

Connecting the dots: How diversity and inclusion influence job satisfaction and performance in the Saudi Arabian energy industry?

Turki Abdullah Al Olayan¹, ¹ Abu Elnasr E. Sobaih^{2*}

^{1,2}Management Department, College of Business Administration, King Faisal University, Al-Ahsa 31982, Saudi Arabia.

Corresponding author: Abuelnasr Sobaih (Email: asobaih@kfu.edu.sa)

Abstract

The purpose of this study is to examine the influences of diversity management and perceived workplace inclusion on job satisfaction and job performance in the Saudi Arabian energy sector. Drawing upon a comprehensive literature review, the study examines the mediating effect of job satisfaction on the link between diversity management initiatives, inclusion, and job performance. Data was collected through a pre-tested survey instrument from diverse employees in the Saudi Arabian energy sector and analyzed via SEM-PLS. The results indicate a significant positive relationship between diversity management, perceived workplace inclusion, job satisfaction, and performance. However, the direct path coefficient of inclusion on job satisfaction was positive but insignificant. Moreover, job satisfaction mediates the effects of diversity management and perceived workplace inclusion on job performance. The findings highlight the essential role of diversity management strategies and inclusion in promoting positive job outcomes within the energy sector. Implications for practitioners and executive management are discussed, emphasizing the importance of prioritizing diversity management initiatives and fostering inclusive organizational cultures to boost employee satisfaction and performance.

Keywords: Diversity management, Inclusion, Job performance, Job satisfaction, Saudi Arabia, Workplace diversity.

DOI: 10.53894/ijirss.v8i1.4928

Funding: This research was funded by the Deanship of Scientific Research, Vice Presidency for Graduate Studies and Scientific Research, King Faisal University, Saudi Arabia, (Grant number KFU250521).

History: Received: 6 January 2025/Revised: 31 January 2025/Accepted: 7 February 2025/Published: 25 February 2025

Copyright: \bigcirc 2025 by the authors. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<u>https://creativecommons.org/licenses/by/4.0/</u>).

Competing Interests: The authors declare that they have no competing interests.

Institutional Review Board Statement: The study was conducted according to the guidelines of the Declaration of Helsinki and approved by the Deanship of Scientific Research Ethical Committee, King Faisal University (project number: KFU250521, date of approval: 1 November 2024).

Publisher: Innovative Research Publishing

Authors' Contributions: Both authors contributed equally to the conception and design of the study. Both authors have read and agreed to the published version of the manuscript.

Transparency: The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

1. Introduction

The energy sector is a cornerstone of the Kingdom of Saudi Arabia's (KSA) economy and is pivotal in driving economic growth and development [1]. As one of the world's leading oil producers and exporters, the energy sector in KSA is a vital factor in the country's economy, adding significantly to the country's revenues, employment generation, and overall GDP [1]. The energy industry encompasses various activities related to exploring, producing, refining, and distributing oil and gas resources, as well as developing renewable energy sources [2]. With its vast oil and natural gas reserves, KSA holds a strategic position in the global energy market, influencing international energy policies and market dynamics [3]. The energy sector in KSA also catalyzes industrialization and diversification efforts, supporting the growth of downstream industries and contributing to the country's long-term economic sustainability [4]. In addition to its economic significance, the energy sector in KSA plays a crucial role as a major employer and provider of livelihoods for a substantial portion of the Kingdom's workforce [5]. The sector offers diverse employment opportunities across various skill levels, from technical and engineering to administrative and managerial positions. The workforce in the energy sector comprises both local and expatriate talent, reflecting the sector's global nature and the need for specialized expertise in areas such as oil and gas exploration, production optimization, and renewable energy technologies. Employment in the energy sector provides stable incomes and benefits for workers and their families, contributing to KSA's social stability and economic prosperity [6]. Furthermore, the sector's strategic importance extends beyond domestic considerations, with investments in energy infrastructure and projects aimed at enhancing the country's role as a critical player in the global energy landscape. As KSA continues to navigate economic diversification efforts and adapt to evolving energy market dynamics, the energy sector remains central to the country's future growth and development agenda.

