



# The Effect of Spiritual Leadership on Innovative Behavior: An Applied Study on Employees of Telecommunication Companies in Egypt

submitted by

Afnan Mohamed Kamal

Under the supervision of

Prof. Dr. Hamida Mohamed El-Naggar

Prof. Dr. Abdul Aziz Ali Hassan

Prof. head of business administration

Prof. head of business administration

department Faculty of Commerce

department Faculty of Commerce

Mansoura University

Mansoura University

**Raya International Journal of Business Sciences**

**volume (2), Issue (7), October 2023**

<https://www.rijcs.org/>

**Publisher**

**Raya Higher Institute of Management and Foreign Trade in New Damietta**

# The Effect of Spiritual Leadership on Innovative Behavior: An Applied Study on Employees of Telecommunication Companies in Egypt

submitted by

Afnan Mohamed Kamal

Under the supervision of

Prof. Dr. Hamida Mohamed El-Naggar

Prof. Dr. Abdul Aziz Ali Hassan

Prof. head of business administration

Prof. head of business administration

department Faculty of Commerce

department Faculty of Commerce

Mansoura University

Mansoura University

## ABSTRACT

This study aimed to investigate the effect of Spiritual Leadership on Innovative Behavior applied on employees of Telecommunication Companies in Egypt. Based on the literature review, researchers developed a conceptual framework for the relationship between the research variables (Spiritual Leadership and Innovative Behavior).

Researchers used a questionnaire that was uploaded to Google Drive in Google Form format and published across the social media channels of Telecommunication Companies in Egypt to collect data. The collected responds were 382, and the valid responds were 365. The findings show that there is a significant, and positive effect of Spiritual Leadership on Innovative Behavior. For Spiritual Leadership Dimensions (Vision, Hope/faith, and Altruistic Love),

results showed that three dimensions of Spiritual Leadership significantly affect Innovative Behavior.

**Keywords:** Spiritual Leadership, Innovative Behavior.

## ***Introduction***

The prevailing era of uncertainty, fierce competition, new challenges, a highly dynamic business environment, the openness of both domestic and international markets has made it difficult for firms to compete and survive (Khaddam et al., 2023). Consequently, leadership becomes a crucial component in managing an organization or industry and an important indicator of the long-term survival of the organization (Subhaktiyasa, 2023). Many approaches and theories have described the nature of leadership based on historical growth approaches. One type of leadership theory investigated to encourage internal motivation is leadership theory based on spirituality (Chang & Arisanti, 2022). Many businesses today place a strong emphasis on spiritual leadership to encourage internal motivation that encourages employees to go above and beyond what is required of them by the company. (Iqbal & Zaidi, 2021). It aims to intrinsically motivate and spiritually drive employees to internalize ecological values that can inspire employees to serve the community, engage in and promote activities (Anser et al., 2021).

In recent decade, Innovation activities are now widely regarded to be essential to organizations' success (Yasir e al., 2023). Innovation has been seen as a source of competitiveness for organizations, both in intangible areas such as leadership and organizational culture and in tangible ones such as products, processes, and services. Moreover, the effects of a leader's behavior on a follower's attitude and behavior have increased as a result of increased scholarly interest in

organizational studies, particularly in relation to innovation, which ultimately influences the survival and growth of an organization. (Lee et al.,2021).

The telecommunications sector is one of the most crucial areas of the information technology. During the recent period, The mobile phone has expanded in Egypt, After the development of the Egyptian market that resulted from the expansion of competition among the four mobile operators (Vodafone Egypt, Orange, Telecom Egypt "we", Etisalat Misr) which reflected positively on the cost of the service provided and the entry of the fourth-generation network. Telecommunication companies play an important role for the economy of nations (Giannarakis, 2022;Nguyen et al.,2020). There is no doubt that Telecommunication companies have a significant role for social and economic prosperity (Nguyen et al.,2020).

This kind of services need for staff who have employees with special knowledge and experience to provide better customer service. Therefore, current research studies the relationship between spiritual leadership and innovative behavior among employees of telecommunication companies.

## **1. Conceptual Framework**

### **1.1 Spiritual Leadership**

#### **1.1.1 Spiritual Leadership Definitions**

Spiritual leadership has been defined as a set of principles, beliefs, value, behaviors, and practices that serve as effective catalysts for motivating oneself and others, contribute to the satisfaction of leaders' and subordinates' psychological needs that help them to continue working in the organization and communicate with others. (Pandia et al ., 2023; Mohammed & Elashram, 2022).

Also, Spiritual leadership uses conscious effort to balance one's work and personal lives. As a result, a spiritual leader encourages self-awareness, self-growth, and self-leadership in followers, viewing them as 'whole persons' with a variety of skills that extend beyond the scope of their employment. Employees in this vein are continually encouraged to strive for a greater force and to integrate themselves into a meaningful whole, thereby realizing their potential (Sibanda & Grobler, 2023). spiritual leadership involves rational determinants, ethical and spiritual values, which shape a unique management style and support employees' needs related to transcendence, connection, self-motivation, satisfaction, spiritual wellbeing, membership, and personal calling (Contreras,2016; Usman et al 2021 ).

In addition, Researchers and practitioners have become increasingly interested in spiritual leadership because of its value-driven strategy, which encourages followers to see their work as a calling by intrinsically motivating them, thereupon culminating in greater organizational performance (Vedula & Agrawal, 2023).

