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From Culture to Conduct: How Clan Culture Shapes Sustainable Nursing Behavior Through Moral Leadership

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ABSTRACT

Healthcare institutions are facing increased challenges in preserving ethical and sustainable practices of their nursing staff due to burnout, scarce resources, and increasing patient requirements. This study seeks to explore the impact of clan culture on sustainable behaviour at work among nurses and identify whether moral leadership acts as a mediator of this process. Based on Social Exchange Theory, Social Learning Theory, Ethical Climate Theory and Conservation of Resources Theory, the mediation model was tested on a sample of 172 registered nurses from public hospitals of South Punjab, Pakistan. A quantitative, cross-sectional approach was used in the study and Partial Least Squares Structural Equation Modelling (PLS-SEM) technique was applied for the analysis of data. Results indicate that clan culture positively affects moral leadership ($\beta = 0.686$, $R^2 = 0.470$), whereas moral leadership is significantly related to five aspects of sustainable workplace behaviour: working sustainably, not harming others, conserving resources, influencing others and showing initiative. The mediation analysis revealed that moral leadership completely mediates the relation of clan culture with each of the mentioned five aspects of behaviour. These results indicate that the collaborative organisational culture supports sustainable practices in nursing through development of morally responsible leaders.

Keywords: *Clan Culture, Moral Leadership, Sustainable Workplace Behavior, Working Sustainability, Ethical Leadership, Nurses, Public Hospitals, Healthcare Sector, Patient Safety, Organizational Culture.*

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Introduction

Workplace sustainability has been a focus of study for a number of years in the academic field of organizational studies, with specific focus areas involving understanding the provision of healthcare services. In essence, sustainable working conditions are the foundation of employee health and well-being, ethical practice, and high-performing organizations. Leadership and organizational climate are cited as key factors influencing sustainable outcomes, shaping employee motivation, behavior, and commitment to sustainable practices (Alemu, 2025). Culture is among various organizational variables that serve as a foundation for employee behavior and leaders' style (Khan et al., 2020). Clan culture is built on trust, collaboration, and employee participation (Mohamed et al., 2025). Such cultures foster commitment and motivation by helping employees align with organizational goals, including the pursuit of sustainable workplace practices. Clan culture in health-care settings; particularly nursing environments promotes teamwork, open communication and mutual support, all of which are pre-requisites for sustainable work practices (Mohamed et al., 2025).

However, the clan culture need not necessarily translate into the work sustainability; a critical mechanism is needed to translate the culture into desired employee behaviors (Linnenluecke & Griffiths, 2010). Moral leadership is a potential mediator in this regard. Moral leadership: an approach that highlights and prioritizes integrity, fairness, ethical decision making and care for others as a way to influence and guide employees to make ethical decisions in an effort to promote responsible and sustainable action. Ahmad & Umrani (2019) study revealed that moral leadership positively influences organizational behavior, and shaping work context that leads to desired workplace outcomes such as employee engagement, psychological safety and team learning.

In addition, moral leadership acts as a pathway to a sustainable future for organizations by building trust and transparency among employees (Ughulu, 2024). Moral leaders set examples and model ethical decision-making, guiding employees toward behaviors that support organizational

sustainability (Ogunfowora et al., 2021). Evidence suggests that moral leadership, through psychological and behavioral mechanisms, positively affects safety performance, organizational citizenship behavior, and sustainability outcomes (Ye & Li, 2024). This body of evidence suggests that moral leadership mediates the relationship between clan culture and sustainable workplace behavior. Sustainable behavior at work is conceptualized across several dimensions, including avoiding harm, conserving resources, influencing others, taking initiative, and working sustainably (Rezapouraghdam et al., 2019). This is particularly relevant in healthcare organizations, where ethical responsibility is central to both patient care quality and organizational performance (Al Hammadi & Hussain, 2019).

The purpose of this study is to examine the mediating role of moral leadership in the relationship between organizational culture and sustainable employee behavior. It contributes to the literature by connecting the cultural and leadership aspects of working sustainability, especially for public healthcare institutions that are facing ethical dilemmas, limited resources and sustainability of their employees.

Literature Review

Clan Culture and Moral Leadership

While individual factors such as employment sector and professional values shape leadership behavior, organizational culture serves as a key contextual determinant of how leaders operate in healthcare settings (Li et al., 2018). Clan culture is built on collaboration, trust, participation, and open communication, and represents a family-oriented organizational culture. Staff mutual respect, collaborative practice, shared governance and supportive supervision manifests a culture in the nursing units (Gerard et al., 2016). They are employee-focused workplaces that promote self-care, professional development and enduring relationships that in turn create opportunities for success in a demanding field like healthcare.

Clan culture could build the ethical base for moral leadership in the nursing sector. Moral leadership may be defined as: Leadership based on integrity, fairness, ethics and the common good (Shacklock & Lewis 2007). Moral leadership, leadership that is not based on position or authority, but on values,

and moral responsibility. In particular, moral leadership is significant in the context of nursing, where nurse leaders frequently have to make everyday decisions related to patient care, allocation of resources, staffing and workload as well as clinical decision making (Zydziaunaite et al., 2015). Honest, transparent, fair and accountable leaders set and model ethical standards, and promote a culture of patient safety (Bryden, 2024).