The relevance of this study is particularly pronounced in the context of the energy sector in Saudi Arabia. As the country undergoes rapid economic transformation and diversification under initiatives like Vision 2030, the energy sector is pivotal to these changes. The sector's success hinges on its ability to attract, retain, and effectively manage a diverse workforce. Understanding how diversity management and inclusion practices can enhance job performance within this sector provides valuable insights for other industries in the region and beyond. By focusing on the energy sector, this study contributes to the broader discourse on how organizations in rapidly developing economies can adopt diversity and inclusion to promote performance and ultimately achieve strategic objectives.

Grounded in the theoretical framework established by Ohunakin, et al. [7], which tests the influences of diversity and inclusion management on job satisfaction and performance, this research seeks to validate, extend, and contextualize these insights within the unique dynamics of the energy sector in Saudi Arabia. This study extends the work of Ohunakin, et al. [7] by examining the mediating effect of job satisfaction on the aforementioned relationships. This research examines how diversity management practices directly affect job performance and indirectly through job satisfaction. The study evaluates how organizational leadership's commitment to diversity management influences both job satisfaction and performance. Additionally, the research explores the role of inclusion in the workplace. It investigates whether employees who perceive higher levels of inclusion in decision-making processes and organizational culture exhibit better job performance. This focus underscores the significance of creating an inclusive environment to boost employee outcomes. It posits that strong leadership in diversity management fosters a more satisfied and high-performing workforce. This is an issue in the Saudi labor market, which has a diverse workforce [8], and the government would like to adopt diversity while ensuring the successful adoption of nationalization, known as "Saudization"[9].

2. Theoretical Framework and Hypothesis Development

2.1. Diversity Management, Inclusion, Job Satisfaction and Performance

Diversity management in the workplace incorporates a multifaceted array of strategies, policies, and practices aimed at fostering an inclusive environment that embraces and leverages diversity among employees [10]. In the energy industry in KSA, diversity management initiatives take on added significance due to the industry's global reach and diverse workforce. These initiatives involve recruiting and retaining a diverse talent pool, providing comprehensive training and development programs to enhance cultural competency and inclusivity, and creating a supportive organizational culture that values diversity in all its forms [11]. Effective diversity management transcends mere demographic representation and seeks to capitalize on all employees' experiences and talents to stimulate innovation, creativity, and organizational success [12].

Job satisfaction is a complex construct encompassing employees' overall attitudes, perceptions, and feelings toward their work and the organizational environment [13]. Research suggests that diversity management initiatives positively influence job satisfaction by fostering a workplace culture that values diversity, stimulates inclusivity, and ensures equitable treatment for team members [14]. In Saudi Arabia's energy industry, where cultural diversity is prevalent, diversity management initiatives are crucial for enhancing employee job satisfaction. If employees perceive that their organization is truly committed to diversity and inclusion, they are more likely to express their job satisfaction [7], leading to increased motivation, engagement, and commitment to organizational goals.

Job performance refers to the effectiveness and productivity of employees in fulfilling their job responsibilities and contributing to organizational objectives [15]. While empirical research explicitly focusing on the direct link between diversity management and job performance within the energy industry in Saudi Arabia is limited, studies in broader organizational contexts suggest that inclusive workplaces tend to foster better job performance among employees. Inclusive environments cultivate trust, collaboration, and mutual respect among employees, which, in turn, enhances teamwork, problem-solving abilities, and overall organizational effectiveness. Moreover, diversity management initiatives promoting a culture of inclusion and belonging can positively impact job performance by empowering employees to enhance their sense of ownership and accountability toward organizational goals [16]. Inclusion entails ensuring employees from diverse

backgrounds feel valued, respected, and included in organizational decision-making processes and cultural norms [17]. Research indicates that organizations with inclusive decision-making processes tend to exhibit higher employee satisfaction and performance levels. In Saudi Arabia's energy industry, where diverse perspectives and expertise are essential for addressing complex challenges, inclusive decision-making processes are vital for driving innovation, fostering collaboration, and ensuring the effective utilization of human capital. When employees feel empowered to contribute their ideas, perspectives, and insights to decision-making processes, they are more likely to be engaged, motivated, and committed to organizational goals, ultimately enhancing individual and collective job performance [17].