### **1.1.2 Spiritual Leadership Dimensions**

Spiritual Leadership has three main dimensions (Fry et al., (2005): Vision, Hope/faith, and Altruistic love. Vision relates to creating a meaningful future and motivating employees to respect their work (Yasin et al, 2022). Fry et al. (2016) add that having a vision enables the leader to determine the broad direction of the organization, enables the manager to streamline a series of tactical decisions across several department and supports the measures' cross-departmental coordination. Hope is defined as having and expressing the desire to realize one's own potential. Faith refers to having a strong belief and hope jointly (Almutairi & Khashman,

2022). It is founded on principles, attitudes, and behaviors that reflect conviction and trust in the fulfilment of what is sought and expected. Also, with hope and faith, individual have clarity of "where they are going, how to get there, and are willing to face opposition and endure hardships in order to achieve their goals" (Fry et al, 2011). In addition, Altruistic love is exemplified by values that encourage voluntarily providing assistance to employees (Almutairi & Khashman, 2022). It is based on a set of values including kindness, humility, patience, integrity, gratitude, trust, courage, compassion, and loyalty (Fry et al., 2011).

## **1.1 Innovative behavior**

### **1.2.1 Innovative behavior Definitions**

Innovative behavior is defined as the process of asking questions and conceiving solutions, seeking support for one's ideas, and realizing one's innovative ideas (Dai et al., 2022). Innovative behavior also includes the practical application of creative ideas, the successful handling of crises, and the ability to discover opportunities and try to seize them ( Abdelkawi et al., 2023). Janssen, (2000) defined innovative behavior as the act of intentionally creating, introducing, and applying new ideas in a work role, team, or organization to benefit role performance, team, or organization (Guo et al., 2023).

Innovative behavior refers to any organizational innovation is discovered, developed, endorsed, and implemented by an organization's employees, who need to go beyond their established daily routines and job descriptions to search for new technologies, suggest new practices, apply new methods, or secure new resources (Burgi, 2020).

Furthermore, Innovative behavior is impacted by both internal psychological factors and external environmental factors. Internally, the presentation of innovative behaviors is influenced by employees' perceptions of effort-reward fairness, scenario perceptions, individual intuitive problem-solving styles, and systematic problem-solving styles. Externally, organizational atmosphere, leadership-member exchange, and supervisory support all have a significant impact on the exhibition of innovative behaviors. (Scott & Bruce, 1994; Janssen, 2000 ; Messmann & Mulder, 2012).

According to the previous literature, current research is Attempting to answer research question One by testing hypothesis One, which is as follows:

H2: Spiritual Leadership significantly affects Innovative Behavior among employees of Telecommunication companies in Egypt.

### **1.2.2 Innovative Behavior Dimensions**

Innovative Behavior has three main dimensions (Scott and Bruce, 1994): Idea generation, Idea promotion, and Idea realization.

## **2. Research Gap & Problem**

According to the researcher's readings, some studies examined the relationship between spiritual leadership and innovative behavior in diverse industries rather than telecommunication companies. For example: manufacturing companies (Yang et al., 2020; Li et al., 2022), hospitality industry (Alfarajat & Emeagwali 2021), Drone companies (Zhou & Yang, 2020), multinational companies (Usmanova et al., 2021), Internet enterprises (Yang et al., 2020) and higher education (Hunsaker, 2020). Therefore, there is a lack of the literature regarding the effect

of spiritual leadership on innovative behavior in telecommunication industry.

Based on literature review, the researchers noticed that there are few previous studies explored the relationship between spiritual leadership and innovative behavior. The current research seeks to explore this relationship.

### **1. Research Questions**

Q1. What is the nature of the correlation relationship between the research variables dimensions (Spiritual Leadership, Innovative Behavior)?

Q2. What is the impact of Spiritual Leadership on Innovative Behavior among employees of telecommunication companies in Egypt?

### **2. Research Objectives**

O1. Determining the nature of the correlation relationship between the research variables dimensions (Spiritual Leadership, Innovative Behavior).

O2. Measuring the effect of Spiritual Leadership on Innovative Behavior among employees of telecommunication companies in Egypt.

### **3. Research Hypothesis**

H1. There is a significant correlation relationship between the research variables dimensions (Spiritual Leadership, Innovative Behavior).

H2. Spiritual Leadership significantly affects Innovative Behavior among employees of telecommunication companies in Egypt.

H2a. Vision significantly affects Innovative Behavior among employees of telecommunication companies in Egypt.



H2b. Hope/faith significantly affects Innovative Behavior among employees of telecommunication companies in Egypt.

H2c. Altruistic love significantly affects Innovative Behavior among employees of telecommunication companies in Egypt.

### **1. Research Importance**

This research concerned with evaluating the existing literature, and then the researchers sought to fill some research gaps related to spiritual leadership, and innovative behavior. In addition, this research demonstrated the way of how spiritual leadership affects innovative behavior among employees of telecommunication companies.

## Conceptual Framework for the relationships between research Variables

The Conceptual Framework for the Relationships Between Research Variables is depicted in Figure 1 and is based on the Literature and the Research hypotheses:

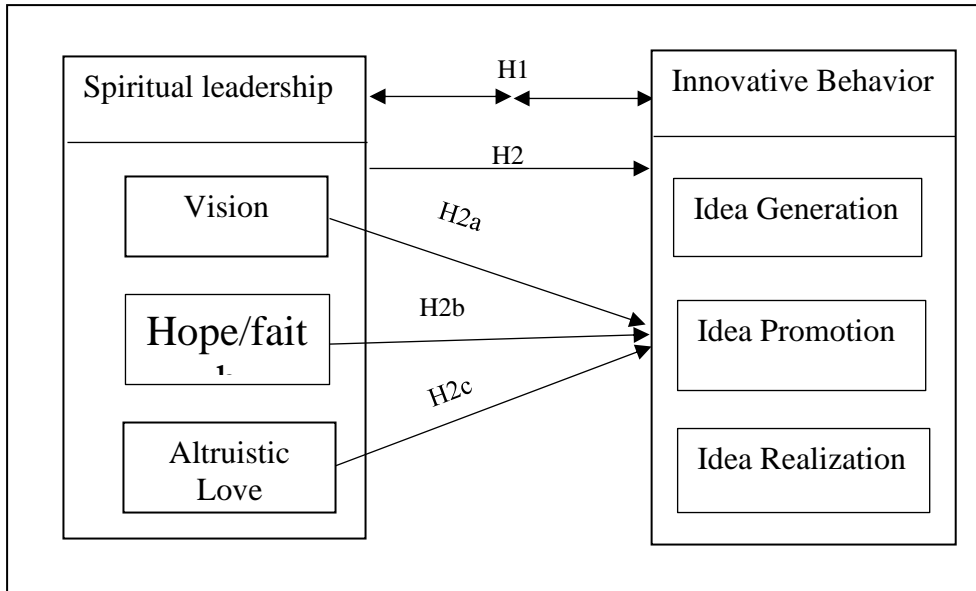


Figure 1 The Conceptual Framework for the Relationships Between Research Variables

