>0.83</b>	<b>0.50</b>
<b>X3 JR</b>	<b>0.569</b>	0.132	0.070	<b>0.824</b>			<b>0.82</b>	<b>0.61</b>
<b>X4 JP</b>	<b>0.202</b>	0.024	0.034	0.270	<b>0.866</b>		<b>0.96</b>	<b>0.74</b>
<b>X5 IP</b>	<b>0.541</b>	0.190	0.060	0.533	0.218	<b>0.800</b>	<b>0.78</b>	<b>0.54</b>

Source: developed by the authors

Obs: The principal diagonal presents Cronbach's Alpha; SD= Standard Deviation; CC= Composite reliability; AVE= Average Variance extracted

#### **6.5.4 Common method bias**

When self-administered questionnaires are used a common variance bias problem can emerge or increase (Podsakoff et al., 2003). According to Podsakoff et al. (2003), the common method variance (CMV) tests will help to check for the existence of variables that can cause measurement errors and systematic biases in the estimation of the relationships between constructs.

Several statistical techniques and other procedures can be used to deal with this problem. These possibilities were taken care of when the measuring instrument was being developed. Each part of the questionnaire was clearly identified and information was given about the nature of the problem being measured. The wording of the statements was very carefully developed and tested. Finally, anonymity of the respondent was completely assured.

According to the suggestions from Podsakoff et al. (2003) a Harman's single factor test was performed as a common latent factor analysis to identify the common variance among all variables observed in the model. The Harman's test showed that any factor could explain more than 23% of the variance and there were 6 factors with eigenvalues greater than 1, explaining 82% of the total variance.

A confirmatory factor analysis was estimated restricting all items of the model to load on a common single factor (Podsakoff et al., 2003). The resulting fit indices show the model did not provide a good fit for the data ((IFI=0.625; TLI=0.612; CFI=0.917; RMSEA=0.11), while the measurement model shows good fit indices (IFI=0.918; TLI=0.910; CFI=0.917; RMSEA=0.056). It therefore does not seem that common method variance influences the measurement and the estimation of the relationships.

## **6.6 Hypotheses test**

Amos 21 was used to perform confirmatory factor analysis and structural equation modeling to test the proposed hypotheses. A multi-group analysis was performed to identify the differences between low and high OAC. The cut-off point was the average of OAC. So, the first group, the low OAC, is composed of 152 workers while the second group, the high OAC, is composed of 121. The following table (Table 25) shows the final results for the overall sample, for the low OAC group and for the high OAC group.

**Table 25 – Results**

hypotheses				Global			Results	Low OAC			High OAC		
				SRW	C.R.	P	Sup./Not Sup.	SRW	C.R.	P	SRW	C.R.	P
H1	SW	<---	SPW	0.398	4.32	***	Supported	0.427	3.041	0.001	0.279	2.482	0.065
H2	JR	<---	SW	0.306	3.799	***	Supported	0.392	3.486	***	0.193	1.736	0.041
H3	JR	<---	SPW	0.144	1.812	0.035	Supported	0.130	1.247	0.106	0.172	1.505	0.066
H4	IP	<---	JR	0.674	8.694	***	Supported	0.632	6.01	***	0.763	6.671	***
H5	JP	<---	JR	0.541	5.624	***	Supported	0.602	4.493	***	0.439	3.275	***
H6	IP	<---	SW	0.192	2.723	0.003	Supported	0.135	1.285	0.09	0.24	2.632	0.004
H7	JP	<---	SW	-0.065	-0.886	0.188	Not Supported	-0.028	-0.285	0.387	-0.071	-0.692	0.240

Structural equation modeling analysis for the proposed model.  
 GFI=0.825 IFI= 0.918. TLI= 0.910 CFI= 0.917. RMSEA = 0.056; \*\* p<0.01, \* p <0.05

A multi-group chi square test was carried out to confirm the moderation effects. The results show that the differences between the fully constrained model and the unconstrained model are significant ( $\Delta\chi^2=78$  and  $\Delta DF=35$ ;  $p\leq 0.01$ ) so OAC seems to moderate the shown relationships as suggested by Dawes (2009) and Seiler, Rudolf and Krume (2013).

There is a positive relationship between SPW (H1) perceptions and SW (srw=0.398;  $p=***$ ), therefore supporting H1. The relationship exists in the terms suggested by Ashforth and Pratt (2003) and this particular finding shows that workers apparently naturally expect that SPW may increase the presence of SW. This result is not similar for the two groups, low OAC (srw=0.427;  $p=0.001$ ) and high OAC (srw=0.279;  $p=0.065$ ). However, the workers with low OAC, are the ones that most value SPW as an appeal to feel the presence of SW, which makes them feel the sense of purpose and meaning (Rego et al., 2008), a sense of emotional balance and inner peace (Joelle & Coelho, 2017) and they need to feel the connection to each other at work (Ashmos & Duchon, 2000).

There is a positive relationship (srw=0.306;  $p=***$ ) between SW and JR (H2) and (srw=0,144;  $p=0,035$ ) between SPW and JR (H3), therefore supporting both

hypotheses. Regarding H2, the workers are able to overcome obstacles and to achieve goals at work with the presence of SW, either with low OAC (srw=0.427; p=0.01) or high OAC (srw=0.279; p=0.065). However, this fact is more significant for the workers with low OAC, meaning that when in the organization the workers feel less affectively attached to their organization, they need to experience and feel the presence of a spirituality environment, as explained by H1. Concerning H3, these findings show that this relationship is not moderated through OAC. In both groups, low OAC (srw=0.130; p=0.106) and high OAC (srw=0.172; p=0.066), the relationship is not significant and SPW and JR tend to evolve together, while OAC does not have any relationship with this fact.

There is a positive relationship (srw=0.674; p=\*\*\*) between JR and IP (H4) as there is between JR and JP (H5) (srw=0.541; p=\*\*\*), which is in line with the present literature review (Joelle & Coelho, 2017). The impact of JR on IP is bigger for the high OAC group (srw=0.763; p=\*\*\*), while the impact on JP is bigger for the low OAC group (srw=0.602; p=\*\*\*). Apparently the more committed the worker, the more the willingness to over-perform and to become a more productive worker (Licata et al., 2003). This impact is the opposite on the relationship with JP, when the worker expresses the way they are evaluated by their supervisor.

There is a positive relationship (srw=0.192; p=0.003) between SW and IP but the relationship between SW and JP (srw=-0.065; p=0.188) is not significant. Consequently H6 is supported and H7 is not supported in this research. This finding corroborates one of the purposes of this study, since the impact of SW on JP and IP can be mediated by JR; in the first case, partially mediated and in the second case fully mediated. As a matter of fact, Rego et al. (2007) describe SW as a facilitator to develop a personal trait, measured in this study by the variable JR. This promotes efficacy and efficiency, making the worker feel increasingly willing to make efforts, which impacts positively on IP and JP. Therefore, there is a direct relationship between SW and IP while the relationship with JP is only indirect. However, the relationship between SW and IP is significant only for the high OAC group (srw=0.240; p=0.004) and not significant for the low OAC group (srw=0.135; p=0.09). SPW stimulates SW and a spiritual culture can promote individual performance, if the workers are more resourceful (Rego et al., 2007; Joelle & Coelho, 2017). So the mediating role of JR could be important as well as OAC as a moderator.



## 6.7 Indirect, direct and total effects

After analyzing the direct effects, we followed the approach suggested by Cheong and MacKinnon (2012), and Zhao et al. (2010) to assess indirect effects. They argue that the only requirement for mediation is the significance of the indirect effects. They also note that significance levels should be obtained through bootstrapping. The analysis of direct and indirect effects may help understand the chain of effects between spirituality environment and performance (Table 26).