The relationship between the clan culture and moral leadership in nursing can be explained by using Social Learning Theory and Social Exchange Theory. Clan culture in healthcare settings facilitates ethical behavior through social interaction, fostering trust and cooperation among colleagues. Organizational norms rooted in dignity, equity, and shared accountability make nurse managers more likely to model ethical behavior (Salmela et al., 2017). Nurses will, in return, be loyal to the leaders who show them that they value their welfare and ethical issues, and will trust, commit and abide by the codes of professional conduct. This reciprocity helps to strengthen moral atmosphere and team spirit.

H1: Clan culture positively influences moral leadership among nurses in public hospitals.

Moral Leadership and Working Sustainability

Moral leadership is increasingly being considered a fundamental style of leading in healthcare organizations, especially in the nursing field where patient safety and professional ethics are important factors. Moral leadership is ethical and value based leadership perspectives, caring about honesty, fairness, responsibility and others for the common good. Leadership effectiveness should stem from moral authority, not coercive power (Savgat & Kantek, 2026). Moral leaders in nursing settings are ethical role models, who demonstrate and embody transparency and accountability in clinical and administrative decision-making. Sustainable working in nursing is characterized by nurses' ability to sustain their long-term professional engagement, physical as well as psychological well-being and productive performance without excessive burnout or occupational stress (Almeida, et al., 2024). Sustainable working conditions encompass job satisfaction, work-life balance, emotional resilience, stable employment intention, and

continued professional development. Nursing is a highly demanding profession characterized by heavy patient responsibility, shift work, emotional labor, and significant clinical risk exposure. Strategies that support sustainable working conditions are therefore essential for maintaining a stable healthcare workforce and ensuring high-quality patient care (Hoxha et al., 2024). Ethical Climate Theory and Social Exchange Theory help to explain the influence of moral leadership on working sustainably. Moral leaders encourage justice, transparency, and ethical organizational practices, which strengthen nurses' trust in their organization. When nurses perceive their leaders as ethical and just, they demonstrate stronger organizational commitment and greater intention to remain in the profession. Ethical leadership has also been found to reduce workplace conflict, discrimination, and unfair treatment — all of which are key drivers of nurse burnout and turnover (Lambert et al., 2024).

H2: Moral leadership positively influences work sustainability among nurses in public hospitals.

Moral Leadership and Avoiding Harm

Moral Leadership is rooted in the theory of ethical leadership and value based views of leadership, and emphasizes integrity, fairness, accountability, and caring for the welfare of others. Porter-O'Grady (2025) claims that the authority of leadership rests in moral value rather than on coercive control. Moral leaders model ethical behavior in the nursing environment through integrity, accountability, and competent practice (both clinical and administrative). In hospitals, ethical dilemmas as well as clinical risk and life-threatening situations are regular issues (Tasneem & Baig, 2025), thus such leadership is crucial.

The principle of avoiding harm in the nursing field relates to the ethical foundation of nonmaleficence and healthcare professionals are required not to cause injury, medical errors, unsafe practices that put patients at risk (Wong et al., 2025). Nursing is stressful from the beginning, because of the risk that critical errors in medication administration, patient monitoring, or patient communication can cause great harm, and it's a high-risk clinical environment in which nurses work. Therefore, leadership behaviour in predicting and controlling safety culture and risk (Yazdi, 2025). Avoiding harm includes encouraging reporting of errors,

promoting safety practices in patient care, preventing workplace bullying and ensuring ethics of clinical standards. All healthcare organizations and clinical professionals have harm prevention as a core element of service quality (Endeshaw, 2021). Ethical Climate Theory and Social Exchange Theory together explain the relationship between moral leadership and harm avoidance. Moral leaders create a shared ethical climate that inspires fairness, accountability, and ethical decision-making, reinforcing nurses' dedication to patient safety. When nurses observe ethical behaviour on the part of their leaders, they are more inclined to follow clinical guidelines, comply with safety protocols. It also improves psychological safety as moral leadership provides nurses with the capacity to have voice in discussing a safety issue, in contextualizing clinical errors and participate in risk prevention strategies (Mrayyan & Askar, 2025).

H3: Moral leadership positively influences avoiding harm among nurses in public hospitals.

Moral Leadership and Conserving Resources

Moral leadership is an important way to approach leadership in a health organization setting like a nursing work place that promotes ethical accountability, staff welfare and patient safety (Bjarnason & LaSala, 2011). Moral leadership is all about integrity, fairness and accountability as well as values-based decision-making. This entails that leadership is based on moral virtues and not on power via coercion (Stone & Patterson, 2023). According to COR theory, people try to acquire and maintain those things they value, i.e. emotional energy, time, social support and professional competence (Yıldırım & Bulut, 2022). In the nursing profession, resource conservation is a must, particularly as nurses are constantly exposed to stressors, emotionally-draining shifts and patient interactions. When resources are depleted, nurses experience fatigue, decreased productivity, and diminished quality of care. Organizational and leadership factors that help sustain the psychological and physiological resources of nurses are therefore critical for workforce sustainability. Ethical Leadership Theory and Social Exchange Theory identify the link between moral leadership and conserving resources. Ethical leaders develop working environments that are transparent, respectful and supportive which further helps to minimize

unnecessary stress and emotional burden among nurses. When leaders act with fairness and ethical behavior, nurses report more trust and psychological safety which preserves emotional and cognitive resources (Corder & Ronnie, 2018). The practice of moral leadership likewise encourages open communication, equitable workloads and trustworthiness within the workplace which in turn diminish resource depletion related to uncertainty and conflict (Al'Ararah et al., 2023).

H4: Moral leadership positively influences conserving resources among nurses in public hospitals.