Source: Prepared by researchers depending on Literature

### 1. Research Methods

This study depended on quantitative research methods. That is more suited with positivism philosophy and deductive approach. Through quantitative research methods, the researcher collected the data from the specific sample in this study (Creswell, 2014).

## **2. Data Collection**

Research data was collected during the period from December 2022 to March 2023. Researchers designed an electronic version of the questionnaire using Google Form, which was published to employees of telecommunication companies through social media channels like Facebook Pages, Facebook Groups, and WhatsApp Groups interested in telecommunication companies in Egypt. Total responds were (382), while accepted responds were (365). Researchers exported the collected data from Google Form to Google Sheet then to Excel Sheet in which items were coded and formatted to be ready for WarpPLS. Research used WarpPLS 7.0 to analyze research data which is a development of the PLS analysis.

### **8.1 Types of Data**

Primary and secondary data were used by the researchers. The primary data was gathered via a questionnaire created on a Google Form and distributed over social media. Secondary data was the reports, literature, and data about the field available on the internet.

### **8.2 Data Collection Techniques**

There are different methods that researchers use to collect primary research data (Cooper & Emory, 1995). The questionnaire survey was used as a method of data collection in this study.

## **9. Variables Measurement**

In this section, Researchers presented the measures of constructs employed in this study. The independent variable which is spiritual leadership includes vision, hope/faith and altruistic love, while the dependent variable is innovative behavior. The constructs employed in this study are measured by five-point Likert scale with choices ranging from "5= strongly agree" to "1= strongly disagree"

## 9.1 Spiritual leadership

Spiritual leadership was measured by a construct involves 18 items adopted from (Fry et al., 2005).

## 9.2 Innovative Behavior

Innovative behavior was measured using 10-item scale based on (Scott and Bruce, 1994).

## 10. Population and Sampling

The population of the current study is the employees of telecommunication companies in Egypt. Researchers collect data through web-based questionnaire. The main sampling techniques can be divided into two groups: probability sampling techniques and non-probability techniques. The current study adopted the probability sampling technique.

**Table (1) The numbers of employees of telecommunication companies in Egypt**

Companies	Number of employees
1. Telecom Egypt "we"	36400
2. Vodafone Egypt	7800
3. Orange	7300
4. Etisalat Egypt	6800
Total	58300

Source: Telecommunication companies

### 10.1 Sampling Unit

The current research's sampling unit is the employees of telecommunication companies in Egypt.

## **10.2 Sampling Frame**

The sampling frame for a probability sample was described by Saunders et al. (2009) as a complete list that contains all units in the population from which a sample can be selected. For this study, the sampling frame is the number of telecommunication companies' employees in Egypt. The list related to the number of telecommunication companies' employees showed that there are 58300 employees. This list was obtained from the records of Telecommunication Companies in Egypt.

## **10.3 Sample Size**

The sample size necessary to be large enough to allow the findings to be generalized to a population. According to Saunders et al. (2009), the appropriate sample size relies on a variety of variables, including the type of statistical analysis used in the study, the margin of error, the confidence level, and the population size. In order to generalize the findings to a population, the sample size had to be large enough. Therefore, according to Saunders et al. (2009), considering a margin error equals 5% which is the percentage used in social research, a confidence level of 95%, and the size of the society 58300, this requires a sample size 382. Researchers collect 365 questionnaires by web-based questionnaire.

## **10.4 Sampling Technique**

Researchers depended on stratified random sample technique. Using Google Form, the researcher created an electronic version of the questionnaire, which was sent to employees of telecommunication companies in Egypt using social media.

## **11. Questionnaire Pilot Testing**

### **11.1 Validity**

Instrument validation is an essential procedure in order to get statistically valid conclusions. Hence, it is essential for a test to be valid in order for the results to be accurately applied and understood. Validity represents the accuracy of a measure as is regarded as the most significant characteristic of the questionnaire (Fowler, 2009). Moreover, there are four types of validity commonly examined in social research, namely face validity, content validity, criterion-related validity, and construct validity (Saunders et al., 2009).

### **11.2 Face Validity**

Face validity is considered as the weakest component in validity form (DeVon et al., 2007). It depends on expert's judgments. Therefore, it is regarded as a personal evaluation. Furthermore, face validity correlates to particular qualities, for example, completeness of the questionnaire's items, transparency, and clarity (Sangoseni et al., 2013).

### **11.3 Content Validity**

Content validity refers to the ability of the questionnaire's items to sufficiently cover all aspects of the variable measured (Saunders et al., 2009). In order to verify the questionnaire's content validity, the initial questionnaire is directed at academic experts.

### **11.4 Translation of Questionnaire**

The first questionnaire form was offered in English. It was then translated into Arabic to ensure that the questions were accurately comprehended and answered. Once again, the Arabic copy has been translated back into English to be contrasted with the main form in accordance with the validity processes of back translation.

methodologies approved by Saunders et al. (2009). Finally, researchers analyzed the two original questionnaires to arrive at a final and more appropriate one.