**Table 26 - Indirect, Direct and Total Effects**

	JR			JP			IP			SW	
	TE	DE	ID	TE	DE	ID	TE	DE	ID	TE	DE
<b>SPW</b>	0.275 ***	0.144 **	0.131 ***	0.209 ***	0.095 **	0.114 ***	0.231 ***	-0.046 NS	0.277 ***	0.436 ***	0.436 ***
<b>SW</b>	0.301 ***	0.301 ***		0.084 NS	-0.078 NS	0.162 ***	0.412 ***	0.207 ***	0.205 ***		

Source: developed by the authors

TE-Total Effects DE-Direct Effects IE-Indirect Effects

Note – between parentheses: p values: \*\*\*<0.01 \*\*<0.05

The results show that JP and IP can improve considerably when we introduce JR into the chain of effects. JR mediates the proposed relationships and seriously increases the explanation of the effects that a spiritual environment in the workplace may have on performance. SPW and SW are powerful tools in a human resources management program since they can act simultaneously on the worker attitudes and behaviors (JR directly) and consequently, increasing (indirectly) the performance outcomes.

## 6.8 Conclusions

This investigation addresses the need and suggests an interdisciplinary management model based on SW, increased by a set of SW practices. The results show

that by creating a kind of a spirituality environment the presence of SPW and SW could increase several work related outcomes like IP, especially when mediated by JR.

Looking at different approaches to SW in the literature, its importance in management is a new field of research and practice. Introducing spiritual practices, as it does, this “spiritual culture” might flourish and produce relevant performance outcomes. Maslow’s theory of needs recognizes that self-actualization implies the presence of both valences, mind and spirit, at work, so if companies try to involve workers using SPW, the presence of SW may boost this involvement. And some of these practices have the characteristic of giving a sense of art to its management (Atkinson, 2008). The introduction of some SPW can help those workers who are emotionally less attached to their organizations to get more committed to their tasks and to their workplace.

In a troubled world (Ashmos & Duchon, 2000) people want to deploy their full potential as whole human beings and to perform a work with meaning (Mitroff, 2003; Rego & Cunha, 2008). They need to feel the presence of SW, mainly if they feel less committed, to overcome obstacles in performing their daily tasks. The implementation of SPW not only promotes SW but can also help workers to be job-resourceful as well.

The workers with low or high OAC seem to positively evaluate the impact of all their ability to overcome difficulties at work on their work performance (Casimir et al., 2014), which is in line with the present literature review.

## **6.9 Contributions**

This research contributes to developing the idea of an SW culture, setting up both a set of practices and the presence of SW across an organization with important practitioner implications. This approach, finds an opportune theory in Maslow because spirituality and meaning are dimensions of self-actualization and a more holistic picture of a human is needed so as to relate to the management context (O’Connor & Yballe, 2007).

It reinforces the idea of the importance of spirituality in an organizational culture and its impact on job related outcomes.

By adding spiritual practices, we are helping to strengthen the idea of a spirituality environment, boosted by these practices.

It reinforces the role of JR as a mediating variable, transferring the effects of this spiritual environment to the proposed work-related outcomes. JR seems to be a variable that collects the environment stimuli and transforms them into a willingness to engage in behaviors and practices that may contribute to the individual performance and, therefore, also the organizational performance.

Another relevant finding is the fact that OAC moderates some of the present relationships of this study. When OAC is low, a spirituality environment produces higher outcomes as if workers were expecting something to tie them to the organization. This finding answers the question posed by Kolodinsky et al. (2008), as well as future research questions.

The current WS conceptualization with the development of the new SPW dimension responds to the gap in the management and academic literature. This work finds its meaning considering that human beings are rational, emotional and spiritual (Ashmos & Duchon, 2000; Rego & Cunha, 2008; Brooke & Parker, 2009) so, the inclusion of SW in management (Cavanagh & Bandsuch, 2002) and academic agendas (Butts, 1999; Rego & Cunha, 2008) is highly recommended. These empirical findings can provide guidance for business specialists and human resources management to understand the need to conduct organizations with meaning and purpose, which have an important impact on workers. The development of SPW practices could be a relevant management instrument to be used as a way to promote and create a spirituality-rich workplace.

With this research we believe that new evidence has been provided in the field of management and academic context related to SW.

## **6.10 Limitations and future studies**

The current research had several limitations that deserve mention. The first limitation of this study is the fact that independent and dependent variables were collected from the same source. So, it is important that future studies use a double source method and examine workplace spirituality longitudinally.

A second methodological limitation is that the work is based entirely on perceptions, by which the individual organizes and interprets sensory impressions in

order to provide meaning to the surrounding environment. Consequently, individuals can perceive a reality, which is different in certain ways from the objective reality.

The third limitation is that the concept of SW is itself still subject to different approaches and definitions that can affect how the construct is operationalized and measured.

Future studies could adopt other dependent variables such as creativity and innovation, stress, burnout, managerial and organizational performance, as other moderator and mediating variables. It might be necessary to improve the representativeness of the sample by expanding it within global companies operating in different countries.

## 6.11 References

- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63, 1-18.
- Aravamudhan, N. R., & Krishnaveni, R. (2015). Spirituality at Work Place—An Emerging Template for Organization Capacity Building? *Purushartha: A Journal of Management Ethics and Spirituality*, 7, 1.
- Ashforth, B.E. & Pratt, M.G. (2003). ‘Institutionalized Spirituality: An Oxymoron?’, in R.A. Giacalone and C.L. Jurkiewicz (eds), *Handbook of Workplace Spirituality and Organizational Performance*. New York: M.E. Sharpe.
- Ashmos, D.P., & Duchon, D. (2000). Spirituality at work: a conceptualization and measure. *Journal of Management Inquiry*, 9(2), 134-145.
- Atkinson, D.M. (2007), *Thinking the Art of Management: Stepping into “Heidegger’s Shoes”*, Palgrave, Basingstoke.
- Atkinson, D. (2008). Dancing "the management": On social presence, rhythm and finding common purpose. *Management Decision*, 46(7), 1081-1095.
- Bamel, U. K., Rangnekar, S., & Rastogi, R. (2011). Managerial effectiveness in Indian organizations: Reexamining an instrument in an Indian context. *Research & Practice in Human Resource Management*, 19(1), 69-79.
- Baumgartner, H., & Homburg, C. (1996). Applications of structural equation modeling in marketing and consumer research: A review. *International Journal of Research in Marketing*, 13(2), 139-161.
- Bishara, N. D., & Schipani, C. A. (2010). Complementary alternative benefits to promote peace. *Journal of Business Ethics*, 89.
- Brophy, M. (2015). Spirituality incorporated: including convergent spiritual values in business. *Journal of Business Ethics*, 132, 779-794.
- Brooke, C., & Parker S. (2009). Researching Spirituality and Meaning in the Workplace. *The Electronic Journal of Business Research Methods*, 7(1), 1-10.
- Burack, E. H. (1999). Spirituality in the Workplace. *Journal of Organizational Change Management*, 12(4), 280-291.