Moral Leadership and Influencing Others

When considering influence in nursing, it is the process by which a leader has an effect on the attitudes, behaviors, motivation and performance of a nurse relative to a given set of organizational and clinical outcomes. The ability for healthcare providers to put forth influence as leaders is not based simply upon their formal leadership authority, but on trust, credibility, communication and professional respect. The attribute of Influence is critical in achieving the goal of safety culture and teamwork, and supporting organizational level change efforts as well (Vaismoradi et al., 2020). However, the ethical and relational influence has a greater contribution to creating more sustainable healthcare worker behaviors compared to coercive leadership (Abid et al., 2023). Social Learning Theory and Social Exchange Theory can provide insights as to how moral leadership can affect the influence of others. Based on Social Learning Theory, nurses typically imitate the behaviors of role models that they admire. What is important is when nurse leaders act ethically, fairly and responsibly, nurse staff will follow them and will engage in professional behaviors. The Social Exchange Theory provides further insights as to why nurses go out their way to cooperate and remain conscientious, committed workers when they perceive an ethical treatment and a moral responsibility from their leaders (Nazir et al., 2018). Thus, moral leadership is a source of increased leadership power in the form of psychological trust and professional respect.

H5: Moral leadership positively influences the ability to influence others among nurses in public hospitals.

Moral Leadership and Taking Initiatives

In the nursing field, taking initiative has been defined as proactive-behavior where nurses tend to go above and beyond their formal job description with the intention of enhancing patient care, resolving a clinical problem or contributing to an organizational development (Moloney et al., 2020). Initiative: Being proactive; speaking up about patient safety issues, suggesting changes in the way patients are treated and helping others without being asked. Initiative taking is of great importance to respond quickly, make clinical judgments and continuously improve the work of a nurse in the health care environment (Saduyeva et al., 2025). Drawing on Social Exchange Theory and Psychological Safety Theory, moral leadership fosters initiative-taking by promoting fairness, ethics, and respect, which strengthens trust between nurse managers and their staff. In return, nurses reciprocate through proactive work behaviors, including taking initiative when they observe their leaders acting with integrity and justice. Furthermore, by fostering psychological safety, moral leadership encourages nurses' openness in sharing ideas, reporting clinical risks, and putting forth innovations free of fear of punishment or blame (El-Gazar et al., 2025).

H6: Moral leadership positively influences initiative-taking among nurses in public hospitals.

Mediation Effect

Organizational culture and moral leadership have well-documented impacts on workforce retention and sustainability, particularly in healthcare settings where nursing work is becoming increasingly demanding and emotionally intensive. The culture of the clan encourages collaboration, mentoring between experienced and newer nurses, and open communication in patient care settings (Nallaiahgari & Rajagopal, 2025). This supportive cultural environment reduces interpersonal conflict and strengthens nurses' sense of organizational belonging. Moral leadership is an essential supportive factor needed to enhance management of ethical problem and emphasize on human in healthcare professions. Moral leadership holds that the right to lead should be grounded in morality and values, not coercive authority (Fehr et al., 2015). Moral leaders in the nursing sector practice with justice, dignity, honesty, and transparency in clinical and

administrative decision-making. They demonstrate ethical leadership, promoting professional duty and accountability, patient-centered care and respect for staff.

Flaubert et al. (2021) found that working sustainably in nursing is the ability of nurses to work productively and psychologically over a long period of time, while also being able to reduce the occurrence of excessive burnout, turnover intention and occupational stress. One of the elements is sustainable working conditions that further develop seen as job satisfaction, work-life balance, emotional resilience and secure career commitment. Nursing is considered one of the high-stress careers because of shift work, heavy workload, exposure and emotional stress of death. Therefore, the role of organizational and leadership dimensions that facilitate sustainability and ensure a stable healthcare workforce is crucial (Poeira & Nunes, 2025). Social Exchange Theory (SET) and Conservation of Resources Theory (COR) might provide a further explanation for the link between clan culture and moral leadership to working sustainability (Xuecheng et al., 2022). Clan culture is the source of social and emotional resources that assist nurses in dealing with work stress, such as peer support, trust and teamwork. These resources are supported by moral leadership, which fosters justice and good oversight and supports respectful debate. When afforded ethical treatment and organizational support, nurses reciprocate with loyalty, commitment, and sustained performance.

H7: Moral leadership serves as a significant mediating mechanism through which clan culture positively influences working sustainability.

Avoiding harm in nursing practice is grounded in the ethical principle of nonmaleficence — the professional duty not to cause injury, commit errors, or engage in unsafe clinical practices in patient care. There are also several other examples of how harm avoidance occurs, such as adherence to patient safety protocols, accurate medication administration, effective communication during patient handovers and timely reporting of near miss incidents. Nursing work involves complex clinical activities and high-risk patient care activities, making safety performance significantly influenced by the behavior of the organization's leadership and culture (Arzahan et al., 2022). Therefore, Social Exchange Theory and

ethical climate theory can be a part of explaining the relationship between clan culture and moral leadership and avoiding harm. Clan culture provides a supportive and collaborative environment, which enables nurses to express their safety concerns and participate in quality improvement initiatives. Moral leadership is essential in this regard because it establishes clear lines of ethical supervision, fairness, and accountability (Ughulu, 2024). Nurses demonstrate stronger prosocial and safety-oriented behaviors when they feel supported by ethical leaders adhering to safety protocols, reporting errors without hesitation, and engaging in preventive clinical practices.

H8: Moral leadership acts as a significant mediating mechanism through which clan culture positively influences avoiding harm.