### 11.5 Construct Validity

Construct validity may be divided into two types: convergent validity and discriminant validity. Average variance extracted (AVE) is used to determine convergent validity (Hair et al. 2010). The AVE indicates the total amount of variance in the pieces that make up a construct. On the other hand, discriminant validity translates how different one construct is from other related constructs (Tarling, 2008). Fornell and Larcker (1981) define discriminant validity as the square root of the AVE that must surpass the association between constructs. As shown in table 2, all these construct’s AVEs are greater than 0.5. Therefore, the results indicate that there is convergent validity for all the latent used in this research.

**Table 2 Correlations among I.vs. with sq. rts. of AVEs**

	SL	IB
SL	(0.806)	0.678
IB	0.678	(0.791)

Note: Square roots of average variances extracted (AVEs) shown on diagonal.

Source: Prepared by the researchers according to statistical analysis

**Table 3 Combined loadings and cross-loadings**

	SL	IB	SE	P-Value
SL1	(0.791)	0.188	0.047	<0.001
SL2	(0.754)	0.250	0.047	<0.001
SL3	(0.849)	0.057	0.046	<0.001
SL4	(0.795)	0.054	0.047	<0.001

	SL	IB	SE	P-Value
SL5	(0.880)	0.138	0.046	<0.001
SL6	(0.783)	0.272	0.047	<0.001
SL7	(0.815)	0.277	0.047	<0.001
SL8	(0.831)	-0.106	0.047	<0.001
SL9	(0.754)	-0.094	0.047	<0.001
SL10	(0.844)	-0.089	0.046	<0.001
SL11	(0.896)	-0.149	0.046	<0.001
SL12	(0.858)	-0.087	0.046	<0.001
SL13	(0.842)	0.083	0.046	<0.001
SL14	(0.877)	-0.174	0.046	<0.001
SL15	(-0.202)	0.137	0.051	<0.001
SL16	(0.888)	-0.069	0.046	<0.001
SL17	(0.761)	-0.356	0.047	<0.001
	SL	IB	SE	P-Value
SL18	(0.836)	-0.124	0.046	<0.001
IB1	-0.129	(0.827)	0.047	<0.001
IB2	-0.125	(0.832)	0.047	<0.001
IB3	-0.130	(0.788)	0.047	<0.001
IB4	-0.200	(0.842)	0.046	<0.001
IB5	-0.003	(0.817)	0.047	<0.001
IB6	0.532	(0.716)	0.047	<0.001
IB7	0.375	(0.672)	0.048	<0.001
IB8	-0.042	(0.840)	0.046	<0.001
IB9	0.054	(0.725)	0.047	<0.001
IB10	-0.185	(0.828)	0.047	<0.001

Notes: Loadings are un-rotated and cross-loadings are oblique-rotated. SEs and P values are for loadings. P values < 0.05 are desirable for reflective indicators. Scores for each item <0.30 are desirable for sample 365 (Hair, 2009).

Source: Prepared by the researchers according to statistical analysis

## 12. Reliability

To perform internal consistency reliability, researchers relied on Cronbach's alpha coefficient ( $\alpha$ ) and Composite Reliability (CR). Cronbach's alpha and CR should be larger than or equal to 0.7 (Hair et al., 2010).



**Table 4 composite reliability coefficient & Cronbach's alpha coefficient**

Latent Variables	SL	IB
composite reliability coefficient		
Values	0.968	0.943
Cronbach's Alpha Coefficients		
Values	0.960	0.933

Source: Prepared by the researchers according to statistical analysis

As shown in table 4, Cronbach's alpha and CR are larger than 0.7 which indicates high internal consistency reliability

### 13. Sample Description

This section outlines the characteristics of the sample regarding the respondents' gender, age, qualifications and Work experience as follow:

Gender 38.9% (142) respondents are males, and 61.1% (223) respondents are females.

The majority of age groups 78.1% (285) respondents are aged less than 30 years. 15.9% (58) respondents are aged from 30 to less than 40. 6.0% (22) respondents are aged from 40 to less than 50 years, and 0.0% (0) respondents are aged from 50 years or more.

In terms of respondent's qualifications, 0.8% (3) respondents are less than undergraduate. 79.5% (290) respondents have a bachelor's degree, and 19.7% (72) respondents are postgraduate

Finally, respondent's work experience 60.0% (219) are less than one year, 21.9% (80) are more than one year and 18.1% (66) are more than 5 years.

## 14. Descriptive Statistics

According to Byrne (2010), data analysis is an essential step that needs to be done before the measurement model is tested, specifically when using structural equation modeling. The researchers conducted some measurements before beginning the statistical study to ensure that the appropriate conditions for the statistical techniques to be used are available. Descriptive statistics were provided demonstrating the values of skewness and kurtosis of 28 each item in order to determine the normality of the examined data. Normality reflects the degree to which the data from the survey is distributed by normal distribution (Hair et al., 2010). The descriptive statistics for the study variables are shown in Table (5). This table includes the mean, standard deviation, skewness, and Kurtosis values for the items used to evaluate each variable.

**Table (5) Descriptive Statistics for Each Item**

Constructs ' items			Mean	Std. deviation	Skew-ness	Kurtosis
Spiritual Leadership						
Dimension s	Item code	Item				
Vision	SL1	I see that my company's vision is clear.	3.78	0.994	-0.314	-0.964
	SL2	I understand my company's vision.	3.78	1.012	-0.486	-0.829
	SL3	I see that the vision of my company is convincing to me.	3.59	0.964	-0.327	-0.625
	SL4	I commit to my company's vision.	3.84	0.960	-0.477	-0.692
	SL5	My company's vision leads us to the best.	3.55	1.072	-0.509	-0.398
	SL6	I see that the work group I work in brings out the best in me.	3.53	1.221	-0.483	-0.657
	SL7	I have confidence in the vision of my organization.	3.59	1.087	-0.417	-0.694
		Vision		3.665	0.893	