- Butts, D. (1999). Spirituality at Work: an Overview. *Journal of Organizational Change Management*, 12(4), 328-331.
- Casimir, G., Ngee, K. N., Yuan, W. K., & Ooi, G. (2014). The relationships amongst leader-member exchange, perceived organizational support, affective commitment, and in-role performance. *Leadership & Organization Development Journal*, 35(5), 366.
- Cavanagh, G. F., & Bandsuch, M. R. (2002). Virtue as a benchmark for spirituality in business. *Journal of Business Ethics*, 38(1), 109-117.
- Cheong, J., & MacKinnon, D.P. (2012). "Mediation/indirect effects in Structural Equation Modeling, in Hoyle, R. H. (ed), *Handbook of Structural Equation Modeling*, pp. 417-435, Guilford Press, London.
- Chiu, R. K., & Francesco, A. M. (2003). Dispositional traits and turnover intention: Examining the mediating role of job satisfaction and affective commitment. *International Journal of Manpower*, 24(3), 284-298.
- Crawford, A., Hubbard, S.S., Lonis-Shumate, S.R., & O'Neill, M. (2009). Workplace spirituality and employee attitudes within the lodging environment. *Journal of Human Resources in Hospitality and Tourism*, 8(1), 64-81.
- Daniel, J.L. (2015). Workplace spirituality and stress: Evidence from Mexico and US. *Management Research Review*, 38(1), 29.
- Degot, V. (1987). Portrait of the manager as an artist. *Dragon: The SCOS Journal*, Issue: Art and the Organisation, 2(3), 13-50.
- Demirtas, O., & Akdogan, A. A. (2015). The effect of ethical leadership behavior on ethical climate, turnover intention, and affective commitment. *Journal of Business Ethics*, 130(1), 59-67.
- Deshpande, A. (2012). Workplace spirituality, organizational learning capabilities and mass customization: An integrated framework. *International Journal of Business and Management*, 7(5), 3-18.
- Dawes, J. (2009). The effect of service price increases on customer retention the moderating role of customer tenure and relationship breath. *Journal of Service Research*, 11(3), 232-245.
- Duchon, D., & Plowman D. A. (2005). Nurturing the Spirit at Work: Impact on Work Unit Performance. *Leadership Quarterly*, 16(5), 807-833.

- Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Fry, L. W. (2003). Toward a theory of spiritual leadership. *Leadership Quarterly*, 14(6), 693-727.
- Fry, L. W., & Altman, Y. (2009). Maximizing the Triple Bottom Line & Spiritual Leadership: The CEL Story. *Academy of Management*. Available from: < <http://www.iispiritualleadership.com/files/SLTCELLAOM.pdf> > Access, 10, 2011.
- Geigle, D. (2012). Workplace Spirituality Empirical Research: A Literature Review. *Business and Management Review*, 2 (10), 14-27.
- Giacalone, R. A., & Jurkiewicz C.L. (2003). *The handbook of Workplace Spirituality and Organizational Performance*, M. E. Sharpe, Armonk, NY.7
- Goyal, M., Singh, S., Sibinga, E. M., Gould, N. F., Rowland-Seymour, A., Sharma, R., & Ranasinghe, P. D. (2014). Meditation programs for psychological stress and well-being: a systematic review and meta-analysis. *JAMA internal medicine*, 174(3), 357-368.
- Gupta, M., Kumar, V., & Singh, M. (2014). Creating Satisfied Employees Through Workplace Spirituality: a study of the Private Insurance Sector in Punjab (India). *Journal of Business Ethics*, 122(1), 79-88.
- Hair, J. F., Jr, Anderson, R. E., Tatham, R. L., & Black, W. C. (2005). *Análise multivariada de dados* (5a ed.) [Multivariate data analysis] 7th ed. (2010). Upper Saddle River: Prentice Hall. Porto Alegre: Bookman.
- Harris, E.G., Artis, A.B., Walters, J.H., & Licata, J.W. (2006). Role stressors, service worker job resourcefulness, and job outcomes: an empirical analysis. *Journal of Business Research*, 59(4), 407-15.
- Harrison-Walker, L. (2008). How emotional intelligence and spirituality impact job survivors in a post-M&A work environment. *Journal of Organizational Culture, Communication and Conflict*, 12(1), 1-23.
- Howard, S. (2002). A spiritual perspective of learning in the workplace. *Journal of Managerial Psychology*, 17(3), 230- 242.
- Hoyle, R. H. (1995). *Structural Equation Modeling: Concepts, Issues, and Applications*. Sage Publications, USA.

- Issa, T., & Pick, D. (2010). Ethical mindsets: An Australian study. *Journal of Business Ethics*, 96(4), 613-629.
- Joelle, M., & Coelho, A. (2017). The impact of spirituality at work on workers' attitudes and individual performance. *The International Journal of Human Resource Management*, DOI: 10.1080/09585192.2017.131431
- Jurkiewicz C.L., & Giacalone, R. A. (2004). A Values Framework for Measuring the Impact of Workplace Spirituality. *Journal of Business Ethics*, 49(2), 129.
- Karakas, F. (2010). Spirituality and Performance in Organizations: A Literature Review. *Journal of Business Ethics*, 94(1), 89-106.
- Kinjerski, V. M., & Skrypnek, B. J. (2004). Defining spirit at work: Finding common ground. *Journal of Organizational Change Management*, 17(1), 26-42.
- Komala, K., & Ganesh, L.S. (2007). Individual Spirituality at work and its relationship with Job Satisfaction and Burnout: an Exploratory Study among Healthcare professionals. *The Business Review*, 7(1), 124-129.
- Kolodinsky, R. W., Giacalone, R. A., & Jurkiewicz, C. L. (2008). Workplace values and outcomes: Exploring personal, organizational, and interactive workplace spirituality. *Journal of Business Ethics*, 81(2), 465-480.
- Koltko-Rivera, M.E. (2006). Rediscovering the later version of Maslow's hierarchy of needs: self-transcendence and opportunities for theory, research, and unification". *Review of General Psychology*, 10(4), 302-17.
- Krishnakumar, S., & Neck, C. P. (2002). The "what", "why" and "how" of spirituality in the workplace". *Journal of Managerial Psychology*, 17(3), 153-164.
- Lee, C., & Zemke, R. (1993). The search for spirit in the workplace. *Training*, 30(6), 21-7.
- Licata, J. W., Mowen, J. C., Harris, E. G., & Brown, T. J. (2003). On the trait antecedents and outcomes of service worker job resourcefulness: a hierarchical model approach. *Journal of the Academy of Marketing Science*, 31(3), 256-271.
- Lutz A., Brefczynski-Lewis J., Johnstone T., & Davidson R.J. (2008). Regulation of the Neural Circuitry of Emotion by Compassion Meditation: Effects of Meditative Expertise. *PLoS ONE*, 3(3), 1897.



- Mahakud, G. C., & Gangai, K. N. (2015). The influence of workplace spirituality on organisational commitment among public sector employees. *Journal of Organisation and Human Behaviour*, 4(1).
- Marques, J. (2012). Making buddhism work @ work: The transformation of a religion into a seasoned ethical system. *The Journal of Management Development*, 31(6), 537-549.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological review*, 50(4), 370.
- Maslow, A. H. (1970). New introduction: Religious, Values, and Peak-Experiences (new edition). *The Journal of Transpersonal Psychology* 2(2), 83.
- Meyer, J.P., Stanley D.J., & Topolnysky, L. (2002). Affective, continuance and normative commitment to the organization: a meta-analysis of antecedents, correlates and consequences. *Journal of Vocational Behavior*, 61(1), 20-52.
- Michaelson, C., Pratt, M.G., Grant, A.M., & Dunn, C.P. (2014). Meaningful work: connecting Business Ethics and Organization Studies. *Journal Business Ethics*, 121(1), 77-90.
- Michel, R., & Ashill, N. J. (2009). Symptoms of burnout and service recovery performance. *Managing Service Quality*, 19(1), 60-84.
- Milliman, J., Czaplewski, A. J., & Ferguson, J. (2003). Workplace spirituality and employee work attitudes: An exploratory empirical assessment". *Journal of Organizational Change Management*, 16(4), 426-447.
- McCaul, H.S., Hinsz, V.B., & McCaul, K.D. (1995). Assessing organizational commitment: an employee's global attitude toward the organization. *The Journal of Applied Behavioral Science*, 31(1), 80.
- Meyer, J.P., Allen, N.J., & Smith, C.A. (1993). Commitment to organizations and occupations: extensions and a test of a three-component conceptualization. *Journal of Applied Psychology*, 78(4), 538-551.
- Mitroff, I.I. (2003). Do not promote religion under the guise of spirituality. *Organization*, 10(2), 375-382

