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Spiritual Intelligence, Workplace Spirituality, And Fraud Prevention: The Moderating Role Of Women's Leadership In Government Accounting

Inteligencia espiritual, espiritualidad en el lugar de trabajo y prevención del fraude: el papel moderador del liderazgo femenino en la contabilidad pública

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ABSTRACT

Introduction: this research is motivated by the importance of leadership in preventing fraud, particularly in the context of government institutions. Spiritual leadership exercised by women is believed to bring strong values of integrity and ethics, especially through a spiritual approach within organisations.
Objective: this study aims to analyse the relationship between spiritual intelligence and spirituality in the workplace on fraud prevention, as well as to explore the role of spiritual leadership by female leaders as a moderating variable in that relationship.
Method: using a quantitative approach, this study involved 258 government employees working in institutions led by women. Data analysis was conducted using Structural Equation Modelling (SEM) with Smart-PLS 3 to test the relationships between variables.
Result: the results of the study indicate that spiritual intelligence does not have a significant effect on fraud prevention. However, spirituality in the workplace has a positive and significant effect. Additionally, spiritual leadership by female leaders has been proven to strengthen the effect of spiritual intelligence on fraud prevention, but it does not influence the relationship between spirituality in the workplace and fraud prevention.
Conclusion: this study emphasises the importance of providing more opportunities for women to lead in the government sector. The findings also highlight the need to create a more stable and sustainable leadership system within the government structure, given the high frequency of leadership changes that can disrupt the continuity of integrity values in public institutions.

Keywords: Spiritual Intelligence; Workplace Spirituality; Spiritual Leadership; Woman Leader Role; Fraud Prevention; Government Institution.

RESUMEN

Introducción: esta investigación está motivada por la importancia del liderazgo en la prevención del fraude, especialmente en el contexto de las instituciones gubernamentales. Se cree que el liderazgo espiritual ejercido por las mujeres aporta sólidos valores de integridad y ética, especialmente a través de un enfoque espiritual dentro de las organizaciones.
Objetivo: este estudio tiene como objetivo analizar la relación entre la inteligencia espiritual y la espiritualidad en el lugar de trabajo en la prevención del fraude, así como explorar el papel del liderazgo espiritual de las mujeres líderes como variable moderadora en esa relación.

Método: utilizando un enfoque cuantitativo, este estudio contó con la participación de 258 empleados públicos que trabajan en instituciones dirigidas por mujeres. El análisis de los datos se realizó utilizando el modelo de ecuaciones estructurales (SEM) con Smart-PLS 3 para comprobar las relaciones entre las variables.
Resultados: los resultados del estudio indican que la inteligencia espiritual no tiene un efecto significativo en la prevención del fraude. Sin embargo, la espiritualidad en el lugar de trabajo tiene un efecto positivo y significativo. Además, se ha demostrado que el liderazgo espiritual de las mujeres líderes refuerza el efecto de la inteligencia espiritual en la prevención del fraude, pero no influye en la relación entre la espiritualidad en el lugar de trabajo y la prevención del fraude.
Conclusiones: este estudio destaca la importancia de ofrecer más oportunidades a las mujeres para que ocupen puestos de liderazgo en el sector público. Los resultados también ponen de relieve la necesidad de crear un sistema de liderazgo más estable y sostenible dentro de la estructura gubernamental, dada la alta frecuencia de los cambios de liderazgo que pueden perturbar la continuidad de los valores de integridad en las instituciones públicas.

Palabras clave: Inteligencia Espiritual; Espiritualidad en el Lugar de Trabajo; Liderazgo Espiritual; Papel de la Mujer Líder; Prevención del Fraude; Institución Gubernamental.

INTRODUCTION

This research attempts to highlight several important issues. First of all, fraud still occurs around the world, especially in the government institutions of Indonesia. There are many corruption cases examined by The Corruption Eradication Commission (KPK RI) in Indonesia and raised in recent time. This condition became a depiction of the failure of fraud prevention from the inside of government organizations. The fraudulent conditions that occur in Indonesia are one example that fraud in governments in various other countries around the world must be addressed immediately because it will hinder development.

The Indonesian government allocates significant funds each year for corruption prevention and supervision. Although various efforts have been made, there has been no significant decrease in corruption cases.[1] Based on data collected from The Corruption Eradication Committee, the large number of frauds occurred, especially corruption cases, caused state financial losses of up to 48,7 trillion rupiah in 2023.

Thus, there is a need to conduct an effective fraud prevention. Therefore, this study attempts to offer a spirituality factor to prevent fraud. According to Abdullah[2] spiritual quotient strengthens the implementation of the government internal control system to prevent fraud. In addition, Purnamasari[3] stated that employees who have spirituality tend to be reluctant to commit fraud. Furthermore, research on fraud prevention has been widely conducted, but the determinant of fraud prevention from the spirituality aspect is still limited.[4]

The spiritual aspects that expected could be the determinants in preventing fraud are spiritual intelligence and workplace spirituality. The spiritual intelligence is an aspect within a human being, as Marshall[5] defined that spiritual intelligence is an ability of a human to address and solve problems of meaning and value which lead someone to assess one course of action or life-path to be more meaningful than another.[5] Thus, the quality of a person who has a high level of spiritual intelligence within himself will prevent him from committing fraud, due to his challenge to be a high-level value of human which useful for other people, this kind of quality person will have a barrier on themselves to commit fraud.