Constructs ' items			Mean	Std. deviation	Skewness	Kurtosis
Hope/ Faith	SL8	I perform difficult tasks for my confidence in my company and its mission.	3.75	1.035	-0.644	-0.273
	SL9	I do everything I can to ensure that my company's mission is achieved.	3.95	0.920	-0.524	-0.588
	SL10	I trust my company so I do my best in doing my job.	3.75	1.085	-0.562	-0.584
	Hope/ Faith		3.820	0.932		
Altruistic love	SL11	My company cares about employees.	3.34	1.205	-0.418	-0.663
	SL12	My company takes into account the rights of its employees by providing them with adequate support when facing suffering.	3.36	1.181	-0.333	-0.688
	SL13	I see that the leaders in my company do what they say.	3.38	1.089	-0.160	-0.743
	SL14	I see that my company is loyal to its employees.	3.41	1.127	-0.343	-0.563
	SL15	I see that my company is penalized for unintentional errors.	2.88	1.200	0.075	-0.853
	SL16	I see that the leaders in my company are honest.	3.39	1.161	-0.464	-0.535
	SL17	I see that the leaders in my company are humble.	3.46	1.182	-0.438	-0.633
	SL18	I see that the leaders in my company have the courage to stand up for their employees.	3.40	1.235	-0.351	-0.862
Altruistic love		3.359	0.901			
Innovative behavior						
Idea Generation	IB1	I am looking for modern technological means to perform my work.	3.85	0.900	-0.404	-0.594
	IB2	I create new ways to do my work.	4.04	0.848	-0.699	0.003
	IB3	Looking for new ideas to develop the company's current services.	3.90	0.972	-0.782	0.243

Constructs ' items			Mean	Std. deviation	Skewness	Kurtosis
Idea promotion	IB4	I seek to find new solutions to the problems that I face in my work.	4.06	0.833	-0.572	-0.304
	Idea Generation		3.960	0.781		
	IB5	I always strive to support my new ideas by promoting them to others.	3.98	0.953	-0.803	0.379
	IB6	Innovative ideas get approved by my manager.	3.58	1.128	-0.405	-0.663
	IB7	I make sure to provide the necessary funding to implement new ideas.	3.48	1.192	-0.321	-0.816
Idea promotion		3.680	0.918			
Idea Realization	IB8	I make plans to implement new ideas	3.76	1.025	-0.649	-0.030
	IB9	I turn innovative ideas into useful applications.	3.75	0.973	-0.546	-0.116
	IB10	I think I am innovative in my field.	3.97	0.913	-0.631	-0.074
	Idea Realization		3.824	0.860		

Source: Prepared by the researchers according to statistical analysis.

As shown in table 5, before commencing the statistical investigation, the researchers took certain measures to confirm that the necessary circumstances for the statistical procedures were in place.

## 15. Structural Model and Hypotheses Testing

### 15.1 Model Fit Indices

To address the causal relationships between the study's components, a structural model is typically used. The structural model is also used to analyses the study's theoretical model (Ong et al., 2017). Three additional metrics were used to quantify the overall fit of the model fit indices: Average Path Coefficient (APC), Average R-squared (ARS), and Average Variance Inflation Factor (AVIF) (AVIF). According to Kock (2015), APC and ARS are significant if the P-value is less than 0.05, but AVIF must be less than 5.

**Table (6) Model Fit Indices**

Fit Measures	Actual Values	P Values	Accepted Fit
APC	0.211	P < 0.001	P < 0.05
ARS	0.632	P < 0.001	P < 0.05
AVIF	0.275		Acceptable if < 0.3, ideally < = 0.3

Source: Prepared by the researchers according to statistical analysis.

### 15.2 Testing Hypothesizes

Based on the statistical analysis, Spiritual Leadership significantly affects Innovative Behavior with telecommunication Companies in Egypt at P Value <0.01. Table7 declared the statistical analysis of the relationships between research variables.

**Table (7) Path Coefficient**

H	Independent Variable	Dependent Variable	Path Coefficient	P Value	Interpretation
H2	SL	IB	0.683	< 0.001	Accepted
H2a	V	IB	0.688	< 0.001	Accepted
H2b	H/F	IB	0.192	< 0.001	Accepted
H2c	AL	IB	0.134	0.005	Accepted

Source: Prepared by Researchers based on WarpPLS V 7.0 Statistical analysis.

The value of effect size (f 2) is calculated. Values are shown in the following table:

**Table (8) Effect size values**

H	Independent Variable	Dependent Variable	$f^2$
H2	SL	IB	0.466
H2a	V	IB	0.508
H2b	H/F	IB	0.127
H2c	AL	IB	0.074

Source: Prepared by Researchers based on WarpPLS V 7.0 Statistical analysis.

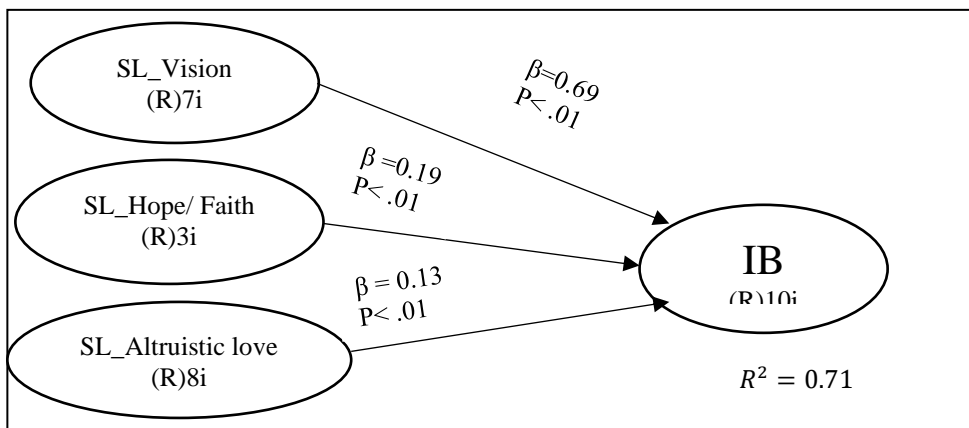


Figure 2 The relationships between Spiritual Leadership dimensions and Innovative Behavior

Source: Prepared by Researchers based on WarpPLS V 7.0 Statistical analysis.