- Moore, T.W., & Casper, W. J. (2006). An examination of proxy measures of workplace spirituality: A profile model of multidimensional constructs. *Journal of Leadership & Organizational Studies*, 12(4), 109-118.
- Mott, P.E. (1971). *The characteristics of effective organizations*. New York: Harper and Row.
- Neal, J. (Ed.). (2013). *The Handbook of Faith and Spirituality in the Workplace: Emerging Research and Practice*. Fayetteville, AR: Springer.
- O'Connor, D., & Yballe, L. (2007). Maslow Revised: Constructing a road map of human nature. *Journal of Management Education*, 31(6), 738-756.
- Pavlovich, K., & Corner, P.D. (2014). Conscious Enterprise Emergence: Shared Value Creation Through Expanded Conscious Awareness. *Journal of Business Ethics*, 121(3), 341-351.
- Pawar, B. S. (2009). Workplace Spirituality Facilitation: A Comprehensive Model. *Journal of Business Ethics*, 90(3), 375-386.
- Pawar, B.S. (2014). Leadership Spiritual Behaviors Towards Subordinates: an empirical examination of the effects of a leader's individual spirituality and organizational spirituality. *Journal of Business Ethics*, 122(3), 439-452.
- Petchsawang, P. & Duchon, D. (2009). Measuring workplace spirituality in an Asian context. *Human resource development international*, 12(4), 459-468.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., & Podsakoff, N.P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88 (5), 879–903.
- Quatro, S.A. (2004). New age or age old: Classical management theory and traditional organized religion as underpinnings of the contemporary organizational spirituality movement. *Human Resource Development Review*, 3(3), 228-249.
- Rego, A., Souto, S., & Cunha, M.P. (2007). Espiritualidade nas organizações, positividade e desempenho. *Comportamento Organizacional e Gestão*, 13(1), 7-36.
- Rego, A., & Cunha M. P. (2008). Workplace spirituality and organizational commitment: an empirical study. *Journal of Organizational Change Management*, 21(1) 53-75.

- Rivkin, W., Diestel, S., & Schmidt, K.-H. (2015). Affective commitment as a moderator of the adverse relationships between day-specific self-control demands and psychological well-being. *Journal of Vocational Behavior*, 88, 185-194.
- Roof, R. A. (2015). The association of individual spirituality on employee engagement: The spirit at work. *Journal of Business Ethics*, 130(3), 585-599.
- Sanders III, J. E., Hopkins, W. E., & Geroy, G. D. (2003). From transactional to transcendental: Toward a and integrated theory of leadership. *Journal of Leadership and Organizational Studies*, 9(4), 21-31.
- Schneider, R. H., Alexander, C. N., Salerno, J, Rainforth, M. & Nidich, S (2005). Stress Reduction in the Prevention and Treatment of Cardiovascular Disease in African Americans: A Review of Controlled Research on the Transcendental Meditation Program. *Journal of Social Behavior and Personality*, 17(1), 159-180.
- Shih, Y., Huang, R., & Chiang, H. (2009). Correlation between work concentration level and background music: A pilot study. *Work*, 33(3), 329.
- Sirgy, M.J., Reilly, N.P., Wu J., & Efraty, D. (2008). A Work-Life Identity Model of Well-Being: Towards a Research Agenda Linking Quality-of-Work-Life(QWL) Programs with Quality of Life (QOL). *Applied Research Quality Life*, 3, 181–202.
- Salarzahi, H., Aramesh, H., & Mohammadi, M. (2011). Organizational spirituality and its impact on consumption model of employees in governmental organizations in Iran (case study). *International Journal of Business and Management*, 6(1), 137-144.
- Schmidt-Wilk, J., Heaton, D.P., & Steingard, D. (2000). Higher education for higher consciousness: Maharishi University of management as a model for spirituality. *Journal of Management Education*, 24 (5), 580-612.
- Seiler, V., Rudolf, M., & Krume, T. (2013). The influence of socio-demographic variables on customer and loyalty in the private banking industry. *International Journal of Bank Marketing*, 31(4), 235-258.
- Sheep, M. L. (2006). Nurturing the whole person: the ethics of workplace spirituality in a society of organizations. *Journal of Business Ethics*, 66(4), 357-375.
- Shinde, U., & Fleck, E. (2015). What spirituality can bring to leaders and managers: enabling creativity, empathy and a stress free workplace. *Journal of Organizational Psychology*, 15(1), 101.

- Staples, D.S., Hulland, J.S., & Higgins, C.A. (1999). A self-efficacy theory explanation for the management of remote workers in virtual organizations. *Organization Science*, 10(6) 758-776.
- Shiu, E.M.K., Walsh, G., Hassan, L.M., & Shaw, D. (2011). Consumer Uncertainty, Revisited. *Psychology and Marketing*, 28(6), 584-607.
- Solís, E., Rogelio R. & Monroy, V. I. B. (2015). Between love and war: the effects of affective commitment in organizational politics and organizational performance. *Journal of Organizational Culture, Communication and Conflict*, 19(2), 69-92.
- Suárez, S. A. (2015). Effects of spirituality in the workplace. *Academy of Organizational Culture, Communications and Conflict. Proceedings*, 20(1) p. 9. Jordan Whitney Enterprises, Inc.
- Thamrin, H.M. (2012). The Influence of Transformational Leadership and Organizational Commitment on Job Satisfaction and Employee Performance. *International Journal of Innovation, Management and Technology*, 3(5), 566.
- Tischler, L. (1999). The growing interest in spirituality in business A long-term socio-economic explanation. *Journal of Organizational Change Management*, 12(4), 273-279.
- Tombaugh, J. R., Mayfield, C., & Durand, R. (2011). Spiritual expression at work: Exploring the active voice of workplace spirituality. *International Journal of Organizational Analysis*, 19(2), 146-170.
- Trott III, D. C. (1996). Spiritual well-being of workers: An exploratory study of spirituality in the workplace. Unpublished doctoral dissertation, The University of Texas.
- Vinit, S. C., Dhar, U., & Pathak, R. D. (2005). Factorial constitution of managerial effectiveness: Re-examining an instrument in Indian context. *Journal of Managerial Psychology*, 20(1), 164-177.
- Woodward, J. B., & Funk, C. (2010). Developing the artist-leader. *Leadership*, 6(3), 295-309.
- Yeoman, R. (2014). Conceptualizing meaningful work as a fundamental human need. *Journal of Business Ethics*, 125(2), 235-251.
- Zhao, X., Lynch, J.G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197-206.

## **CHAPTER VII - Conclusions, contributions and future research**

### **7.1 Conclusions**

The humankind expected the development of SW (Maslow, 1970; O'Connor & Yballe, 2007; Daniel, 2015) and this investigation proposes a new conceptualization for SW, adding a new dimension that captures the importance of work on individual happiness and the achievement of inner peace (EBIP).

The purpose of this investigation aims to contribute to the understanding of the SW conceptualization, measurement and its impacts on worker's attitudes and individual performance. But for this purpose to be achieved, many goals were established as follow: developing a new dimension to the traditional conceptualizations labeled emotional balance and inner peace and comparing both, traditional and new model; testing the impacts of each of these models on individual productivity; testing SW as second-order variable, considering the two different models with and without the new measure emotional balance and inner peace; investigating how SW influences worker's attitudes and individual performance; identifying the influence of a spiritual environment, with both spirituality at work and SPW, on individual performance, mediated by job resourcefulness and moderated by affective commitment.

The investigation was based on quantitative methodological design. This investigation is based on a cross sectional survey and data was collected based on a structured questionnaire, applied in Portugal. Questionnaires were sent to individual workers and 273 completed questionnaires were returned. Structural equation modeling was used as the statistical tool to test the hypotheses and to provide a significative and parsimonious explanation to the data.

