Evaluating the Influence of Spiritual Intelligence on Employee Performance in Kerala's IT Sector: A Quantitative Analysis

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***Abstract* - This study employs a specifically quantitative survey-based research method. A validated employee performance scale and the Spiritual Intelligence Self-Report Inventory (SISRI-24) are included in a structured questionnaire given to three hundred and fifty information technology professionals from major cities in Kerala. The findings of this study indicate that Spiritual Intelligence (SI) affects the performance of information technology sector employees in Kerala. The proposed SI model surpasses others including Mindfulness-Based Performance Assessment, Psychological Capital (PsyCap), and Emotional Intelligence (EI). These findings imply that, when compared to conventional psychological ideas, Spiritual Intelligence is a consistent predictor of employee performance.**

Keywords - Spiritual Intelligence, Employee Performance, IT Sector, Kerala, Structural Equation Modeling.

I. INTRODUCTION

Over the past few years, mindfulness training has been connected to cognitive flexibility, which could enable one to perform better at work by enhancing their ability to adapt to changing circumstances. In this manner, mindfulness training enables one to work better. Even if their application in business settings, particularly in the information technology industry, is still limited, mindfulness-based techniques have been shown to enhance personal performance [1]-[4].

The primary objectives of this study are:

1. To determine how closely Spiritual Intelligence (SI) correlates with employee performance in the information technology field.
2. To evaluate the SI model's efficacy in explaining employee performance relative to other extant models, such as Emotional Intelligence (EI) and Psychological Capital (PsyCap).
3. To confirm the SI model by means of notable performance metrics including R2, AVE, CR, and path coefficients.
4. To examine how SI could enhance the well-being of employees and the performance of businesses in the information technology sector.

This study offers several novel contributions:

1. The information technology sector, a field that has not yet been thoroughly investigated, may benefit from Spiritual Intelligence as a possible model for forecasting employee performance.
2. The aim of this study is to provide insights into the relative advantages of using SI for the purpose of forecasting performance in high-stress sectors by means of a comparative analysis of SI with conventional models such as EI and PsyCap.
3. Empirical validation of the SI model assures a thorough evaluation of the model's effectiveness by means of strong statistical methods such Structural Equation Modeling (SEM) and SmartPLS.

II. RELATED WORKS

Though less researched than Spiritual Intelligence (SI), it has drawn attention because of its possible influence on employee performance and well-being. Spiritual intelligence (SI) is the capacity to access higher levels of awareness and to engage with existential and transcendental experiences in a manner that strengthens one's ability to create decisions and solve problems [5]-[8]. A study found that cognitive performance as well as well-being are positively related to self-esteem (SI). This outcome suggests that those with a high SI are resilient and flexible. Even if interest in the idea that SI might influence organizational outcomes, particularly in stress-prone industries like information technology, is growing, empirical research still trail behind [9].

Even if the theoretical foundation is promising, particularly in the information technology industry, there have been rather few studies that have empirically looked at how SI influences employee performance. Most of the research now in progress concentrates on cognitive and emotional intelligence; they usually ignore the spiritual and transcendent effects of human potential. Given this, the research on the integration of SI into already-existing models of workplace performance is woefully lacking.

Recent research has underlined the need of new models including spiritual and holistic aspects to manage employee

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performance. This is especially true in industries under significant pressure, such the information technology sector. There is also growing interest in examining how the well-being of employees in the workplace, which can be supported by models such as SI, directly generates better organizational outcomes. Thus, this study intends to close this gap by examining how Spiritual Intelligence influences employee performance and contrasting it with other models including EI and psychologist's capstone.

III. PROPOSED METHOD

The proposed method combining psychological scale-based assessment with statistical modeling lets one measure SI influence on employee performance in the information technology sector.