## 16. Findings

In table 9, researchers provide the following summaries of the research Questions, Objectives, Hypothesizes, and Results:

**Table 9 Research Questions, Objectives, Hypothesizes, and Results**

<b>Research Questions</b>	<b>Research Objectives</b>	<b>Research Hypothesizes</b>	<b>Results</b>
Q1. What is the nature of the correlation relationship between the research variables dimensions (Spiritual Leadership, Innovative Behavior)?	O1. Determining the nature of the correlation relationship between the research variables dimensions (Spiritual Leadership, Innovative Behavior).	H2. Spiritual Leadership significantly affects Innovative Behavior among employees of telecommunication companies in Egypt.	Accepted
Q2. What is the impact of Spiritual Leadership on Innovative Behavior among employees of Telecommunication companies in Egypt?	O2. Measuring the effect of Spiritual Leadership on Innovative Behavior among employees of Telecommunication companies in Egypt	H2.Spiritual Leadership significantly affects Innovative Behavior among employees of telecommunication companies in Egypt.	Accepted
		H2a.Vision significantly affects Innovative Behavior among employees of telecommunication companies in Egypt.	Accepted
		H2b. Hope/faith significantly affects Innovative Behavior among employees of telecommunication companies in Egypt.	Accepted
		H2c. Altruistic love significantly affects Innovative Behavior among employees of telecommunication companies in Egypt.	Accepted

Source: Prepared by Researchers based on Literature, Conceptual Framework, and Statistical analysis.

**Table 10 Research Findings compared to Literature**

<b>Research Findings</b>	<b>Compared to literature</b>
Spiritual Leadership significantly affect Innovative Behavior.	Li et al., (2022); Alfarajat & Emeagwali (2021); Usmanova et al., (2021); Zhou & Yang, (2020); Zhang, & Yang, (2020); Yang et al., (2020); Jeon & Choi (2020); Hunsaker et al., (2020)

Source: Prepared by Researchers based on Literature.

## 17. Recommendations

Researchers summarized the practical recommendations based on the results of the current research in Table 11 as follows:

Recommendation area	Recommendation	Staff
Spiritual leadership	Establishing and operating spiritually-based leadership training programs, these programs help leaders to: <ul style="list-style-type: none"> <li>➤ Incorporate the spiritual aspects into vision of organization.</li> <li>➤ Set and express them.</li> <li>➤ Improve expectations of employees toward vision and understand their roles.</li> <li>➤ Understand the nature of the interaction between them and the employees.</li> </ul>	➤ Human resource management
• Vision	<ul style="list-style-type: none"> <li>➤ Helping and involving their employees in setting the company's vision</li> <li>➤ Helping employees understand the vision of the company.</li> </ul>	➤ Managers ➤ Leaders
• Hope/faith	<ul style="list-style-type: none"> <li>➤ Seeking to make employees have confidence in themselves and their ability to achieve the company's vision.</li> </ul>	➤ Managers ➤ Leaders
• Altruistic love	<ul style="list-style-type: none"> <li>➤ Familiarizing employees with the concept of altruism</li> </ul>	



---

	<ul style="list-style-type: none"> <li>➤ Paying close attention to their subordinates' growth in their daily work, especially for the purpose of helping them establish proper values and self-awareness.</li> <li>➤ Inspiring employees with spiritual beliefs, and</li> <li>➤ Striving to create a harmonious and mutually supportive organizational environment so that the employees can form a correct understanding of the expected goals, values and roles, which will ultimately effectively enhance employees' performance.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Managers</li> <li>➤ Leaders</li> </ul>
Innovative behavior	<ul style="list-style-type: none"> <li>➤ Inviting group discussions to encourage a thorough sharing of beneficial knowledge and information among teammates.</li> <li>➤ Creating brainstorming groups to help them generate new ideas</li> <li>➤ Providing the necessary funding to implement new ideas</li> <li>➤ Holding frequent team meetings with their employees in order to discuss potential problems at work, locate chances for work together to develop new and realistic ideas and solutions.</li> <li>➤ Encouraging the creation of an innovative work environment</li> </ul>	<ul style="list-style-type: none"> <li>➤ Managers</li> <li>➤ Leaders</li> </ul>

---

## 18. Conclusion

The study's research model estimates the direct and effects of Spiritual Leadership dimensions on Innovative Behavior.

Results showed that Spiritual Leadership significantly affects Innovative Behavior. For Spiritual Leadership Dimensions, results showed that three dimensions of Spiritual Leadership significantly affect Innovative Behavior, they are: Vision, Hope/Faith, and Altruistic love.

## 19. Limitations and Future Research

- This research results are limited to the cross-sectional period in when the questionnaire was shared to employees of telecommunication Companies in Egypt during the period from December 2022 to March 2023.
- Future research could use the qualitative method in combination with person to person interviews in order to get more glaring results about Spiritual Leadership and enhancement of employees' innovative behavior.
- Researchers would choose a quantitative research methodology but it has certain drawbacks because it restricts application and reduces the high level of accuracy of the result.
- Researchers uses a sample from telecommunication companies in Egypt (developing country). On the other side, future studies may rely on telecommunication companies in developed countries and drawing a comparison between the results in light of the current research.
- The current study relied on a questionnaire to test research hypotheses and provide cross-sectional data. Therefore, the results of the study provide no indication about the changes in the research variables over time. Thus, a longitudinal study can be useful for future research to examine the changes in innovative behavior on the basis of the changes in spiritual leadership.
- Study the effects of research variables applied on other sector such as Education and health sector.

## ***References***

Almutairi, M., & Khashman, A. (2022). The impact of spiritual leadership on the decision-making process in the Kuwaiti ministries. *Management Science Letters*, 12(3), 177-184.