This quantitative study has reviewed the potential benefits of incorporating spirituality at work. There are significant relationships between SW and organizational outcomes, JR and affective commitment. JR assumes an interesting role as a mediating variable between SW and performance. This fact occurs especially when workers feel the presence of community sense and alignment with the organization's values and when they perform a meaningful work with emotional balance and inner peace. The findings tell us, that these dimensions have a significant and positive effect on OAC, as OAC on JR. A curious fact revealed by the hypothesis test: only the dimension EBIP

shows a positive impact on JR. As expected, EBIP seems to introduce more global coherence into SW concept, because if employees feel a higher welfare and a better life balance they are more perseverant to perform their job-related tasks.

The new conceptualization proposed corresponds to a more balanced operationalization of the concept and to an additional explanation capacity. EBIP it`s the fifth dimension added to the concept of SW, that brings out a strong affiliation with this understanding of spirituality, and create a clear connection between the individual and organizational levels, since employees with higher welfare and better life balance, are stronger and more persevering.

The mediating role of job resourcefulness may be important as well as organizational affective commitment in a moderator role. The variable organizational affective commitment appears to perform better as a moderator than a driver or a mediating variable, according to the findings.

In an organizational context, performance may improve seriously with a spirituality environment, as a management tool with the focus on workers attitudes, JR and OAC. It`s possible a management model based on SW and increased by a set of SW practices, that have the particularity to give a sense of art to management.

## **7. 2 Contributions**

First, this investigation shows several different theoretical implications. First, this investigation gives a new approach to define SW based on Maslow`s Theory of Needs. It goes to the origins and may serve as the starting point for future conceptual and empirical studies.

Second, the development and validity of the new measure EBIP, is aligned with Maslow`s ideas and according to the three principles of World Health Organization. This development can represent a contribute to the academic context, once clear links were established between the origins of the concept and its implications as well as the appeals of institutions like the World Health Organization, and may represent the answer to a new management perspective with positive impacts on workers` health and well-being. This link needs more empirical studies to examine conceptual support and

practical implications, attending that SW has been suggested to be an important aspect of future organizations.

Third, this investigation brings to the management field the perspective of spirituality at work since its conceptualization, getting closer to a management art approach, according to the literature review, and providing practical clues to implement it. This perspective represents a comprehensive framework of spirituality at work and spiritual practices at work, to bring new clues for the development of further empirical studies.

Fourth, this research gives additional support to the validity and reliability of the Ashmos and Duchon (2000) scales, and to a new model adding the new measure emotional balance and inner peace. This new measure introduces more global coherence between the different dimensions of the spirituality at work concept, as second-order-variable, and reinforce its impacts on worker's attitudes.

Fifth, this work developed the measure "spiritual practices at work" by item generation, based on literature review, and reveals to be a viable construct, consistent with the spirituality concept. The workers apparently feel that the spiritual practices at work may increase the sense of community, the meaning of work, the emotional balance and inner peace, the alignment with organizational values and opportunities for inner life, mainly when they feel low affective commitment. The development of this measure could be a relevant issue to academic agendas.

This investigation contributes to a better understanding of the SW concept, including conceptual issues, measurement and impacts on individual performance. The topic spirituality at work can be seen as a new paradigm inside the organizational sciences and management thinking for the XXI century. This approach could help in the establishment of management practices across nations, based on the potential relationships between spirituality at work dimensions, work attitudes and performance. It is important to note that this new approach seems to be fundamental to organizations, because business and workplaces can play a vital role in promoting peace and harmony, and reducing violence in the society, through the implementation of both, spiritual practices at work and spirituality at work.

The current investigation has important practical implications, giving a unique contribution with relevant advances creating a new dimension for the SW concept based

on Maslow's thinking, associated with aspects of an individual's life with the work activity, looking for the right balance to insure emotional equilibrium and inner peace. Managers and entrepreneurs, who are effective at developing and maintaining organizational environments, embracing several view points and values, can analyze the key areas to more comprehensive framework spirituality at work (SW) and spiritual practices at work (SPW), measures, performance variables, mediating and moderator variables, to run the company, adopting the management art. It's important to point out the presence of Maslow's work to support the new conceptualization of the concept of SW, developed within the framework of this research.

The present investigation provides guidance for human resource management and business specialists to understand the spiritual environment: What is it? How to do? Why? It is possible to understand what is the meaning and propose this model's implementation into the physical space of organizations. With this investigation, considering the three empirical studies developed, it's possible to understand the association of SW and human resources management, after knowing the impact of SW on employee attitudes. This can help company managers to be more efficient at improving the working conditions of their employees as well improving the quality of life of customers and society as a whole. The whole of practices defined gives additional examples of clues of how to develop a spirituality environment and boost individual and, consequently, the company performance and competitiveness.

### **7.3 Limitations and future research**

From the current research, the examination of SW – measures, antecedents, outcomes, mediators and moderators variables – represents an opportunity for extensive future research. Future research questions might include: what are the SW dimensions more valuable for workers? What kind of antecedents it is possible to find? What kind of variables moderate and mediate the impacts of a spirituality environment? What are the potential outcomes raised by a spirituality environment? What is the attractiveness of a company that implements SW? Attitudes and behaviors like trust, creativity, burnout, intentions to leave are potential outcomes yet to be investigated. The role of a spiritual leadership is a potential driver of SW deserving special attention.



This research had several methodological limitations. First, the sample was collected in a cross-sectional approach and future research should examine SW longitudinally, comparing the results for different moments, in order to establish a clear causality. Second, the work is based on workers' perceptions, consequently they can perceive their reality in a way which may be different from the objective reality, especially on what concerns individual performance. Another limitation and difficulty is the concerning with the SW concept, attending the set of definitions presented in the literature review. This last limitation is itself the starting point and the reason to continue with the investigation on the SW field.

## 7.4 References

- Anderson, J.C., & Gerbing, D.W. (1984). The effect of sampling error on convergence, improper solutions, and goodness-of-fit indices for maximum likelihood confirmatory factor analysis. *Psychometrika* 49(2) 155-173.
- Ashar, H., & Lane-Maher, M. (2004). Success and Spirituality in the New Business Paradigm. *Journal of Management Inquiry*, 13(3), 249-260.
- Ashmos, D.P., & Duchon, D. (2000). Spirituality at work: a conceptualization and measure. *Journal of Management Inquiry*, 9(2), 134-145.
- Bamel, U. K., Rangnekar, S., & Rastogi, R. (2011). Managerial effectiveness in Indian organizations: Reexamining an instrument in an Indian context. *Research & Practice in Human Resource Management*, 19(1), 69-79.
- Barley, S. R., & Kunda, G. (1992). Design and devotion: Surges of rational and normative ideologies of control in managerial discourse. *Administrative Science Quarterly*, 37, 363-399.
- Benefiel M. (2003). Irreconcilable foes? The Discourse of Spirituality and The Discourse Of Organizational Science. *Organization*, 10(2):383–391
- Bentler, P.M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2) 238-246.
- Bishara, N. D., & Schipani, C. A. (2010). Complementary alternative benefits to promote peace. *Journal of Business Ethics*, 89.
- Bollen, K. A. (1989). *Structural Equations with Latent Variables*. John Wiley and Sons, USA.
- Bollen, K. A., & Davis, W. R. (2009). Two rules of identification for structural equation models. *Structural equation Modeling: A Multidisciplinary Journal*, 16(3): 523-536.
- Bouma G., Haidar A., Nyland C., & Smith W. (2003) Work, Religious Diversity and Islam. *Asia Pacific Journal of Human Resources* 41(1):51–61
- Bowen, N. K., & Guo, S. (2011). *Structural equation modeling*. Oxford University Press.
- Brophy, M. (2015). Spirituality incorporated: including convergent spiritual values in business. *Journal of Business Ethics*, 132, 779-794.