The relationship between spiritual intelligence and fraud was studied by Astriva et al.[6] which provides empirical evidence that Spiritual Intelligence had a significant negative influence on the tendency of accounting fraud. In addition, research conducted by Mahdi states that spiritual intelligence plays a role in moderating the determinants of fraud prevention in government.[7] This means that the application of spiritual intelligence in government apparatus can strengthen the role of certain factors in preventing fraud. Meanwhile, a spiritual in work environment will support fraud prevention. This is proven by the results of research from Purnamasari[3] which proves that there was a positive relationship between spirituality in the workplace and corruption prevention. The investigation of prior research from Johari[7], reveals a significant negative association between workplace spirituality and procurement fraud incidences, which means that the application of workplace spirituality can reduce the occurrence of fraud in organizations.

The second urgency, several previous studies had put forward a statement that certain leadership models can prevent fraud. For instance, Murphy et al.[8] framework offers opportunities for leaders to take steps to prevent, or at least mitigate, fraud, as well as Ariail et al.[9] stated that ethical leadership play a role in fraud prevention. Fraud can actually be minimized through the role of leader with the appropriate type of leadership.[10,11] Meanwhile, there are empirical evidence that a spiritual leadership can prevent fraud based on research from Wahyono[12] and Mahyarni[13] which gave evidence that a spiritual leader reduced deviant behavior in the workplace, which fraud can be categorized as a deviant behavior.

This research attempts to prove that a certain leadership type, especially act by women leader will give significant contribution in fraud prevention. However, gender issue in government leadership still put a gap. The Indonesian government has provided support for women in contributing to the country. One of these is by ratifying Law Number 68 of 1958, which deals with the ratification of the Convention on Women's Political Rights. This convention ensures that women can participate in all aspects of politics, including non-discrimination, equal voting rights, the ability to shape policy, access to administrative positions, and membership in social and political groups. In addition, the government has provided a 30 percent quota for legislative candidates in 2002 and was first implemented in the 2004 election.[14] With these various challenges, the opportunity for women to become leaders is equal in many opportunities in government institutions.

There are some prior researches that had been discussed the various roles of women's leadership, including the role of woman's leadership to strengthening the health system,[15,16] to enhance environmental NGOs' online accountability,[17,18] According to the research, the board's performance improves significantly when female CEOs are in charge.[19]

The presence of a female boss reduces the risk of a firm being embroiled in litigation for financial reporting fraud, according to Lenard[20]. Furthermore, the role of women in preventing fraudulent acts such as tax avoidance is proven by research from Dakhli[21] findings that shown a correlation between board gender and tax evasion practices.

The role of female leaders in public organisations has strategic potential in building integrity and preventing fraud. However, studies that specifically examine how female spiritual leadership plays a role in strengthening the influence of spiritual values on fraud prevention are still limited. This study aims to comprehensively explore the relationship between spiritual intelligence and spirituality in the workplace with fraud prevention, as well as analyse how spiritual leadership exercised by female leaders can strengthen this relationship in the context of government institutions.

Fraud Prevention

Basically, fraud prevention is any effort made to prevent fraud from occurring in an organization. Rosli[22] draw conclusion from Oxford English Dictionary that fraud prevention as the action of stopping fraud which to refer to a wrongful or criminal deception intended to result in financial or personal gain from happening or arising. Association of Certified Fraud Examiners adopt the definition of fraud from Black's Law Dictionary which states that "Fraud is any activity that relies on deception in order to achieve a gain".[23]

Asset misappropriation, fraudulent statements, and corruption are the three main types of fraud according to the Association of Certified Fraud Examiners.[4] In his research, Peltier-Rivest[24] proposed a fraud prevention model consisting of alleviating fraud motivators, reduce perceived opportunities and improving ethics. It seems that Peltier-Rivest[24] proposed a fraud prevention model based on The Triangle Theory from Cressey. The fraud triangle has three components: pressure, opportunity, and rationalization, all of which must coexist for a crime to occur.

Fraud prevention using The Triangle Theory has been widely used. This study uses a model proposed by Peltier-Rivest[24], acknowledging that the fraud triangle hypothesis is regarded as the most comprehensive among theories elucidating the elements that precipitate fraud.[25] This theory is the most popular way to look at the causes of professional fraud[26] and accepted as the universal lens of fraud[27] as well as more than 8000 academic articles and numerous research projects and studies have been spawned on the back of it.[28]

Spiritual Intelligence and Fraud Prevention

At the conclusion of the 20th century, recent scientific findings indicate the presence of a third form of intelligence, termed spiritual intelligence.[29] A person with spiritual intelligence is able to reflect deeply on their existence, find meaning in their experiences, recognise their transcendent self, and master spiritual states. This is achieved through awareness, integration, and adaptive application of one's nonmaterial and transcendent aspects of existence.[30]

Recently, the significance of spiritual intelligence has been recognized as crucial for enhancing spiritual well-being, alleviating occupational stress, and facilitating efficient social functioning, hence fostering workers' comprehension of their roles.[31] Spiritual intelligence can motivate individuals to avoid Machiavellian behavior in order to maintain balance and connectedness in the individual's life which the impact become a positive organizational culture that will automatically prevent fraud.[32] Meanwhile, there are researchers who equate religiosity and spirituality.[33,34] Religiosity aims to control human behavior in building loyalty and obedience so as to prevent fraudulent behavior.[35] For instance, the study noted that religious belief is associated with the moralities of justice and care under the social dimension. What this means is that a person's moral and ethical decisions may be influenced by their religious beliefs and their personal relationship with God.[36] As the religiosity is a part of spiritual, a person who had the spiritual intelligence will prioritizing ethics and morals to prevent fraud or support the implementation of fraud prevention that occurs around them.