This section examines the importance of psychological, emotional, and professional resource conservation in the healthcare workplace, where organizational culture and moral leadership play a significant role. Clan culture fosters team work, mentoring, open communication and participative decision making in nursing settings. These attributes help to create a workplace that can reduce the interpersonal conflict and increase social capital between employees, which are key to sustain resilience and emotional stability for nurses.

Clan culture is further reinforced by moral leadership. Moral leadership is embodied by those who demonstrate integrity, fairness, transparency, and accountability. In the nursing context, moral leaders uphold ethical standards, distribute workloads equitably, and make decisions that prioritize the well-being of both patients and staff. Trust grows and a sense of "justice" arises when leaders do what they say (Xu et al., 2016). Conservation of Resources (COR) is the underlying principle of the concept of conserving resources. As COR theory argues that people will seek to gain, maintain and protect the resources valued by them such as time, energy, affective stability, job-related competencies and emotional sociability (Chen et al., 2024). Burnout, decreased job satisfaction, and turnover intention can occur when nursing environments are associated with high workload, chronic emotional labor and staffing shortages. Therefore, factors of organization and leadership that buffer the

resources of the nurse are crucial in achieving sustainability of the future workforce. Clan culture, moral leadership and conserving resources relationship can be explained by COR theory and Social Exchange Theory. Providing both social and relational resources such as peer support, collaboration and open communication thusly buffering stress which is reflected in limiting emotional exhaustion (Akturan, 2025) are the fundamentals of clan culture. Moral leadership supports these protective factors through fair treatment, minimizing ambiguity, and practicing ethical behaviors. Nurses, on the other hand, who feel fair and morally right from leadership are less stressed, feel more psychologically secure and can maintain emotional and cognitive resources.

H9: Moral leadership serves as a significant mediating mechanism through which clan culture positively influences conserving resources.

Organizational culture and moral leadership play a significant role in shaping the attitudes, behaviors, and performance of nursing staff. Clan culture, with its emphasis on collaboration, trust, participation, and mutual involvement, creates conditions particularly conducive to leader influence. In nursing settings, clan culture encourages staff to work collectively toward shared goals and support one another through mentoring, fostering strong interpersonal relationships and mutual respect that amplify a leader's positive influence.

Moral leadership shares the same objectives as clan culture in wanting integrity, fairness, accountability and ethical behavior. Leadership should be based on moral authority, rather than on position (Joullie et al., 2021). Moral leaders in nursing demonstrate honesty in clinical decision-making, fairness in workload management, and harmony between stated values and daily actions. Through consistent ethical behavior, they establish credibility and moral authority with their staff. As a leader in the nursing sector, influencing others is essentially defined as the extent to which a nurse shows commitment, motivation, professional behavior and compliance with clinical standards. In health care, having the power to make decisions from on high is not influential, it is merely the result of more significant elements — trust and respect, role modeling and shared values. In high-risk, complex environments such as hospitals, weak leadership influence may

negatively affect compliance with safety protocols, patient care teamwork, and may even sabotage efforts to improve quality. Social Exchange Theory and Social Learning theory can be used to describe the process of clan culture and influence and moral leadership. With a clan culture nurses are more willing to accept guidance and feedback, as this establishes a culture of trust. This generates a culture in which moral leadership is bolstered by ethical and consistent behaviours that lead to greater trust in a leader. Nurses emulate ethical behaviors and internalize organizational values when there is a perception among nurses that leaders are morally grounded, supportive (Skubinn & Herzog, 2016). Moral leaders impact the way nurses relate to patients, the way they communicate, and how they are committed to patient-centered care by serving as role models.

H10: Moral leadership serves as a significant mediating mechanism through which clan culture positively influences influencing others.

Moral leadership also enhances the positive dimensions of clan culture. The core functions of moral leadership encompass integrity, fairness, ethical stewardship, and values-based decision-making. Moral leaders in nursing exhibit ethical behavior consistently and openly across clinical and administrative settings. By treating employees fairly and acting in accordance with their stated values, moral leaders build the credibility and moral authority that motivates staff to act from respect rather than fear. Taking initiative in nursing refers to proactive, self-starting behaviors in which nurses go beyond their formal job description to improve patient care, propose innovative work approaches, and identify potential risks and quality improvement opportunities. In healthcare settings, where patient needs shift rapidly and conditions can deteriorate quickly, such initiative-taking is particularly critical (Prinsloo, 2024). Nurses who exhibit proactive behavior contribute to improved patient outcomes, process efficiency, and organizational adaptability. The relationship between clan culture, moral leadership, and proactive behavior can be understood through Social Exchange Theory and Social Learning Theory. Clan culture fosters an environment of collaboration, idea-sharing, and psychological safety, where nurses feel comfortable contributing without fear of

judgment. Moral leadership reinforces this environment by exemplifying courage, accountability, and ethical responsibility. Nurses reciprocate their leaders' moral integrity by engaging in proactive behaviors (Idrees et al., 2018), and by observing ethical role models, they are themselves motivated to take initiative.

H11: Moral leadership serves as a significant mediating mechanism through which clan culture positively influences taking initiative.

Research Methodology

For this research, the study adopted a quantitative research design with a cross-sectional approach to investigate the effect of clan culture on sustainable workplace behavior of nurses and the moderating role of moral leadership in public hospitals of South Punjab, Pakistan. The data was collected from 172 registered nurses through a self-administrative questionnaire. Since convenience sampling technique was used owing to the rotational shifts of nurses, nurses from different departments, such as emergency department, medical, surgical, pediatrics, gynecology, and intensive care units, were involved in the research.