- Brown R. B. (2003) Organizational Spirituality: The Sceptic's Version. *Organization* 12(2):393–400
- Burack, E. H. (1999). Spirituality in the Workplace. *Journal of Organizational Change Management*, 12(4), 280-291.
- Butts, D. (1999). Spirituality at Work: an Overview. *Journal of Organizational Change Management*, 12(4), 328-331.
- Byrne, B. M. (1998). Structural Equation Modeling With Lisrel, Prelis and Simples: Basic Concepts, Applications, and Programming. Lawrence Erlbaum Associates, USA.
- Byrne, B.M. (2010) *Structural equation modelling with AMOS: basic concepts, applications, and programming*. 2nd edition. New York: Routledge, Taylor and Francis Group.
- Cavanagh, G. F. (1999). Spirituality for managers: Context and critique. *Journal of Organizational Change Management*, 12, 186-199.
- Cavanagh, G. F., & Bandsuch, M. R. (2002). Virtue as a benchmark for spirituality in business. *Journal of Business Ethics*, 38(1), 109-117.
- Csikszentmihalyi, M. (2003). Good business: Leadership, flow and the making of meaning. London: Coronet.
- Cozby, P., & Bates, S. (2012) *Methods in Behavioural Research*. 11th edition. New York: McGraw-Hill Publishing.
- Cunha, M.P., Rego, A., & D'Oliveira, T. 2006. Organizational spiritualities: An ideology-based typology. *Business & Society*, 45(2): 211-234.
- Daniel, J.L. (2015). Workplace spirituality and stress: Evidence from Mexico and US. *Management Research Review*, 38(1), 29.
- Dean, K. L., Fornaciari, C. J., & McGee, J. J. (2003). Research in spirituality, religion, and work: Walking the line between relevance and legitimacy. *Journal of Organizational Change Management*, 16, 378-395.
- Driver M. (2005). From Empty Speech to Full Speech? Reconceptualizing Spirituality in Organizations Based on a Psychoanalytically-Grounded Understanding of the Self. *Human Relations*, 58(9):1091–1110
- Duchon, D., & Plowman D. A. (2005). Nurturing the Spirit at Work: Impact on Work Unit Performance. *Leadership Quarterly*, 16(5), 807–833.

- Ecob, R., & Cuttance, P. (1987). An overview of structural equation modeling. *Structural modeling by example: Applications in educational, sociological, and behavioral research*, 9-23.
- Fornaciari, C. J., Sherlock, J. J., Ritchie, W. J. & Kathy, L. D. (2005). Scale Development Practices in the measurement of spirituality. *International Journal of Organizational Analysis*, 13(1), 28-49.
- Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Freshman, B. (1999). An exploratory analysis of definitions and applications of spirituality in the workplace. *Journal of Organizational Change Management*, 12(4), 318- 327.
- Fry L. W. (2003) Towards a Theory of Spiritual Leadership. *The Leadership Quarterly*, 14(6), 693–727
- Fry, L. W., Vitucci, S., & Cedillo, M. (2005). Spiritual leadership and army transformation: Theory, measurement, and establishing a baseline. *The Leadership Quarterly*, 16(5), 835-862.
- Gatling, A., Kim, J., & Milliman, J. (2016). The relationship between workplace spirituality and hospitality supervisors' work attitudes: A self-determination theory perspective. *International Journal of Contemporary Hospitality Management*, 28(3), 471-489.
- Gerbing , D.W., & Anderson, J. C. (1985). The effects of sampling error and model characteristics on parameter estimation for maximum likelihood confirmatory factor analysis. *Multivariate Behavioral Research*, 20(2), 255-271
- Giacalone R. A., & Jurkiewicz C. L. (2003). Toward a Science of Workplace Spirituality. In R. A. Giacalone, C. L Jurkiewicz (eds.), *Handbook of Workplace Spirituality and Organizational Performance*. M. E. Sharpe, Armonk, New York, pp. 3–28
- Gotsis, G., & Kortezi, Z. (2008). Philosophical foundations of workplace spirituality: A critical approach. *Journal of Business Ethic*, 78, 575–600.

Guillén, M. (1997). Scientific management's lost aesthetic: Architecture, organization, and the taylorized beauty of the mechanical. *Administrative Science Quarterly*, 42, 682-715.

Garver, M. S., & Mentzer, J. T. (1999). Logistics research methods: employing structural equation modeling to test for construct validity. *Journal of Business Logistics*, 20(1), 33.

Goodwin, J.C. & Goodwin, K.A. (2012). *Research in Psychology: Methods and design*. 7th edition. New Jersey: Wiley and Sons.

Goyal, M., Singh, S., Sibinga, E. M., Gould, N. F., Rowland-Seymour, A., Sharma, R., & Ranasinghe, P. D. (2014). Meditation programs for psychological stress and well-being: a systematic review and meta-analysis. *JAMA internal medicine*, 174(3), 357-368.

Gupta, M., Kumar, V. and Singh, M. (2014), "Creating Satisfied Employees through Workplace Spirituality: a study of the Private Insurance Sector in Punjab (India)" *Journal of Business Ethics*, Vol. 122, pp. 79-88.

Hair, J. F., Jr, Anderson, R. E., Tatham, R. L., & Black, W. C. (2005). *Análise multivariada de dados (5a ed.) [Multivariate data analysis]* 7th ed. (2010). Upper Saddle River: Prentice Hall. Porto Alegre: Bookman.

Hair, J. F., Black, W.C., Babin, B. J., Anderson, R.E. & Tatham, R.L. (2006). *Multivariate Data Analysis*. 6<sup>a</sup> ed. Prentice Hall, New Jersey.

Hair, J.F., Hult, G.T.M., Ringle, C.M. & Sarstedt, M. (2014), *A Primer on Partial Least Squares Structural Equation Modeling*, Sage, Thousand Oaks, CA

Hamann, P.M., Schiemann, F., Bellora, L. & Guenther, T.W. (2013) Exploring the dimensions of organizational performance: a construct validity study. *Organizational Research Methods*. 16(1), pp.67–87.doi:10.1177/1094428112470007.

Harrington, D. (2009). *Confirmatory factor analysis*. Oxford University Press.

Herman, S.W. (2004). Christian Business Ethics on the Employment Relation: Mapping the terrain, in M.L. Pava and P. Primaveraux (eds. *Spiritual Intelligence at work: Meaning, Metaphor and Morals*). *Research in Ethical Issues in Organizations*, Vol.5 (Elsevier Ltd, Oxford), pp.37-53.

- Hinkin, T.R. (1995). A review of scale development practices in the study of organizations. *Journal of Management*, 21(5), 967-88.
- Hu, L.T., & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55
- Joelle, M., & Coelho, A.M. (2017). The impact of spirituality at work on workers' attitudes and individual performance. *The International Journal of Human Resource Management*, DOI: 10.1080/09585192.2017.131431
- Jurkiewicz C.L., & Giacalone, R. A. (2004). A Values Framework for Measuring the Impact of Workplace Spirituality. *Journal of Business Ethics*, 49,129-142.
- Karakas, F. (2010). Spirituality and performance in organizations: A literature review. *Journal of Business Ethics*, 94, 89–106.
- Kinjierski V. M., Skrypnek B. J. (2004) Defining Spirit at Work. Finding Common Ground. *Journal of Organizational Change Management*, 17(3):165–182
- Krishnakumar, S., & Neck, C. P. (2002). The “what”, “why” and “how” of spirituality in the workplace. *Journal of managerial psychology*, 17(3), 153-164.
- Lee, C. & Zemke, R. (1993). The search for spirit in the workplace. *Training*, 21-8.
- Licata, J. W., Mowen, J. C., Harris, E. G., & Brown, T. J. (2003). On the trait antecedents and outcomes of service worker job resourcefulness: A hierarchical model approach. *Journal of the Academy of Marketing Science*, 31, 256–271.
- Kline, R. B. (2005). Principles and Practice of Structural Equation Modeling. 2<sup>nd</sup> ed. The Guilford Press, NY.
- Kline, R.B. (2011) Principles and Practice of Structural Equation Modelling. 3rd edition. New York: The Guilford Press.
- MacCallum, R. C. (1995). Model specification: Procedures, strategies, and related issues. In Hoyle, R. H. (Ed.) “Structural Equation Modeling: Concepts, Issues, and Applications”. Sage Publications, USA.
- Mahakud, G. C., & Gangai, K. N. (2015). The Influence of Workplace Spirituality on organisational commitment among public Sector employees. *Journal of Organisation and Human Behaviour*, 4(1).