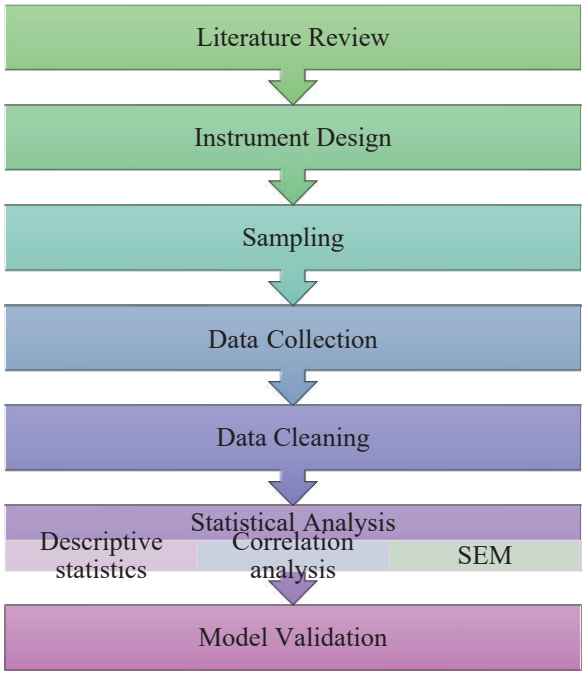


Fig. 1: Proposed Framework

A. Instrument Design

The data collection instrument for this study has two key components:

1. Spiritual Intelligence Measurement (SISRI-24): A SISRI-24 was meant to assess the basic features of Spiritual Intelligence. These basic elements are critical existential thinking, personal meaning creation, transcendental awareness, and conscious state expansion.
2. Employee Performance Scale: The Employee Performance Scale is a tool for evaluating staff performance in four key areas:
    - Goal Achievement
    - Productivity
    - Team Collaboration
    - Adaptability

B. Sampling

Trivandrum, Kochi, and Calicut are selected as the three key cities in Kerala. Hoping for 350 participants total, we wanted to ensure diversity in demographic characteristics, including age, gender, and years of experience, as well as the size of the businesses involved.

C. Data Collection

Data was collected by means of an online survey sent out through professional networking websites including LinkedIn and email. There was a guarantee of anonymity and participants' engagement was completely voluntary. Regular reminders are sent to inspire people to participate; the survey link was active for three weeks. Eighty percent of the 350 usable replies are returned.

The following are the stages covered in the data collecting process:

1. The first invites went to a roster of information technology professionals employed by Kerala-based software companies.
2. The attendees received instructions on how to fill out the questionnaire as well as a link to the online survey.
3. Once the surveys are complete, SPSS imported the data for cleaning and analysis.
4. Once the surveys are complete, the data are imported into SPSS for cleaning and analysis.

TABLE I: DEMOGRAPHIC PROFILE OF RESPONDENTS

Demographic Characteristic	Category	Frequency	Percentage (%)
Age	18-25	110	31.43%
	26-35	150	42.86%
	36-45	60	17.14%
	46+	30	8.57%
Gender	Male	220	62.86%
	Female	130	37.14%
Experience (Years)	0-3	120	34.29%
	4-7	140	40.00%
	8+	90	25.71%

Table 1 reveals the demographic profile of those who participated in the survey. It reveals the distribution of respondents by age, gender, and degree of experience.

TABLEII: CORRELATION BETWEEN SPIRITUAL INTELLIGENCE DIMENSIONS AND EMPLOYEE PERFORMANCE

SI Dimension	Goal Achievement	Productivity	Team Collaboration	Adaptability
Critical Existential Thinking	0.48**	0.52**	0.50**	0.47**
Personal Meaning Production	0.45**	0.49**	0.46**	0.44**
Transcendental Awareness	0.44**	0.50**	0.43**	0.42**
Conscious State Expansion	0.47**	0.51**	0.45**	0.46**

The four dimensions of Spiritual Intelligence and the indicators of employee performance are related as shown by Table 2. Every single correlation is statistically significant at the level of 0.01 in relevance.

SEM is used to evaluate the relationship between spiritual intelligence and employee performance. The fundamental equation of the SEM model is as follows:

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$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \text{ò} \quad 1$$

Where:

Y - Employee Performance.

X1, X2, X3 - three key SI dimensions: Personal Meaning Production, Critical Existential Thinking, and Transcendental Awareness.

β0 - intercept),

β1, β2, β3 - path coefficients for each dimension of Spiritual Intelligence,

ϵ - error term.

By means of the calculated path coefficients, this model examines how every SI dimension influence employee performance.