Measurement instruments were modified versions of existing, reliable, and valid scales. OCAI (Organizational Culture Assessment Instrument) (Cameron & Quinn, 2011) was used to measure clan culture while moral leadership was measured based on the scale designed by Eisenbeiss and Van Knippenberg (2015). Sustainable workplace behavior was measured based on five dimensions, namely sustainability of work, non-harming, resource conservation, influence, and initiative. All the items were measured on the 5-point Likert scale where 1 = strongly disagree and 5 = strongly agree.

The ethical clearance was obtained from the respective Institutional Review Committees while informed consent was taken from all participants. The data were screened and analyzed through SPSS and SmartPLS 4. As per the suggested two-step PLS-SEM (Ramayah et al., 2018), initially, the measurement model was analyzed for reliability and validity and then, analysis of the structural model followed which included path coefficients, coefficient of determination (R^2), predictive relevance (Q^2), and mediating effects. Various demographic variables served as control variables.

Analysis and Findings:

Demographic Characteristics

Variable	Category	Frequency	Percentage (%)
Gender	Male	68	39.5%
	Female	104	60.5%
Age	18-24 years	32	18.6%
	25-31 years	74	43.0%
	32-38 years	46	26.7%
	39+ years	20	11.6%
Marital Status	Single	70	40.7%
	Married	102	59.3%
Educational Qualification	Nursing Diploma	54	31.4%
	Nursing Institute	48	27.9%
	Bachelor of Nursing	70	40.7%
Job Position	Medical & Surgical	76	44.2%
	Critical Care Unit	58	33.7%
	Both	38	22.1%
Experience in Organization	Less than 1 year	24	14.0%
	1-5 years	68	39.5%
	6-12 years	46	26.7%
	13-20 years	22	12.8%
	20+ years	12	7.0%

Data Review and Initial Assessment

Data screening was done to determine the correctness, consistency, and quality of the data before the analysis process. With SPSS, the dataset was tested for missing values, outliers, and normality (Arkelin, 2014). The missing values were handled using mean imputation or case-wise deletion, depending on the type of missing values (Bell et al., 2016), while the outliers were considered to determine data appropriateness for further statistical analysis (Aguinis et al., 2013). After the data cleaning process, descriptive statistics were calculated to describe the demographics of the participants in the study, which included gender, age, marital status, education level, department, and years of work experience.

PLS-SEM Model

The data collected were subjected to Partial Least Squares Structural Equation Modeling (PLS-SEM), a reliable statistical tool which does not necessitate big samples sizes when examining complex relationship and predictions models (Hair et al., 2011; Mathews et al., 2018). PLS-SEM is especially ideal for evaluating mediation effects and maximizing explained variances of endogenous variables. The recommended approach of conducting a study through PLS-SEM involves a two-step process of evaluation, starting from assessment of the measurement model, establishing reliability and validity of constructs and then analysis of structural model (Hair et al., 2016; Lowry & Gaskin, 2014).

Review of Measurement Model and Factor Loading

Reliability and validity of the study constructs were determined through evaluation of the measurement model prior to assessing the structural relationships (Hair et al., 2014). Indicator reliability was measured based on factor loadings, which were supposed to be higher than 0.70 for the best result but at least 0.50 if theoretical justification for this item existed (Fayers & Hand, 1997). Internal consistency reliability was measured using Cronbach's Alpha and Composite Reliability (CR), where values over the recommended thresholds indicated

satisfactory reliability (Adamson & Prion, 2013). Convergent validity was evaluated with the help of Average Variance Extracted (AVE), where values higher than 0.50 confirmed the fact that constructs accounted for more than 50% of variance of their indicators. Discriminant validity was measured through Fornell-Larcker criterion and cross-loadings, proving that each indicator correlated better with its construct than with any others (Ab Hamid et al., 2017; Hilkenmeier et al., 2020). In general, it can be stated that the measurement model demonstrated satisfactory reliability, convergent validity, and discriminant validity.

Variable	Items	VIF	Cross Loading	Cronbach's Alpha	Composite Reliability	Composite Reliability	AVE
Clan Culture (CC)	CC1	1.535	0.609	0.845	0.855	0.883	0.520
	CC2	2.033	0.766				
	CC3	1.621	0.686				
	CC4	1.794	0.761				
	CC6	2.005	0.768				
	CC7	1.450	0.669				
	CC8	1.887	0.773				
Moral Leadership (ML)	ML1	1.395	0.698	0.822	0.828	0.871	0.531
	ML2	1.688	0.734				
	ML3	1.700	0.723				
	ML4	1.915	0.784				
	ML5	1.445	0.636				
	ML6	1.870	0.786				
Working Sustainability (WS)	WS1	1.592	0.713	0.775	0.777	0.847	0.526
	WS2	1.601	0.767				
	WS3	1.630	0.747				
	WS4	1.388	0.687				

	WS5	1.523	0.709				
Avoiding Harm (AH)	AH1	1.834	0.772	0.814	0.822	0.866	0.519
	AH3	1.718	0.749				
	AH4	1.427	0.679				
	AH5	1.508	0.661				
	AH6	1.687	0.744				
	AH7	1.602	0.710				
Conserving Resources (CR)	CR1	1.548	0.698	0.818	0.824	0.867	0.522
	CR2	1.689	0.761				
	CR3	1.407	0.650				
	CR4	1.958	0.742				
	CR5	1.766	0.689				
	CR6	1.866	0.785				
Influencing Others (IO)	IO1	1.629	0.731	0.804	0.817	0.859	0.505
	IO2	1.677	0.815				
	IO3	2.080	0.654				
	IO4	1.894	0.679				
	IO5	1.561	0.707				
	IO6	1.986	0.665				
Taking Initiative (TI)	TI1	1.323	0.685	0.722	0.731	0.828	0.547
	TI2	1.631	0.820				
	TI4	1.382	0.755				
	TI5	1.319	0.690				