- Malhotra, N. K., (2004). *Marketing Research: An Applied Orientation*. 4<sup>a</sup> ed. Pearson Prentice Hall, Inc., Upper Saddle River, New Jersey, USA.
- Marques, J., Dhiman, S., & King, R. (2005). Spirituality in the workplace: Developing an integral model and a comprehensive definition. *The Journal of American Academy of Business*, 7(1), 81-91.
- Marôco, J. (2010) *Análise de Equações Estruturais: Fundamentos teóricos, Software e Aplicações*. Lisboa: Report Number Lda.
- Maslow, A. H. (1970). *Religions, values, and peak experiences*. New York: Viking Press. (Paperback reissue of 1964 edition; preface added in 1970).
- Maslow, A. H. (1971). *The farther reaches of human nature*. New York: Viking.
- Mayo, E. (1945). *The social problems of an industrial civilization*. Boston: Harvard University
- McCormick, D.W. (1994). Spirituality and management. *Journal of Managerial Psychology*, 9(6), 5-8.
- McGrew, T. J., Alspector-Kelly, M., & Allhoff, F. (2009). *The philosophy of science: An historical anthology*. Malden, MA: Wiley-Blackwell.
- Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extensions and a test of a three-component conceptualization. *Journal of Applied Psychology*, 78, 538–551.
- Milliman, J., Czaplewski, A. J., & Ferguson, J. (2003). Workplace spirituality and employee work attitudes: An exploratory empirical assessment. *Journal of Organizational Change Management*, 16, 426–447.
- Mitroff, I. I., & Denton, E. A. (1999). A study of spirituality in the workplace. *MIT Sloan Management Review*, 40(4), 83.
- Moore, T.W., & Casper, W. J. (2006). An examination of proxy measures of workplace spirituality: A profile model of multidimensional constructs. *Journal of Leadership & Organizational Studies*, 12(4), 109-118.
- Mott, P.E. (1971). *The characteristics of effective organizations*. New York: Harper and Row.

- Neal, J. A. (1997). Spirituality in management education: A guide to resources. *Journal of management education*, 21(1), 121-139.
- Neal, J. & Biberman, J. (2004). "Research that Matters: Helping Organizations Integrate Spiritual Values and Practices". *Journal of Organizational Change Management*, 17(1), 7-10.
- Nunnally, J. C. e Bernstein, I. (1994). Psychometric Theory. 3ª ed. McGraw-Hill, USA.
- O'Connor, D., & Yballe, L. (2007). Maslow revised: Constructing a road map of human nature. *Journal of Management Education*, 31, 738–756.
- Paul, M., Dutta, A., & Saha, P. (2015). Workplace spirituality and work-life balance: A Study among women executives of IT Sector Companies. *International Journal of Management & Behavioural Sciences (IJMBS)*, 6, 267.
- Pava M. L. (2004). Intelligent Spirituality in Business: A Deweyan Conception. In M. L. Pava, P. Primeaux (eds.), *Spiritual Intelligence at Work: Meaning, Metaphor and Morals. Research in Ethical Issues in Organizations*, 5, 63-93. Elsevier Ltd, Oxford.
- Pawar, B. S. (2009). Workplace Spirituality Facilitation: A Comprehensive Model. *Journal of Business Ethics*, 90(3), 375-386.
- Peter, J. P. (1981). Construct validity: A review of basic issues and marketing practices. *Journal of marketing research*, 133-145.
- Rego, A., Souto, S., & Cunha, M.P. (2007). Espiritualidade nas organizações, positividade e desempenho. *Comportamento Organizacional e Gestão*, 13(1), 7-36.
- Rego, A., & Cunha M. P. (2008). Workplace spirituality and organizational commitment: an empirical study. *Journal of Organizational Change Management*, 21(1) 53-75.
- Roof, R. A. (2015). The association of individual spirituality on employee engagement: The spirit at work. *Journal of Business Ethics*, 130(3), 585-599.
- Schneider, R. H., Alexander, C. N., Salerno, J, Rainforth, M. & Nidich, S (2005). Stress Reduction in the Prevention and Treatment of Cardiovascular Disease in African Americans: A Review of Controlled Research on the Transcendental Meditation Program. *Journal of Social Behavior and Personality*, 17(1), 159-180.
- Sen, A. (2009). A Ideia de Justiça. Edições Almedina.



- Sharma A. (2004) A Hindu Perspective on Spirituality and Management. In M. L. Pava, P. Primeaux (eds.), *Spiritual Intelligence at Work: Meaning, Metaphor and Morals. Research in Ethical Issues in Organizations*, (5), 203-211. Elsevier Ltd, Oxford.
- Sheep, M. L. (2006). Nurturing the whole person: The ethics of workplace spirituality in a society of organizations. *Journal of business ethics*, 66(4), 357-375.
- Shiu, E.M.K., Walsh, G., Hassan, L.M., & Shaw, D. (2011). Consumer Uncertainty, Revisited. *Psychology and Marketing*, 28(6), 584-607.
- Staples, D.S., Hulland, J.S., & Higgins, C.A. (1999). A self-efficacy theory explanation for the management of remote workers in virtual organizations. *Organization Science*, 10(6), 758-776.
- Tischler, L. (1999). The growing interest in spirituality in business: A long-term socio-economic explanation. *Journal of Organizational Change Management*, 12(4), 273-279.
- Tischler L., Biberman J., & Mckeage R. (2002) Linking Emotional Intelligence, Spirituality and Workplace Performance: Definitions, Models and Ideas for Research. *Journal of Managerial Psychology*, 17(3):203–218
- Tombaugh, J. R., Mayfield, C., & Durand, R. (2011). Spiritual expression at work: Exploring the active voice of workplace spirituality. *International Journal of Organizational Analysis*, 19(2), 146-170.
- Tischler, L., Biberman, J., & Altman, Y. (2007). A model for researching about spirituality in organizations. *Business Renaissance Quarterly*, 2(2), 23.
- Tucker, L.R. & Lewis, C. (1973). A reliability coefficient for mximum likelihood factor analysis. *Psychometrika*, 38(1) 1-10.
- Vinit, S. C., Dhar, U., & Pathak, R. D. (2005). Factorial constitution of managerial effectiveness: Re-examining an instrument in Indian context. *Journal of Managerial Psychology*, 20(1), 164-177.
- Wilson, J. (2010). *Essentials of business research: a guide to doing your research project*. London: Sage Publications Ltd.
- Wright, T. A., & Cropanzano, R. (2000). Psychological well-being and job satisfaction as predictors of job performance. *Journal of Occupational Health Psychology*, 5(1), 84-94.

The cover image was taken from the website  
<http://www.hartfordcourantmediagroup.com/leadership-team>.

## Appendix

### Espiritualidade nas organizações (Faculdade de Economia da Universidade de Coimbra)

---

Estimados colegas e amigos.

Agradecemos que preencha o questionário electrónico que se insere num tema novo e interessante.

O objectivo deste questionário é avaliar a performance dos trabalhadores nos seus locais de trabalho em função das percepções dos mesmos em torno da espiritualidade e das práticas de espiritualidade nas organizações.

Indique o seu grau de concordância em relação às afirmações que são apresentadas de 1 a 5 de acordo com a escala que é apresentada logo a seguir a cada uma das afirmações.

Para alguma dúvida ou esclarecimento: [caneirosjoel@gmail.com](mailto:caneirosjoel@gmail.com)

Obrigada pela colaboração. Os melhores cumprimentos.