Furthermore, spiritual intelligence can moderate the influence of village competence, and government apparatus resources in preventing fraud.[7] Previous studies demonstrated that spiritual intelligence significantly and positively impacted the avoidance of fraud.[37] Based on this, the following research hypothesis constructed as follow:

H1: Spiritual Intelligence has a positive and significant effect to fraud prevention
Workplace Spirituality and Fraud Prevention
A spirituality in the workplace is an individual's attempt to understand their position in the universe, form meaningful relationships with those they work with, and ensure that their personal values are congruent with those of their employer.[38] As a way of life, workplace spirituality brings people closer to one another, their coworkers, and the community at large.[7] Spirituality in the workplace involves efforts to develop strong relationships with coworkers and others associated with the work.[38] The spirituality that permeates the workplace serves as a glue that binds employees to one another, the company, and the greater good. [7] This means that a good and supportive work environment and co-workers who have good morals and high spirituality in the work environment will prevent someone from committing fraud. Because, humans will be easily influenced by the environment in which they live and carry out their activities.

One definition of workplace spirituality is "the degree to which an individual brings his or her own spiritual beliefs and practices into one's work life".[39] This type of spiritual growth in the workplace often has its roots in an individual's own beliefs and practices. According to Johari[7], a robust corporate culture helps combat fraud by encouraging individuals to oppose bribes in the workplace.

Chawla stated that workplace spirituality negatively affects deviant behavior in an organization.[40] This means that implementing workplace spirituality can reduce or prevent fraud. Other study proved that there is a positive and significant relationship between fraud prevention and workplace spirituality.[3] However, research has shown that spirituality in the workplace is negatively associated with procurement fraud in public sector organisations[7] a strong negative correlation. This is mean, the application of workplace spirituality can reduce the occurrence of fraud. Based on this, the following research hypothesis is constructed as follow:

H2: Workplace Spirituality has a positive and significant effect to fraud prevention
The Role of Women's Spiritual Leadership to Strengthen the Effect of Spiritual Intelligence and Workplace Spirituality on Fraud Prevention
Characterized Spiritual Leadership as the values, attitudes, and behaviors essential for intrinsically motivating oneself and others, fostering a sense of spiritual survival through vocation and belonging.[25] The spiritual leader's role in cultivating a spiritually enriching environment involves offering values, serving as role models, and providing support, which collectively mitigate the risk of fraud. Spiritual leadership is characterised by a combination of intellectual considerations with social and spiritual ideals, as well as a transcendent vision, hope, faith, and selfless love.[41] Fry stated the qualities of spiritual leadership divided into 3 dimensions, which vision, altruistic love and hope/faith.[25]

Fraud can be minimized through the role of leaders with the right type of leadership. The results of the study show that leadership style has a significant influence on the occurrence of asset misappropriation in companies.[10] Increasing leadership spirituality will reduce deviant behavior in the workplace,[12,13] which fraud is included to deviant behavior.

This research propose that Spiritual Intelligence could have an effect to prevent fraud, the role of a spiritual leader predicted can strengthen this influence by providing her qualities as a leader who has attitudes and support to the followers to carry out responsibilities and duties honestly and with full integrity. Based on this argument, the following research hypothesis constructed as follow:

H3: Spiritual Leadership by woman strengthens the effect of Spiritual Intelligence on fraud prevention.
Fry defined spiritual leadership as embodying the beliefs, practices, and actions necessary to inspire others and oneself, creating a sense of purpose and community, and ensuring one's own spiritual well-being. [25] A spiritual leader's role in cultivating a spiritually enriching environment involves offering values, serving as a role model, and providing support to establish a positive spiritual workplace, thereby mitigating the risk of fraud. The values of honesty and high commitment to work applied in the workplace by a spiritual leader will strengthen the influence of workplace spirituality on fraud prevention. Based on this argument, the following research hypothesis was constructed:

H4: Spiritual Leadership by women strengthens the effect of Workplace Spirituality on fraud prevention.
Based on the hypothesis above, the research framework shown in Figure 1 represents the proposed effect of Spiritual Intelligence and Workplace Spirituality on Fraud Prevention, as well as the role of Woman Spiritual Leadership in strengthening these effects.[42]
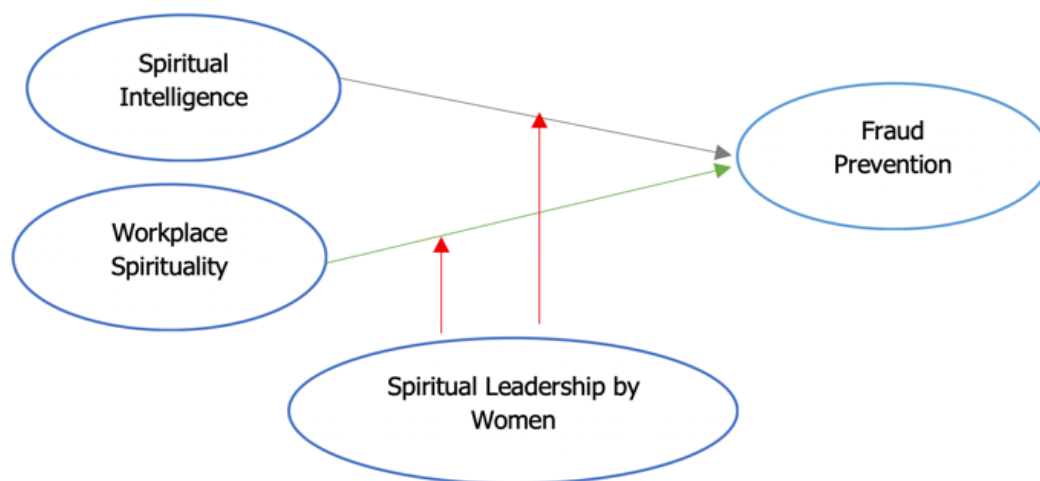
Figure 1. Research Framework

METHOD

This study is an explanatory quantitative study that aims to examine the relationship between spiritual intelligence, spirituality in the workplace, and fraud prevention with spiritual leadership by female leaders as a moderating variable, and was conducted in Pekanbaru City, Riau Province, Indonesia, from 4 to 17 December 2024. All employees in 49 government organisations were included in the study population. but the study focused on employees from seven organisational units led by women, namely the Department of Culture and Tourism, the Department of Population and Civil Registration, the Department of Women's Empowerment, Child Protection, and Community Empowerment, the Department of Libraries and Archives, Pekanbaru City Subdistrict, Rumbai Subdistrict, and Binawidya Subdistrict, with a total population of 303 employees. The sample selection was conducted through a census by distributing an online questionnaire via Google Forms to all employees in these units, with inclusion criteria for employees who had worked for at least one year and exclusion criteria for contract employees and employees on leave during the data collection period, resulting in 258 respondents who completed and validated the questionnaire.

The measurement instrument consisted of 30 items using a five-point Likert scale, where spiritual intelligence was measured based on an adaptation of King's instrument,[31] covering aspects of critical existential thinking, personal meaning production, transcendental awareness, and conscious state expansion; the workplace spirituality variable was measured using items from assessing team cohesion, value alignment between individuals and the organisation, job meaning, workplace happiness, and opportunities for inner life; The variable of spiritual leadership was measured by referring to Fry[25] through the dimensions of vision, altruistic love, and hope/faith; while fraud prevention was measured using the Peltier-Rivest[24] model, which includes reducing motivation for fraud, reducing perceived opportunities for fraud, and increasing ethics.

The collected data were securely stored in a cloud-based folder accessible only to the research team to maintain data confidentiality and integrity, and analysed using Structural Equation Modelling (SEM) with a Partial Least Squares (PLS) approach via SmartPLS 3 software, which included testing convergent and discriminant validity, composite reliability, and structural model analysis to test direct effects and moderation effects. Research ethics were ensured by obtaining informal approval from the relevant authorities, providing respondents with complete information about the research objectives, and guaranteeing data confidentiality and anonymity, so that respondent participation was voluntary without consequences for those choosing not to answer all or part of the questions.

RESULTS

Test Result

It is necessary to know the correlation between variables before doing different tests to ascertain the validity and reliability of the questionnaire items. The loading factor provided below might serve as an indicator of this correlation:

In order to determine if the established variables are genuine and reliable, loading factors are utilised. We have constructed two items to reflect each indicator of the variables. Out of the 30 items tested, only 26 had a loading factor that met the criteria or greater than 0,7.

To determine the dependability of the study's findings, convergent validity testing uses the Average Variance Extracted (AVE), which is displayed in table 2 below. The AVE value was more than 0,5 for every hidden variable. As a result, all indicators may provide a true picture of the factors.

Table 1. Factor Analysis of Variable Items		
Item	**Statement**	**Loading Factor**
Spiritual Intelligence		
SI_1.1	No hesitation to express an opinion if something is not right.	0,867
SI_1.2	Have critical thinking about problems that occur	0,835
SI_2.1	Appreciate the work	0,833
SI_2.2	Care about the work environment	0,831
SI_3.1	Work is part of worship	0,828
SI_3.2	Make time to pray in between work	0,849
SI_4.1	Realizing that his work will be counted as good deeds.	0,862
Workplace Spirituality		
WPS_1.1	Feel proud to be part of the institution where you work	0,737
WPS_1.2	Feel like the work environment is part of the family	0,778
WPS_2.1	Personal values are in line with the values of the institution where you work.	0,738
WPS_3.1	The place where I work cares about providing maximum service to the community.	0,834
WPS_3.2	The place where I work has an obvious program about good service to the community.	0,778
WPS_4.1	The place I work is a second home for me	0,757
WPS_5.2	Doing work as a part of worship.	0,797
Spiritual Leadership		
SL_1.1	Leaders and members have the expectation of creating meaningful work.	0,853
SL_2.1	Leader is willing to defend her members if they doing the right things	0,769
SL_2.2	Leader prioritize the interests of her members over herself.	0,768
	There is trust to the leader	0,784
	The leader is honest and not full of falsehoods	0,744
Fraud Prevention		
FP_1.1	There is a program in the institution for spiritual strengthening	0,731
FP_1.2	There is fair compensation for realistic individual performance.	0,728
FP_2.1	There is an internal control system that is running well	0,700
FP_2.2	There are continuous regular audits	0,762
FP_3.1	Work environment upholds ethics	0,756
FP_3.2	Good governance is applied to the institution	0,745