Fornell–Larcker Criterion

The discrimination test was done using the Fornell–Larcker criterion (Fornell & Larcker, 1981). The findings revealed that the square root of the Average Variance Extracted (AVE) value of every construct surpassed the correlation of every construct with other constructs, hence

fulfilling the suggested criteria (Hair et al., 2021; Haji-Othman & Yusuff, 2022). This implies that clan culture, moral leadership, and the dimensions of sustainable workplace behavior are empirically and theoretically separate constructs.

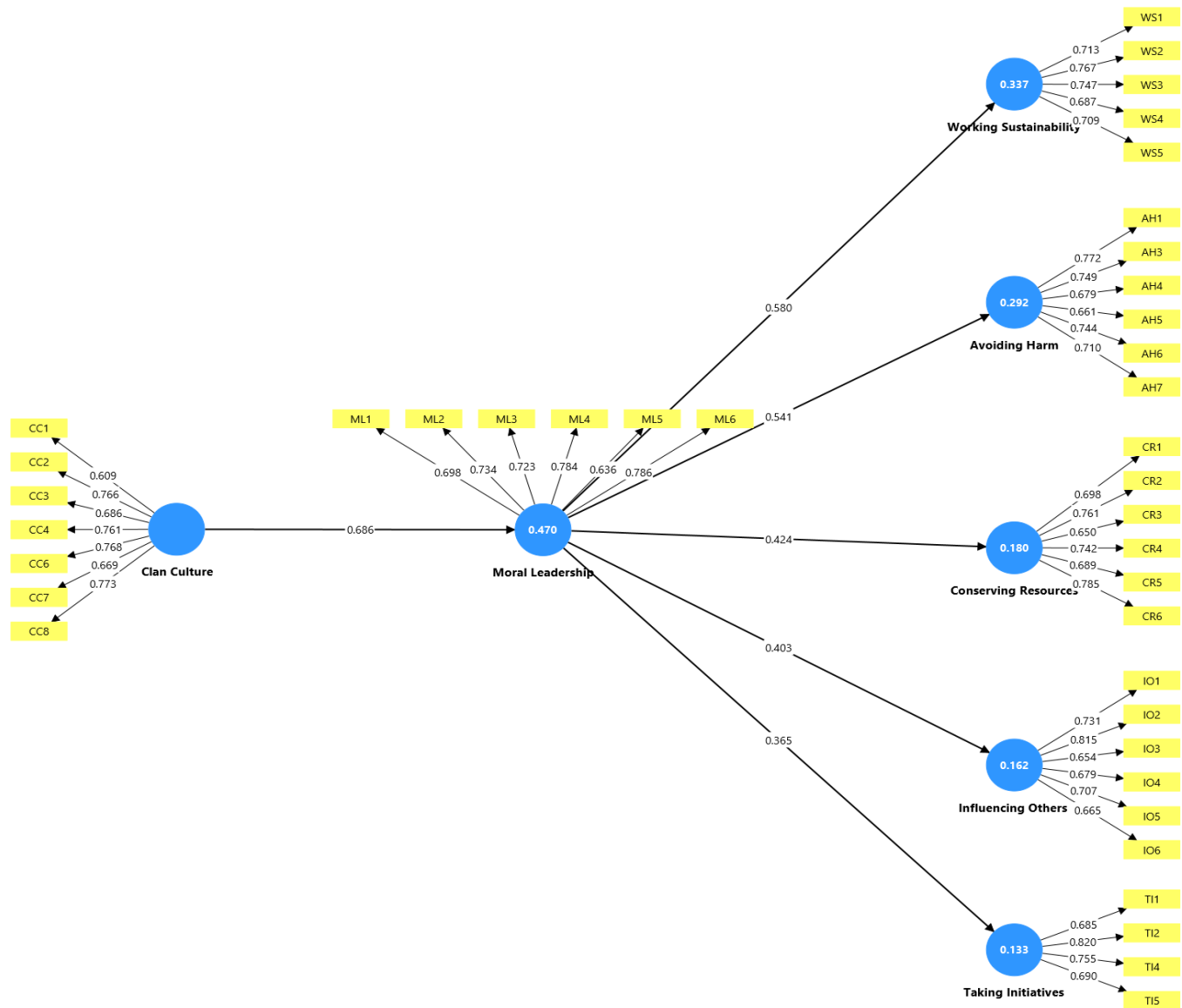
Construct	AH	CC	CR	IO	ML	TI	WS
AH	0.720						
CC	0.597	0.721					
CR	0.679	0.462	0.722				
IO	0.694	0.467	0.750	0.710			
ML	0.541	0.686	0.424	0.403	0.729		
TI	0.592	0.455	0.731	0.725	0.365	0.740	
WS	0.688	0.526	0.614	0.608	0.580	0.553	0.725

Construct	AH	CC	CR	IO	ML	TI	WS
AH							
CC	0.717						
CR	0.821	0.546					
IO	0.859	0.552	0.917				
ML	0.646	0.797	0.493	0.491			
TI	0.772	0.583	0.932	0.941	0.464		
WS	0.857	0.638	0.742	0.767	0.711	0.729	