Anser, M. K., Shafique, S., Usman, M., Akhtar, N., & Ali, M. (2021). Spiritual leadership and organizational citizenship behavior for the environment: an intervening and interactional analysis. *Journal of Environmental Planning and Management*, 64(8), 1496-1514.

Bryman, A., & Bell, E. (2015). *Business research methods*. Oxford University Press, USA.

Burgi-Tian, J. (2020). *For the Greater Good: Network Citizenship Behavior and Innovative Behavior in American Local Government Leaders* (Doctoral dissertation, The George Washington University).

Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. New York, Taylor and Francis Group. Llc.

Chang, C. L., & Arisanti, I. (2022). How does Spiritual Leadership Influences Employee Well-Being? Findings from PLS-SEM and FsQCA. *Emerging Science Journal*, 6(6), 1358-1374.

Contreras, F. (2016). Servant and spiritual leadership theories: Are they two different notions?. *Journal of Human Values*, 22(3), 202-208.

Cooper, D. R., & Emory, C. W. (1995). *Business Research Methods*. (5th Ed.), Richard D.

Creswell, J. W. (2014). *A concise introduction to mixed methods research*. SAGE publications.

Dai, Q., Dai, Y., Zhang, C., Meng, Z., Chen, Z., & Hu, S. (2022). The Influence of Personal Motivation and Innovative Climate on Innovative Behavior: Evidence from University Students in China. *Psychology Research and Behavior Management*, 2343-2355.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50.

Fowler, F. J. (2009). *Survey Research Methods*. (4th ed) Vol-1: Thousand Oaks, CA: Fry, L. W. (2005). Introduction to the leadership quarterly special issue: Toward a paradigm of spiritual leadership.

Fry, L. W., Hannah, S. T., Noel, M., & Walumbwa, F. O. (2011). *RETRACTED: Impact of spiritual leadership on unit performance*.

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.

Guo, Y., Jin, J., & Yim, S. H. (2023). Impact of Inclusive Leadership on Innovative Work Behavior: The Mediating Role of Job Crafting. *Administrative Sciences*, 13(1), 4.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2010). *Multivariate data analysis: A global perspective*. (7th Eds.), Upper Saddle River, NJ: Pearson.

Hunsaker, W. D. (2020). Spiritual leadership and employee innovation. *Current Psychology*, 1-10.

Inkeles, D. (2015). In Re Deepwater Horizon and the Need To Clean Up Rule 23 (B)(3) Certification Jurisprudence Through Legislation. *Journal of Law and Policy*, 23(2).

Iqbal, F., & Zaidi, M. Z. (2021). Consequences of Spiritual Leadership: A Moderating Model of Organizational Performance. *Market Forces*, 16(2), 19-42.

Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, 73(3), 287-302.

Khaddam, A. A., Alzghoul, A., Khawaldeh, K., & Al-Kasasbeh, O. (2023). How Spiritual Leadership Influences Creative Behaviors: the Mediating Role of Workplace Climate. *International Journal of Professional Business Review*, 8(2).

Kock, N. (2013). Using Warp PLS in E-Collaboration Studies: What If I Have only One Group and One Condition?. *International Journal of e-Collaboration*, 9(3), 1-12.

Kock, N. (2015). One-tailed or two-tailed P values in PLS-SEM? *International Journal of e-Collaboration (IJeC)*, 11(2), 1-7.

Lee, W. R., Choi, S. B., & Kang, S. W. (2021). How leaders' positive feedback influences employees' innovative behavior: The mediating role of voice behavior and job autonomy. *Sustainability*, 13(4), 1901.

Li, B., Lei, Y., Hu, M., & Li, W. (2022). How Does Spiritual Leaders Inspire Employees' Innovative Behavior? The Role of Psychological Capital and Intrinsic Motivation.

Messmann, G., & Mulder, R. H. (2012). Development of a measurement instrument for innovative work behaviour as a dynamic and context-bound construct. *Human Resource Development International*, 15(1), 43-59.

Mohammed, S. M., & Elashram, R. E. (2022). The impact of spiritual leadership on workplace spirituality in the light the COVID-19 pandemic in the governmental health sector. *Leadership & Organization Development Journal*, (ahead-of-print).

Nguyen, T., Tran, N., Doan, X., & Nguyen, H. (2020). The impact of knowledge sharing on innovative work behavior of Vietnam telecommunications enterprises employees. *Management Science Letters*, 10(1), 53-62.

Ong, M. H. A., & Puteh, F. (2017). Quantitative data analysis: Choosing between SPSS, PLS, and AMOS in social science research. *International Interdisciplinary Journal of Scientific Research*, 3(1), 14-25.

Pandia, M. M., Jufrizen, J., Khair, H., & Tanjung, H. (2023). Organization Citizenship Behavior: The Role of Spiritual Leadership, Self Efficacy, Locus of Control and Job Satisfaction. *Jurnal Organisasi dan Manajemen*, 19(1), 168-187.

Sage Publications, Inc

Sangoseni, O., Hellman, M., & Hill, C. (2013). Development and Validation of a Questionnaire to Assess the Effect of Online Learning on Behaviors, Attitudes ,and Clinical Practices of Physical Therapists in the United States Regarding Evidenced based Clinical Practice. *Internet Journal of Allied Health Sciences and Practice*, 11(2),1-12.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students*, London, Financial Times Prentice Hall.

Scott, S. G., & Bruce, R. A. (1994, October). Creating innovative behavior among R&D professionals: the moderating effect of leadership on the relationship between problem-solving style and innovation. In *proceedings of 1994 IEEE international engineering management conference-IEMC'94* (48-55).

Sibanda, K., & Grobler, A. (2023). Spiritual leadership within the ambit of African Management philosophies using interactive qualitative analysis. *Acta Commercii*, 23(1), 1-11.