Table 2. Average Variance Extracted (AVE) Test Result			
Variables	**(AVE)**	**Criteria**	**Decision**
Fraud Prevention	0,543	>0,5	Valid
SL* Spiritual Intelligence	1,000	>0,5	Valid
SL* Work Spirituality	1,000	>0,5	Valid
Spiritual Intelligence	0,712	>0,5	Valid
Spiritual Leadership	0,616	>0,5	Valid
Workplace Spirituality	0,601	>0,5	Valid

The following discriminant validity results are shown by the cross loading values and the Fornell Larcker Criterion:

Table 3. Discriminants Validity Result						
	Fraud Prevention	SL*Spiritual Intelligence	SL* Workplace Spirituality	Spiritual Intelligence	Spiritual Leadership	Workplace Spirituality
Fraud Prevention	0,757					
SL* Spiritual Intelligence	-0,285	1,000				
SL* Workplace Spirituality	-0,558	0,468	1,000			
Spiritual Intelligence	0,487	-0,591	-0,367	0,844		
Spiritual Leadership	0,665	-0,696	-0,393	0,715	0,785	
Workplace Spirituality	0,753	-0,333	-0,607	0,563	0,681	0,775

According to table 3, the construct's correlation value with itself is not less than its correlation value with other constructs. The study's constructions are distinct from one another, as a result.

The results of the tests are shown by two reliability measures: Composite Reliability and Cronbach's Alpha. Here are the outcomes of the reliability test:

Table 4. Reliability Test Result					
	Cronbach's Alpha	rho_A	Composite Reliability	Criteria	Decision
Fraud Prevention	0,833	0,836	0,877	>0,7	Reliable
SL* Spiritual Intelligence	1,000	1,000	1,000	>0,7	Reliable
SL* Work Spirituality	1,000	1,000	1,000	>0,7	Reliable
Spiritual Intelligence	0,932	0,934	0,945	>0,7	Reliable
Spiritual Leadership	0,843	0,849	0,889	>0,7	Reliable
Workplace Spirituality	0,889	0,892	0,913	>0,7	Reliable

A high coefficient of determination (R^2) indicates that the independent variable significantly impacts the dependent variable. The results obtained are as follows:

Table 5. Coefficient of Determination Test Result		
	R Square	R Square Adjusted
Fraud Prevention	0,691	0,685

According to the R-squared value shown in the table above, Spiritual Intelligence, Workplace Spirituality, and Spiritual Leadership have a 69,1 % impact on the dependent variable. While additional factors beyond the scope of the research are likely to account for the remaining 30,9 %.

According to a study researchers utilise the structural model, also known as the inner model, to assess the constructed model's ability to explain the association between latent variables. The structural model was examined by examining the R^2 coefficient, ß path coefficient, and Q^2 predictive relevance. The inner model depicted in the figure 2.
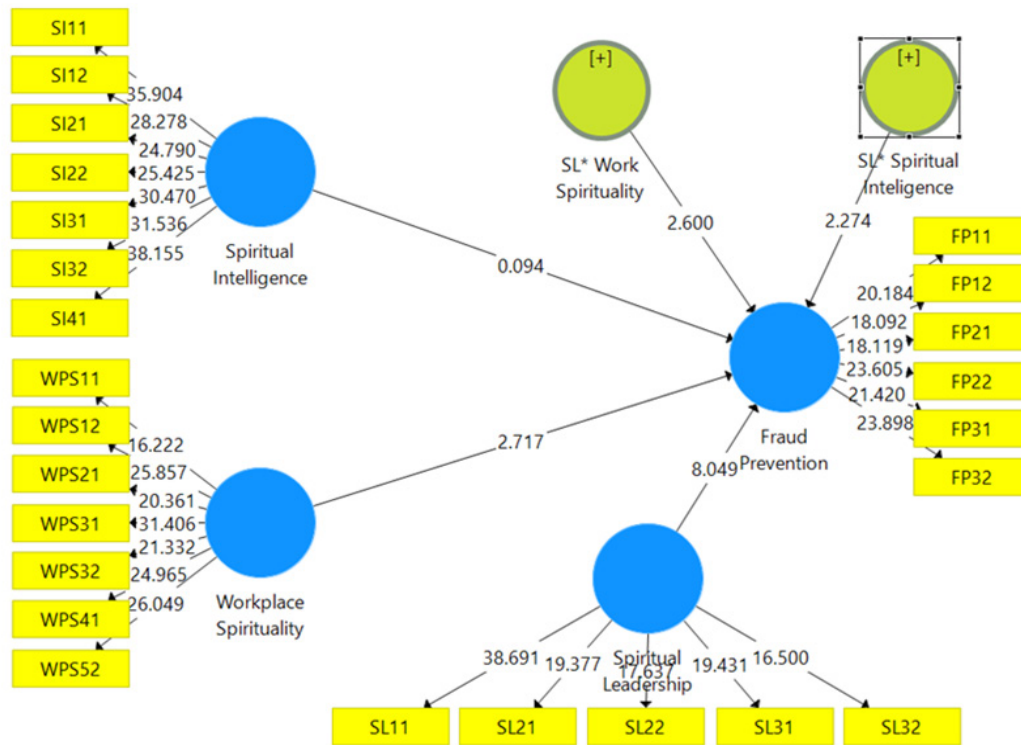
Figure 2. Hypothesis Test Result