Heterotrait–Monotrait (HTMT)

Further analysis to establish discriminant validity was performed by means of Heterotrait-Monotrait Ratio (HTMT), which is a well-verified technique used to test the distinctness of constructs (Henseler et al., 2015). The obtained HTMT values did not exceed the acceptable limit of 0.85

and confirmed the distinctness of constructs studied. The findings constitute an additional proof of discriminant validity in accordance with Fornell-Larcker criterion (Franke & Sarstedt, 2019; Hilkenmeier et al., 2020)



Evaluation of Structure Model

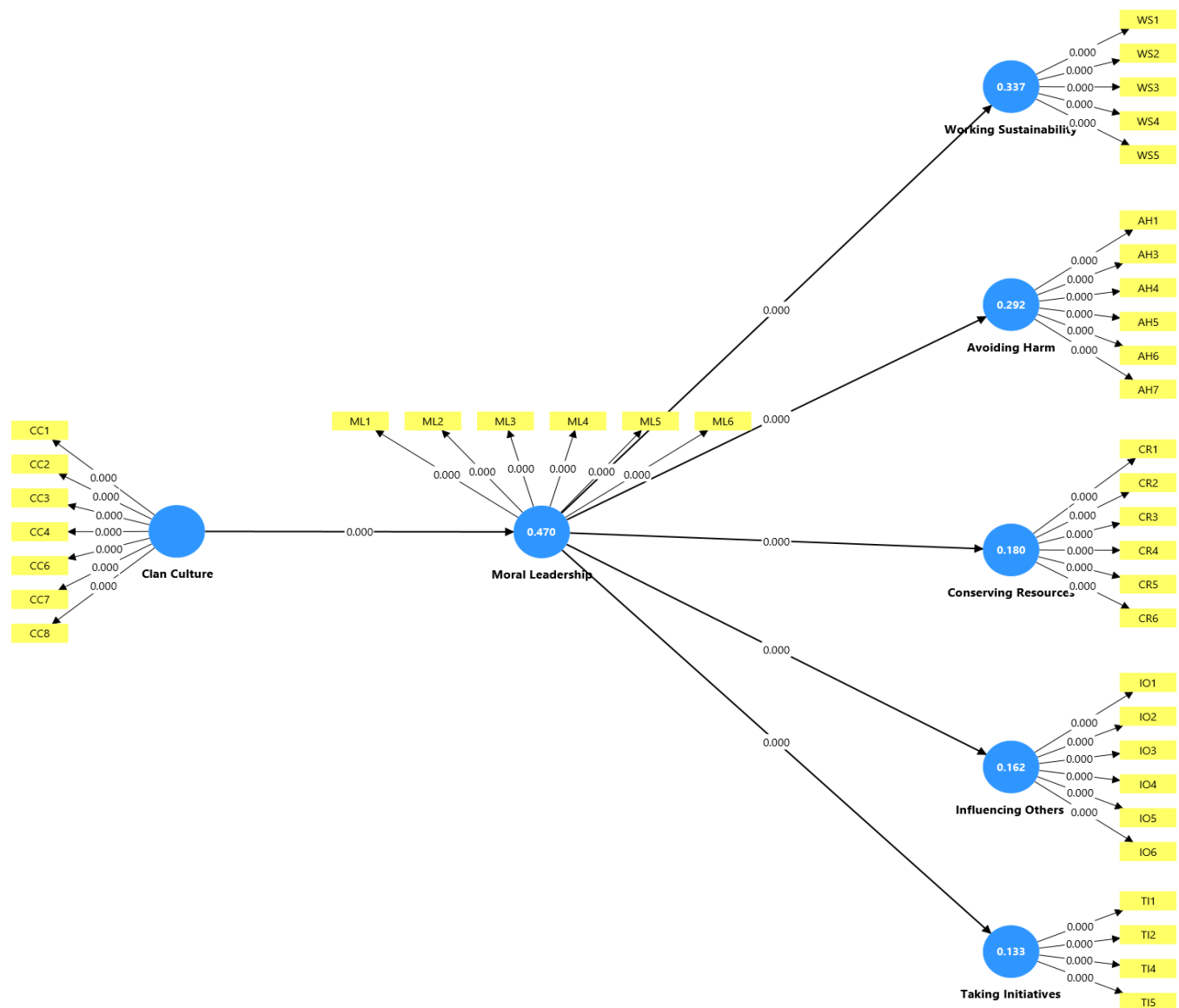
According to the results from the structural model, there is a significant positive effect of the clan culture on moral leadership ($\beta = 0.686$), whereby the variance explained by the clan culture in moral leadership is 47% ($R^2 = 0.470$). This implies that an organization with a culture that fosters collaboration and mutual support has morally based leadership among its nurses. Also, moral leadership positively influences sustainable workplace behavior in all the five dimensions of sustainable work behavior. The strongest influence was witnessed in working sustainably ($\beta = 0.580$, $R^2 = 0.337$) and avoiding harm ($\beta = 0.541$, $R^2 = 0.292$). This implies that moral leaders have a significant role in fostering the well-being of employees and ensuring patients' safety. On the other hand, the influence of moral leadership in conserving resources ($\beta = 0.424$, $R^2 = 0.180$), influencing others ($\beta = 0.403$, $R^2 = 0.162$), and

taking initiative ($\beta = 0.365$, $R^2 = 0.133$) had a relatively lower explanatory power.