Subhaktiyasa, P. G., Andriana, K. R. F., Sintari, S. N. N., Wati, W. S., Sumaryani, N. P., & Ledo, Y. U. (2023). The Effect of Transformational Leadership, Servant Leadership, and Spiritual Leadership on Organizational Citizenship Behavior. *Jurnal Organisasi dan Manajemen*, 19(1), 224-238.

Tarling, R. (2008). *Statistical modelling for social researchers: Principles and practice*. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50.

Usman, M., Ali, M., Ogbonnaya, C., & Babalola, M. T. (2021). Fueling the intrapreneurial spirit: A closer look at how spiritual leadership motivates employee intrapreneurial behaviors. *Tourism Management*, 83, 104227.

Usmanova, K., Wang, D., Sumarliah, E., Khan, S. Z., Khan, S. U., & Younas, A. (2021). Spiritual leadership as a pathway toward innovative work behavior via knowledge sharing self-efficacy: moderating role of innovation climate. *VINE Journal of Information and Knowledge Management Systems*.

Vedula, S. B., & Agrawal, R. K. (2023). Mapping Spiritual Leadership: A Bibliometric Analysis and Synthesis of Past Milestones and Future Research Agenda. *Journal of Business Ethics*, 1-28.

Yang, J., Chang, M., Li, J., Zhou, L., Tian, F., & Zhang, J. (2020). Exploring the moderated mediation relationship between leader narcissism and employees' innovative behavior. *Chinese Management Studies*.

Yasin, R., Yang, S., Huseynova, A., & Atif, M. (2022). Spiritual leadership and intellectual capital: mediating role of psychological safety and knowledge sharing. *Journal of Intellectual Capital*, (ahead-of-print).

Yasir, M., Majid, A., Yousaf, Z., Nassani, A. A., & Haffar, M. (2023). An integrative framework of innovative work behavior for employees in SMEs linking knowledge sharing, functional flexibility and psychological empowerment. *European Journal of Innovation Management*, 26(2), 289-308.

Zhou, S. I. Y. A., & Yang, S. C. (2020). Relationship between spiritual leadership and innovative behavior in Chinese drone companies: The mediating effect of employee engagement. In proceedings of RSU Internafional research conference (1775-1782).



### Questionnaire:

The following statements related to the variables of the study, please read them carefully and then put the sign (√) in front of the choice that reflects your opinion. Please indicate the extent of your agreement or disagreement with each statement, from (5) I completely agree to (1) I completely disagree.

#### 1. Spiritual Leadership

Statement	Completely agree (٥)	Agree (٤)	Neutral (٣)	Disagree (٢)	Completely disagree (١)
1. I see that my company's vision is clear.					
2. I understand my company's vision.					
3. I see that the vision of my company is convincing to me.					
4. I commit to my company's vision.					
5. My company's vision leads us to the best.					
6. I see that the work group I work in brings out the best in me.					
7. I have confidence in the vision of my organization.					

Statement	Completely agree (๕)	Agree (๔)	Neutral (๓)	Disagree (๒)	Completely disagree (๑)
8. I perform difficult tasks for my confidence in my company and its mission.					
9. I do everything I can to ensure that my company's mission is achieved.					
10. I trust my company so I do my best in doing my job.					
11. My company cares about employees.					
12. My company takes into account the rights of its employees by providing them with adequate support when facing suffering.					
13. I see that the leaders in my company do what they say.					
14. I see that my company is loyal to its employees.					
15. I see that my company is penalized for unintentional errors.					
16. I see that the leaders in my company are honest.					
17. I see that the leaders in my company are humble.					

Statement	Completely agree (٥)	Agree (٤)	Neutral (٣)	Disagree (٢)	Completely disagree (١)
18. I see that the leaders in my company have the courage to stand up for their employees.					

## 2. Innovative Behavior

Statement	Completely agree (٥)	Agree (4)	Neutral (٣)	Disagree (٢)	Completely disagree (١)
19. I am looking for modern technological means to perform my work.					
20. I create new ways to do my work.					
21. Looking for new ideas to develop the company's current services.					
22. I seek to find new solutions to the problems that I face in my work.					

Statement	Completely agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Completely disagree (1)
23. I always strive to support my new ideas by promoting them to others.					
24. Innovative ideas get approved by my manager.					
25. I make sure to provide the necessary funding to implement new ideas.					
26. I make plans to implement new ideas.					
27. I turn innovative ideas into useful applications.					
28. I think I am innovative in my field.					

### Demographic variables:

#### 29. Gender

( ) Male

Female

### **30. Age**

Less than 30

From 30 to less than 40

From 40 to less than 50

From 50 years and over

### **31. Qualifications**

less than undergraduate

university degree

Post graduate studies

### **32. Work experience**

Less than 5 years

From 5 years to less than 10 years

From 10 years to less than 15 years

From 15 years and over

## تأثير القيادة الروحية على السلوك الابتكاري: دراسة تطبيقية على موظفي شركات الاتصالات في مصر

### ملخص الدراسة

هدفت هذه الدراسة إلى معرفة تأثير القيادة الروحية على السلوك الابتكاري بالتطبيق على موظفين شركات الاتصالات في مصر. وبناءً على مراجعة الأدبيات، قام الباحثون بتطوير إطار مفاهيمي للعلاقة بين متغيرات البحث (القيادة الروحية والسلوك الابتكاري). استخدم الباحثون استبياناً تم تحميله على Google Drive بصيغة Google Form ونشره عبر قنوات التواصل الاجتماعي لشركات الاتصالات في مصر لجمع البيانات، وأجري البحث على عينة قوامها (382) مفردة، وبلغ عدد قوائم الاستقصاء الصحيحة (365) بمعدل استجابة (95.5%)، وأظهرت النتائج أن هناك أثر معنوي وإيجابي للقيادة الروحية على السلوك الابتكاري. وبالنسبة لأبعاد القيادة الروحية (الرؤية، والأمل/الإيمان، والحب الإيثاري)، أظهرت النتائج أن أبعاد القيادة الروحية أثرت بشكل قوى على السلوك الابتكاري.