Table 6. Hypothesis Test Result						
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Decision
SL* Spiritual Intelligence -> Fraud Prevention	0,178	0,162	0,078	2,274	0,023	Supported
SL* Workplace Spirituality -> Fraud Prevention	-0,167	-0,157	0,064	2,600	0,010	Not Supported
Spiritual Intelligence -> Fraud Prevention	0,006	0,015	0,061	0,094	0,925	Not Supported
Spiritual Leadership -> Fraud Prevention	0,667	0,666	0,083	8,049	0,000	Supported
Workplace Spirituality -> Fraud Prevention	0,217	0,208	0,080	2,717	0,007	Supported

DISCUSSION

Research conducted by a study provide empirical evidence regarding the importance of spiritual intelligence in a person. This study including 230 participants demonstrated that students who regularly attended worship services were less inclined to engage in cheating compared to those who went less frequently. This means that the condition of spiritual intelligence can prevent someone from committing fraud. Therefore, considering that spiritual intelligence is important, increasing spiritual intelligence becomes a challenge to be applied to an organization.

However, the test results obtained empirical evidence that hypothesis 1 is not supported. It means that the Spiritual Intelligence of government employees did not give an effect to fraud prevention. The low level of spiritual intelligence of government employees in Pekanbaru probably causes this condition.

The low spiritual intelligence of employees is indicated by invalid items in the statement measurement given. For example, the item "realizing that his work will be counted as good deeds" was discarded because it did not meet validity. Employees generally carry out work because of other factors, such as salary, job satisfaction, position and other things. So that doing work is not because of the awareness that work is worship.

In line with the result of this research, Bayuandika et al.[29] proved empirically that spiritual intelligence had no effect on the ability of auditor to detect fraud. They cite Yuwona's assertion that spiritual intelligence serves as a regulator and enhancer of other intelligences that have not reached their full potential.

This study's results align with the research from a study, proving that spirituality does not negate academic

fraud. This study's results may be elucidated using regular activity theory, which posits that three components might heighten the likelihood of fraud: motivated offenders, suitable targets, and the lack of a competent guardian. The spirituality of the object can be ignored by the perpetrator in the absence of a supervisor.

While on the other hand, fraud prevention in the context proposed by Peltier-Rivest[24], namely alleviating fraud motivators, reducing perceived opportunities and improving ethics has been applied in each agency that is the object of the study. Looking at these results, the role of other factors is needed to bring about this effect. The role of a spiritual leader that we propose in hypothesis 3 can provide an answer to this influence.

In hypothesis 3, it was found that Spiritual leadership of female leaders can strengthen the relationship between spiritual leadership and fraud prevention. This provides evidence that, although the level of employee spiritual intelligence is low, the role of leaders with spiritual leadership qualities can support employees to be able to support fraud prevention in institutions.

The integration of personal purpose, vision, and values into leadership development curriculum commenced. This process of introspection and exploration to enhance consciousness and self-direction is essential to spiritual intelligence. Spiritual Leadership had power to Strengthening Organizational Commitment while the commitment of the government is to prevent fraud from occurring as one of the priorities to enhance the development. Therefore, a leader should have the quality of spiritual intelligence in carrying out his responsibilities as a leader.

Findings from the study provide credence to the second hypothesis, which states that spirituality in the workplace significantly and positively impacts efforts to avoid fraud. The condition of a spiritual work environment is indicated by a high sense of pride in being part of a government institution, feeling that the workplace is part of the family, then there is in line between the values adopted and the values of the institution, the institution concern to provide good service to the community, and there is an opportunity given to feel that the work done is part of worship, all of these conditions are the basis that a spiritual work environment can prevent fraud that occurs in institutions.

However, hypothesis 4 proposed that woman spiritual leadership can increase the influence of workplace spirituality on fraud prevention was not proven in this study. To find out the cause of this, an in-depth study is needed. However, the results of our interviews with several employees provide an illustration that a conducive spiritual work environment is basically not affected by the role of the leader because the leaders in the institution often change.

CONCLUSIONS

This study concludes that spirituality in the workplace has a positive effect on fraud prevention, while spiritual intelligence does not show a significant effect. The findings also indicate that spiritual leadership by women can strengthen the influence of spiritual intelligence on fraud prevention, but does not strengthen the influence of spirituality in the workplace. These results underscore the importance of spiritual leadership in the context of public organisations and open up opportunities for further research on the factors that drive employee engagement in fraud prevention.