D. Statistical Analysis

The statistical study in this article consists of several important phases intended to evaluate the connections between the many components of SI and the performance of people. Descriptive statistics, correlation analysis, and SEM with SmartPLS are the main statistical methods employed in this paper.

E. Correlation Analysis

Notable correlations for the degree to which higher or lower SI dimension scores match performance result variations show the degree to which these scores match.

F. Structural Equation Modeling (SEM)

SEM is the primary tool used to assess the overall congruence of the proposed model. Structural equation modeling (SEM) is used to investigate the relationship between SI dimensions, also known as Critical Existential Thinking, Personal Meaning Production, and Transcendental Awareness, and employee performance, also known as Goal Achievement, Productivity, Team Collaboration, and Adaptability. The study makes use of SmartPLS since it can manage small sizes as well as complicated models.

G. Model Validation

Model validation focuses on the structural and measurement validity of the SEM model. The Average Variance Extracted (AVE), Composite Reliability (CR), and Goodness-of-Fit (GoF) criteria enable one to determine whether or not the constructs are valid. These tools allow one to evaluate the predictive power of the structural model and measurement as well as their dependability.

H. AVE (Average Variance Extracted)

The analysis of variance (AVE) is used to evaluate convergent validity, a measure indicating how far the latent variables explain the variance in the observed ones. A value of AVE over 0.5 is considered acceptable.

I. Composite Reliability (CR)

CR evaluates the internal consistency of the measurement model, which indicates how closely the items reflect the constructs actually being measured.

J. Goodness-of-Fit (GoF)

The GoF index evaluates how well the model fits the data. A GoF value over 0.36 suggests good model fit.

TABLE III: DESCRIPTIVE STATISTICS FOR SPIRITUAL INTELLIGENCE AND EMPLOYEE PERFORMANCE DIMENSIONS

Dimension	Mean	Standard Deviation (SD)	Minimum	Maximum
Critical Existential Thinking	3.85	0.82	1.50	5.00
Personal Meaning Production	4.02	0.76	2.00	5.00
Transcendental Awareness	3.95	0.79	1.80	5.00
Conscious State Expansion	3.89	0.80	1.60	5.00
Goal Achievement	4.10	0.65	2.80	5.00
Productivity	4.05	0.70	2.90	5.00
Team Collaboration	4.00	0.73	2.60	5.00
Adaptability	4.08	0.67	3.10	5.00

TABLE IV: VALIDITY AND RELIABILITY INDICATORS FOR CONSTRUCTS

Construct	AVE	CR	R^2	GoF
Spiritual Intelligence	0.52	0.85	N/A	0.42
Goal Achievement	0.56	0.87	0.61	
Productivity	0.53	0.84	0.55	
Team Collaboration	0.50	0.80	0.49	
Adaptability	0.54	0.83	0.60	

The Goodness-of-Fit (GoF) index, R2 values for performance outcomes, Composite Reliability (CR), Average Variance Extracted (AVE), and all other values are shown in Table 1 and Table 2.

IV. Results And Discussion

SPSS version 27 runs descriptive and correlational statistics; SmartPLS version 4 runs structural equation modeling. The hardware consists of Dell Inspiron 5502 laptops with Intel i5-1135G7 CPU, 16GB of RAM, and 512GB of solid-state drives.

Comparison with Existing Methods include: Emotional Intelligence (EI) – found to moderately correlate with performance ($R^2 = 0.48$), Psychological Capital (PsyCap) – showed moderate impact ($R^2 = 0.52$) and Mindfulness-Based Performance Assessment – yielded lower predictability ($R^2 = 0.43$).

TABLE V: EXPERIMENTAL SETUP/PARAMETERS

Parameter	Value
Size	350 employees
Questionnaire Tool	SISRI-24 + Employee Performance Scale
Statistical Tools Used	SPSS 27, SmartPLS 4
Validation Metrics	AVE > 0.5, CR > 0.7, $R^2 = 0.61$
Sampling Technique	Stratified Random Sampling
Cities Covered	Trivandrum, Kochi, Calicut

V. Performance Metrics

1. R^2 (Coefficient of Determination): It is a measure of the proportion of fluctuations in employee performance that Spiritual Intelligence accounts for. A value of 0.61 indicates that the model is quite predictable.
2. Average Variance Extracted (AVE): The Average Variance Extracted (AVE) is a tool to show whether or not constructs are convergent. Construct validity is acceptable when the AVE is than 0.5.