Maria Joelle

**\*Obrigatório**

**Idade\***

**Nível de escolaridade \***

- Mestrado/Doutoramento
- Licenciatura/Bacharelato/Pós-graduação
- Secundário(10º ao 12º ano)
- 2º e 3º Ciclo( 5º ao 9º ano)
- 1º Ciclo

**Função que desempenha na empresa\***

- Administrador/gerente
- Director de departamento
- Chefe de serviço
- Coordenador
- Operador
- Nenhuma destas funções

**Se na anterior escolheu a última resposta, diga qual a sua função:**

**Número de anos na empresa\***

**Sector de actividade\***

- Comércio
- Serviços
- Indústria

### Localização\*

País - Cidade

### Número de funcionários\*

- 1 a 10
- 11 a 30
- 31 a 50
- 51 a 100
- 101 a 250
- mais 251

### 1 As pessoas do meu grupo/equipa sentem-se parte de uma família.\*

1 2 3 4 5

completamente falsa      completamente verdadeira

### 2 O meu grupo/equipa fomenta a criação de um espírito de comunidade.\*

1 2 3 4 5

completamente falsa      completamente verdadeira

### 3 Acredito que as pessoas do meu grupo/equipa se apoiam umas às outras.\*

1 2 3 4 5

completamente falsa      completamente verdadeira

**4 Acredito que os membros do meu grupo/equipa se preocupam realmente uns com os outros.\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**5 Sinto que as pessoas do meu grupo/equipa estão ligadas entre si por um propósito comum.\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**6 Sinto-me bem com os valores que predominam na minha organização.\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**7 As pessoas sentem-se bem acerca do seu futuro na organização.\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**8 A minha organização respeita a minha “vida interior”.\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**9 A minha organização ajuda-me a que eu viva em paz comigo mesmo.\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**10 Os líderes da minha organização preocupam-se em ser úteis à sociedade.\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**11 O trabalho que eu realizo está relacionado com aquilo que considero importante para a minha vida.\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**12 Vejo que existe uma ligação entre o meu trabalho e os benefícios para a sociedade como um todo.\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**13 Quando trabalho, sinto que sou útil à sociedade.\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**14 Os meus valores espirituais são valorizados no meu local de trabalho.\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**15 No meu local de trabalho há lugar para a espiritualidade.\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**16 No meu local de trabalho eu posso "alimentar" a minha espiritualidade.\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**17 Na minha organização praticamos exercício físico.\***

1 2 3 4 5  
nada      intensamente

**18 Na minha organização praticamos exercícios de relaxamento.\***

1 2 3 4 5  
nada      intensamente

**19 Na minha organização praticamos meditação.\***

1 2 3 4 5  
nada      intensamente

**20 Na minha organização praticamos reiki.\***

1 2 3 4 5  
nada      intensamente

**21 Na minha organização temos programas de saúde, higiene e educação alimentar.\***

1 2 3 4 5  
nada      intensamente

**22 Na minha organização praticamos yoga.\***

1 2 3 4 5  
nada      intensamente

**23 Na minha organização praticamos pilates.\***

1 2 3 4 5  
nada      intensamente

**24 Na minha organização praticamos dança.\***

1 2 3 4 5  
nada      intensamente



25 Na minha organização existem políticas de apoio à gestão da diversidade ( diferenças de personalidade, etnia, religião, cultura,...).\*

1 2 3 4 5  
nada      intensamente

26 Na minha organização são proporcionados momentos de música.\*

1 2 3 4 5  
nada      intensamente

27 Na minha organização praticamos outro tipo de actividades (indique quais).

28 As pessoas que trabalham na organização recebem um bom auxílio por parte dos órgãos de gestão. \*

1 2 3 4 5  
completamente falsa      completamente verdadeira

29 Os órgãos de gestão ouvem as nossas sugestões/reclamações.\*

1 2 3 4 5  
completamente falsa      completamente verdadeira

30 Esta organização é gerida de forma apropriada.\*

1 2 3 4 5  
completamente falsa      completamente verdadeira

31 Os órgãos de gestão desta organização agem correctamente.\*

1 2 3 4 5  
completamente falsa      completamente verdadeira

32 Eu tenho confiança na equidade e honestidade da gestão da organização\*

1 2 3 4 5  
completamente falsa      completamente verdadeira

**34 Eu sinto que os problemas desta organização também me pertencem\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**35 Eu não sinto que "faça parte parte da família" nesta organização.\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**36 Eu não me sinto "emocionalmente ligada" nesta organização\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**37 A minha organização tem um grande significado pessoal para mim\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**38 Eu não sinto um forte senso de pertença à minha organização\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**39 O meu trabalho ajuda-me a sentir paz comigo mesmo\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**40 O meu trabalho ajuda-me a encontrar um equilíbrio na minha vida\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**41 O meu trabalho ajuda-me a concretizar as minhas aspirações pessoais\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**42 O meu trabalho ajuda-me na minha realização pessoal\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**43 O meu trabalho ajuda-me a ser mais feliz \***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**44 O meu trabalho ajuda-me a que mesmo quando alguma coisa corre mal me sinta confiante\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**45 Eu sou muito inteligente e empreendedor na execução do meu trabalho\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

**46 Eu sou uma pessoa muito criativa a encontrar formas de fazer o meu trabalho\***

1 2 3 4 5  
completamente falsa      completamente verdadeira

47 Eu tenho orgulho em conseguir fazer com que as coisas aconteçam mesmo quando há dificuldades\*

1 2 3 4 5  
completamente falsa      completamente verdadeira

48 Eu sou imaginativo quando se trata de ultrapassar barreiras no meu trabalho\*

1 2 3 4 5  
completamente falsa      completamente verdadeira

49 Sou um empregado eficaz\*

1 2 3 4 5  
completamente falsa      completamente verdadeira

50 Os meus colegas vêem-me como um empregado bastante produtivo\*

1 2 3 4 5  
completamente falsa      completamente verdadeira

51 Estou satisfeito com a qualidade do meu trabalho\*

1 2 3 4 5  
completamente falsa      completamente verdadeira

52 O meu superior vê-me como um empregado eficaz\*

1 2 3 4 5  
completamente falsa      completamente verdadeira

53 Qual das seguintes opções melhor descreve a forma como seu supervisor o classificou na última avaliação formal de desempenho?\*

1 2 3 4 5  
fraco      excelente

54 Como é que o seu nível de produção, em quantidade, se pode comparar com os níveis de produtividade dos seus colegas? \*

1 2 3 4 5  
fraco      excelente

55 Como é que a qualidade do seu trabalho se pode comparar à dos seus colegas?\*

1 2 3 4 5  
fraco      excelente

56 Qual é nível de eficiência do seu trabalho em comparação com seus colegas? Por outras palavras, até que ponto é que usa de forma adequada os recursos disponíveis (dinheiro, pessoas, equipamentos, etc.)? \*

1 2 3 4 5  
fraco      excelente

57 Em comparação com os seus colegas, como avalia as suas capacidades de impedir ou minimizar potenciais problemas antes que eles ocorram?\*

1 2 3 4 5  
fraco      excelente

58 Em comparação com os seus colegas, qual é a sua eficácia em adaptar-se às mudanças no trabalho?\*

1 2 3 4 5  
fraco      excelente

59 Qual é a sua rapidez em adaptar-se às mudanças no trabalho, comparando com os seus colegas?\*

1 2 3 4 5  
fraco      excelente

60 Como se classifica, em comparação com seus colegas, a ajustar-se a mudanças no modo de trabalho?\*

1 2 3 4 5  
fraco      excelente

61 Como reage a situações de relativa emergência (como crises, prazos curtos, questões pessoais inesperadas, repartição dos recursos, problemas, etc.) em comparação com os seus colegas? \*

1 2 3 4 5  
fraco      excelente

62 Como avalia a qualidade da sua resposta a situações de relativa emergência em comparação com os seus colegas?\*

1 2 3 4 5  
fraco      excelente

Enviar

Nunca envie palavras-passe através dos Formulários Google.

Tecnologia do [Google Docs](#)