Availability of data and materials

The dataset collected and analysed in this study is not publicly available due to institutional and confidentiality considerations, but can be obtained from the corresponding author upon reasonable request. Access to the data will be granted for academic and non-commercial purposes to ensure transparency and support replication of the study.

BIBLIOGRAPHIC REFERENCES

1. Nadirsyah, Indriani M, Mulyany R. Enhancing fraud prevention and internal control: the key role of internal audit in public sector governance. Cogent Business & Management 2024;11(1). https://doi.org/10.1080/23311 975.2024.2382389

2. Abdullah MW, Hanafie H, Bayan AYM. Internal Governance And Fraud Prevention System: The Potentiality Of The Spiritual Quotient. Journal of Governance and Regulation 2023;12(4). https://doi.org/10.22495/ jgrv12i4art5

3. Purnamasari P, Rahmani AN, Hartant0 R. Does Spirituality In The Workplace Reflect The Relationship Between Accounting And Corruption Prevention? Urnal Reviu Akuntansi Dan Keuangan 2020;10(3).

4. Purnamasari P, Amaliah I. Fraud Prevention: Relevance to Religiosity and Spirituality in the Workplace. Procedia - Social and Behavioral Sciences 2015;211:827–35. https://doi.org/10.1016/j.sbspro.2015.11.109

5. Marshall Z &. SQ: Spiritual intelligence: The ultimate intelligence. Psychology and Psychotherapy 2000;75(January):116-7.

6. Astriva V, Sukesti F. The Influence of Internal Control, Individual Morality, Spiritual Intelligence and Suitability of Compensation on Accounting Fraud Tendencies. Economics and Business International Conference Proceeding 2024;1(2):571–84. https://doi.org/http://103.97.100.158/index.php/EBiC/article/view/467

7. Johari RJ, Faudzi NAFM, Hussin SAHS, Rosnidah I, Musyaffi AM. Procurement Fraud In The Public Sector: An Analysis Of Fraud Triangle Elements And Workplace Spirituality. Review of Economics and Finance 2023;21. https://doi.org/10.55365/1923.x2023.21.12

8. Murphy PR, Dacin MT. Psychological Pathways to Fraud: Understanding and Preventing Fraud in Organizations. Journal of Business Ethics 2011;101(4). https://doi.org/10.1007/s10551-011-0741-0

9. Ariail DL, Crumbley DL. Fraud Triangle and Ethical Leadership Perspectives on Detecting and Preventing Academic Research Misconduct. Journal of Forensic & Investigative Accounting 2016;8(3).

10. Ghani EK, Mohamed N, Tajudin MA, Muhammad K. The Effect of Leadership Style, Organisational Culture and Internal Control on Asset Misappropriation. Academy of Accounting and Financial Studies Journal 2021;25(5):1–12.

11. Sustika AD, Utami I, Hapsari ANS. Whistleblowing For Fraud: Perspective Of Leadership Types And Accountability Pressure. Asia Pacific Fraud Journal 2020;5(2). https://doi.org/10.21532/apfjournal.v5i2.153

12. Wahyono, Prihandono D, Wijayanto A. The influence of spiritual leadership on spirituality, conscientiousness and job satisfaction and its impacts on the reduction of workplace deviant behavior. Journal of Economic and Administrative Sciences 2020;37(1). https://doi.org/10.1108/jeas-02-2019-0015

13. Mahyarni. The influence of spiritual leadership and its impacts on the reduction of workplace deviant behavior. International Journal of Public Leadership 2019;15(3). https://doi.org/10.1108/IJPL-01-2019-0003

14. Prihatini ES. On The Same Page? Support for Gender Quotas among Indonesian Lawmakers. Asian Social Science 2018;14(5). https://doi.org/10.5539/ass.v14n5p48

15. Dhatt R, Theobald S, Buzuzi S, Ros B, Vong S, Muraya K, et al. The role of women's leadership and gender equity in leadership and health system strengthening. Global Health, Epidemiology and Genomics 2017;2. https://doi.org/10.1017/gheg.2016.22

16. Meagher K, Khaity M, Hafez S, Rodo M, Achi N El, Patel P. Strengthening health systems and peacebuilding through women's leadership: a qualitative study. Globalization and Health 2023;19(1). https://doi.org/10.1186/s12992-023-00920-1

17. Kalbuana N, Taqi M, Uzliawati L, Ramdhani D. The Effect of Profitability, Board Size, Woman on Boards, and Political Connection on Financial Distress Conditions. Cogent Business and Management 2022;9(1). https://doi.org/10.1080/23311975.2022.2142997

18. Taqi M, Kalbuana N, Abbas DS, Mayyizah M. Litigation Risk-Delving Into Audit Quality, Internal Audit Structure, Political Connections, and Company Size. Interdisciplinary Journal of Management Studies (Formerly Known as Iranian Journal of Management Studies) 2024;17(2). https://doi.org/10.22059/ijms.2024.367759.676318

19. Adams RB, Ferreira D. Women in the boardroom and their impact on governance and performance. Journal of Financial Economics 2009;94(2):291–309. https://doi.org/10.1016/j.jfineco.2008.10.007