R Square Value

To gauge the ability of the structural model to explain variance among the endogenous constructs in terms of the exogenous variables, the coefficient of determination (R^2) was employed (Hair et al., 2010). As per Chin (1998), an R^2 value of 0.67 denotes high explanatory ability; 0.33 denotes medium explanatory ability; and 0.19 denotes low explanatory ability. In the present study, the exogenous variable was clan culture, and moral leadership and the five facets of sustainable workplace behaviour sustainable work behavior, non-harmful behavior, resource conservation behavior, behavioral influence, and proactive behavior were considered as the endogenous variables. The R^2 values derived from the structural model are shown in Table below.

Variables	R-Square (R ²)	R ² Adjusted
Moral Leadership (ML)	0.470	0.467
Working sustainability (WS)	0.337	0.333
Avoiding Harm (AH)	0.292	0.288
Conserving Resources (CR)	0.180	0.175
Influencing Others (IO)	0.162	0.157
Taking Initiatives (TI)	0.133	0.128



Discussion

The outcome of this study is an excellent empirical proof that the proposed conceptual framework is correct as there is enough evidence that clan culture and moral leadership are two of the most important factors affecting the

development of sustainable work practices among nurses working in public hospitals. It has been found out that a collective, cooperative, and participative culture is crucial for fostering moral leadership that further leads to sustainable behaviors, such as sustainable work, sustainable behavior without causing any harm, conservation,

influence on other people, and being proactive. In other words, although the existence of a favorable organizational culture is the basis for positive employee attitude, its impact on sustainable behaviors can be achieved mainly through the ethical and morally responsible behavior of leaders.

These results corroborate with the theories that form the basis of this study. Firstly, according to the theory of social exchange, employees operating in an enabling organizational climate are expected to reciprocate through positive attitudes and behaviors. Nurses in an organizational context that is perceived as fair, trustworthy, and supportive are committed and engaged in sustainable organizational practices. Secondly, social learning theory indicates that employees learn workplace behaviors through imitation of leaders who engage in ethical behaviors. Morally driven leaders in the healthcare sector are role models whose behaviors dictate those of nurses in professional practice, ethical decision making and interpersonal relationship building. Thirdly, ethical climate theory corroborates the point that ethical leadership creates an organizational climate of responsibility, fairness, transparency and respect hence promoting behaviors that help protect both the employees and patients. Lastly, conservation of resources theory explains how moral leadership protects valuable resources of nurses by minimizing stress in the workplace.

One of the most important implications of this study lies in the discovery that moral leadership is completely mediating the effect of clan culture on all five dimensions of sustainable work behavior. Such a discovery means that the effect of clan culture on sustainable work behavior alone is not enough to bring about sustainable nursing behaviors. Rather, for the values inherent in a clan culture, such as cooperation, trust, participation of employees and mutual respect, to materialize at work, leaders who exhibit ethical behavior, integrity, and fairness need to play an instrumental role in the process.

This research will also contribute to the current body of knowledge through the integration of organizational culture, ethical leadership, and sustainable workplace behavior into one conceptual framework in the health care industry. Previous studies have largely considered these

constructs in isolation from each other, but the current research proves how these elements combine to affect nurses' sustainable behavior.

Conclusion

This study presents strong empirical support of the role of clan culture in developing moral leadership as well as its vast influence on nursing sustainability. The results show a confirmation of all eleven hypotheses, which supports the positive role of moral leadership in enhancing working sustainability, patient safety, resource saving, influencing others, and initiating actions in nurses. The greatest impact was found in working sustainably and avoiding any harm, which shows that moral leadership not only ensures the interests of patients but also guarantees that nurses work under conditions that do not put their health at risk. The smaller effect of influencing others and initiating actions implies that further organizational efforts should be made to foster such aspects. On practical level, the results emphasize the necessity of developing management in healthcare organizations that promotes cooperation and moral leadership. Further research might consider introducing other factors into the model to make it more complete.

Implementations

Theoretical contributions to the existing literature include showing how clan culture facilitates sustainable behavior in the workplace via moral leadership. In its turn, by combining the constructs of organizational culture, moral leadership, and sustainable workplace behavior in one study, the current study contributes to empirical literature on Social Exchange Theory, Social Learning Theory, Ethical Climate Theory, and Conservation of Resources Theory in the context of healthcare. Moreover, it is possible to conclude from the study that moral leadership is a crucial mediating variable between clan culture and the five dimensions of sustainable workplace behavior in nurses. Practical contributions of the study are also worth mentioning as they provide implications for hospital administrators and policymakers. Health care organizations need to develop a clan-based organizational culture that would involve cooperation, trust, participation, and support of employees and work on the development of moral leadership skills via different types of programs aimed at leadership

and ethical decision-making.

Future Directions

In future research, testing of this proposed model in various healthcare organizations such as private, public, and non-governmental hospitals will increase the generalizability of results. The use of longitudinal studies is suggested to understand the changing effects of clan culture and moral leadership on the nurses' sustainable workplace behavior in times of organizational change or crisis in the healthcare sector. Future

research can add more mediating and moderating factors, such as job satisfaction, work engagement, psychological empowerment, organizational commitment, workload, organizational support, and size of the hospital. Cross cultural research studies will help verify the proposed model in the varied healthcare context. Even though qualitative approaches like interviews and case studies might provide better understanding about nurses, the best suited methodology for establishing cause-and-effect relations is longitudinal quantitative studies.

Conflict of Interest

The authors showed no conflict of interest.

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