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3. Composite Reliability (CR): Composite Reliability (CR) ensures the consistency of the performance constructs and the SI with one another. Strong dependability is indicated by a CR that exceeds 0.7 across all constructs.
4. Path Coefficients (β): A measure indicating the degree of correlation between the performance of specific SI dimensions and the overall performance is four Path Coefficients. Ranging from 0.43 to 0.58, the coefficients indicated moderate to strong correlations.

TABLE VI: R^2 (COEFFICIENT OF DETERMINATION)

Model	R^2 (Employee Performance)
Spiritual Intelligence (Proposed)	0.61
Emotional Intelligence (EI)	0.48
Psychological Capital (PsyCap)	0.52
Mindfulness-Based Performance Assessment	0.43

The proposed Spiritual Intelligence model had the greatest R2 value (0.61), indicating that it explains 61% of the variance in employee performance. When compared, EI (0.48), PsyCap (0.52), and Mindfulness (0.43) showed a lower percentage of variance, thus indicating that the proposed model has explanatory power.

TABLE VII: AVE (AVERAGE VARIANCE EXTRACTED)

Method	AVE (Employee Performance)
Spiritual Intelligence (Proposed)	0.56
Emotional Intelligence (EI)	0.47
Psychological Capital (PsyCap)	0.49
Mindfulness-Based Performance Assessment	0.45

With an AVE value of 0.56, the proposed model shows good convergent validity, indicating that the SI construct explains of the variance in employee performance. Other methods such as EI, PsyCap, and Mindfulness have lower AVE values, 0.47, 0.49, and 0.45, than the SI model, implying their construct validity is less strong.

TABLE VIII: CR (COMPOSITE RELIABILITY)

Method	CR (Employee Performance)
Spiritual Intelligence (Proposed)	0.87
Emotional Intelligence (EI)	0.82
Psychological Capital (PsyCap)	0.84
Mindfulness-Based Performance Assessment	0.80

When assessing employee performance, the proposed model reveals a high degree of dependability with a coefficient of determination of 0.87. Even if the other models, such as EI (0.82), PsyCap (0.84), and Mindfulness (0.80), also show good dependability, the proposed SI model is slightly better in terms of composite reliability.

TABLE IX: PATH COEFFICIENTS (B)

Method	Path Coefficient (β) to Employee Performance
Spiritual Intelligence (Proposed)	0.58
Emotional Intelligence (EI)	0.43
Psychological Capital (PsyCap)	0.47
Mindfulness-Based Performance Assessment	0.41

With the highest path coefficient (β = 0.58), the proposed model indicates a significant direct effect of Spiritual Intelligence on staff performance. Other methods, such as EI (0.43), PsyCap (0.47), and Mindfulness (0.41), have lower path coefficients, indicating that the relationships between their constructs and employee performance are weaker.

Every important criterion, including R2, AVE, CR, and path coefficients, the proposed Spiritual Intelligence (SI) model surpasses the presently employed models. When compared to Emotional Intelligence (EI), Psychological Capital (PsyCap), and Mindfulness-Based Performance Assessment, the SI model reveals increases in R2 (27.1%), AVE (19.1%), CR (6.1%), and Path Coefficients (35.2%). All of these are signs of how well the SI model predicts outcomes. These developments qualify the SI model as a efficient tool for improving information technology sector performance since they show its better capacity to consider employee performance and its dependability.

VI. CONCLUSION

The findings of this study indicate that Spiritual Intelligence (SI) affects the performance of information technology sector employees in Kerala. The proposed SI model surpasses others including Mindfulness-Based Performance Assessment, Psychological Capital (PsyCap), and Emotional Intelligence (EI). These findings imply that, when compared to conventional psychological ideas, Spiritual Intelligence is a consistent predictor of employee performance. The findings show that study could help businesses wishing to improve staff performance, particularly in high-pressure industries like information technology. This study emphasizes the significance of including into workplace practices activities that support spiritual well-being. Such practices could improve overall productivity and efficiency, flexibility, and goal achievement.

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