20. Lenard MJ, Yu B, York EA, Wu S. Female business leaders and the incidence of fraud litigation. Managerial Finance 2017;43(1):59–75. https://doi.org/10.1108/MF-04-2016-0123

21. Dakhli A. Do women on corporate boardrooms have an impact on tax avoidance? The mediating role of corporate social responsibility. Corporate Governance (Bingley) 2022;22(4):821–45. https://doi.org/10.1108/CG-07-2021-0265

22. Rosli R, Mohamed IS, Mohamed N, Othman R, Rozzani N. Development of Fraud Prevention (FP) Model Using the Theory of Planned Behavior. Business and Economic Research 2020;10(3). https://doi.org/10.5296/ber.v10i3.17313

23. ACFE. Occupational Fraud 2024: A Report to The Nations. 2024. https://www.acfe.com/-/media/files/acfe/pdfs/rttn/2024/2024-report-to-the-nations.pdf

24. Peltier-Rivest D. A model for preventing corruption. Journal of Financial Crime 2018;25(2). https://doi.org/10.1108/JFC-11-2014-0048

25. Fry LW. Toward a theory of spiritual leadership. Leadership Quarterly 2003;14(6). https://doi.org/10.1016/j.leaqua.2003.09.001

26. Lokanan ME. Challenges to the fraud triangle: Questions on its usefulness. Accounting Forum 2015;39(3). https://doi.org/10.1016/j.accfor.2015.05.002

27. Mui G, Mailley J. A tale of two triangles: Comparing the fraud triangle with criminology's crime triangle. Accounting Research Journal 2015;28(1). https://doi.org/10.1108/ARJ-10-2014-0092

28. Tickner P, Button M. Deconstructing the origins of Cressey's Fraud Triangle. Journal of Financial Crime 2020;28(3). https://doi.org/10.1108/JFC-10-2020-0204

29. Bayuandika M, Mappanyukki R. The Effect of Spiritual Intelligence and Professional Skepticism of Internal Auditors on Detection of Fraud. International Journal of Asian Social Science 2021;11(1). https://doi.org/10.18488/journal.1.2021.111.22.29

30. King DB. Rethinking Claims of SI a Definition, Model, and Measure. Thesis 2008:1–207.

31. Aini Q, Talib SG, Alghazali T, Ali MH, Sahi ZT, Kumar T, et al. Spiritual intelligence, spiritual health and occupational stress in Islamic organisations. HTS Teologiese Studies / Theological Studies 2023;79(1). https://doi.org/10.4102/hts.v79i1.8228

32. Maharani IAS, Suaryana IGNA, Budiasih IGAN, Krisnadewi KA. Moderation of spiritual intelligence: Machiavellian personality, ethical organizational culture and whistleblowing system on fraud intention. Tennessee Research International of Social Sciences 2024;6(2):164–76.

33. Koch D, Edstrom L. Development of the Spiritual Harm and Abuse Scale. Journal for the Scientific Study of Religion 2022;61(2). https://doi.org/10.1111/jssr.12792

34. Krok D. Religiousness, spirituality, and coping with stress among late adolescents: A meaning-making perspective. Journal of Adolescence 2015;45. https://doi.org/10.1016/j.adolescence.2015.10.004

35. Said J, Asry S, Rafidi M, Obaid RR, Alam MM. Integrating religiosity into fraud triangle theory: Empirical findings from enforcement officers. Global Journal Al-Thaqafah 2018;2018. https://doi.org/10.7187/gjatsi2018-09

36. Teo T, Huang F, Hue MT, Cheung HY. The influence of religious beliefs on bullying and cheating among secondary school students in Hong Kong. Acta Psychologica 2024;251. https://doi.org/10.1016/j.actpsy.2024.104563

37. Yulindh, Saftiana Y, Yuniarti E. Determinants of the Ability of Spi Personnel in the Prevention and Detection of Fraud at State Universities (PTN) in Indonesia. Journal of Economics, Finance and Management Studies 2024;7(6):3235–48. https://doi.org/10.47191/jefms/v7-i6-19

38. Mitroff II, Denton EA. A Spiritual Audit of Corporate America: A Hard Look at Spirituality, Religion, and Values in the Workplace. Theology Today 1999;40(1).

39. Nnadede KS. Human performance improvement: Towards a framework for linking workplace spirituality, mindfulness, workers' engagement, and safety outcomes. Theses and Disserations (All) 2018.

40. Chawla V. The effect of workplace spirituality on salespeople's organisational deviant behaviours: Research propositions and practical implications. Journal of Business and Industrial Marketing 2014;29(3). https://doi.org/10.1108/JBIM-08-2012-0134

41. Ali M, Usman M, Pham NT, Agyemang-Mintah P, Akhtar N. Being ignored at work: Understanding how and when spiritual leadership curbs workplace ostracism in the hospitality industry. International Journal of Hospitality Management 2020;91. https://doi.org/10.1016/j.ijhm.2020.102696

42. Fitri FA, Syukur M, Justisa G. Do the fraud triangle components motivate fraud in Indonesia? Australasian Accounting, Business and Finance Journal 2019;13(4). https://doi.org/10.14453/aabfj.v13i4.5

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CONFLICT OF INTEREST

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