Research suggests that strong leadership commitment to diversity management is necessary for successfully implementing diversity initiatives and cultivating an inclusive organizational culture [18]. In the energy industry of Saudi Arabia, where leadership plays a crucial role in setting the tone and direction for organizational practices, leaders who value diversity and inclusion send a strong message to their team members that their contributions are valued and respected. Leadership support for diversity management initiatives fosters a working environment where team members are empowered to embrace their differences, leverage their unique strengths, and collaborate effectively toward achieving organizational objectives. Moreover, leadership commitment to diversity management helps overcome resistance to change, fosters a culture of openness and transparency, and promotes a sense of belonging and shared purpose among employees, all of which contribute to job satisfaction and performance [19, 20].

2.2. Hypothesis Development

Diversity management initiatives in the workplace have been widely recognized for their potential impact on employees' job satisfaction levels. Effective diversity management practices, including policies, programs, and strategies to promote diversity, equity, and inclusion, are hypothesized to have a significant positive relationship with employees' reported job satisfaction [21]. Organizations prioritizing diversity management must develop inclusive working environments where team members from diverse backgrounds feel valued, respected, and supported. By promoting a culture of diversity and inclusion, employee morale would be enhanced, and job satisfaction would be improved [21]. As a result, we suggest the following hypothesis:

$H_{l:}$ Diversity management significantly and positively impacts employees' job satisfaction.

Inclusion within the workplace is believed to be a critical factor influencing employees' job performance. The perceived level of inclusion, characterized by a sense of belonging, respect, and equal opportunity for participation, is hypothesized to be positively associated with employees' job performance. Research suggests that employees who feel included in decision-making processes and organizational culture are more likely to exhibit superior engagement, commitment, and productivity levels in their roles [22]. By fostering an inclusive culture that celebrates diversity and encourages open communication, organizations can create conducive conditions for employees to thrive and excel in their roles. Inclusive workplaces are believed to enhance employee motivation, job satisfaction, and overall well-being, thereby improving job performance outcomes [23]. Based on this discussion, we assume that:

$H_{2:}$ The perceived level of inclusion significantly and positively impacts employees' job performance.

Diversity management practices in organizations are expected to positively and significantly impact employees' job performance. Diversity management initiatives, which encompass various strategies, policies, and programs to support diversity, equity, and inclusion, are hypothesized to enhance employees' ability to perform their job responsibilities effectively. Research suggests that organizations with robust diversity management programs tend to have higher employee engagement, commitment, and productivity levels, ultimately leading to improved job performance outcomes [18]. For instance, studies have found that employees are more likely to be motivated to perform at their best when they perceive their organization as inclusive and committed to diversity. By fostering a diverse and inclusive work environment where team members are valued and respected, organizations can create conditions conducive to job performance [18]. Consequently, we hypothesize that:

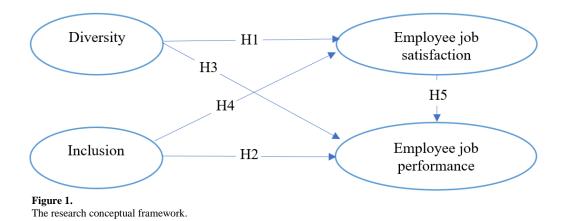
H₃: Diversity management significantly and positively impacts employees' job performance.

The perceived level of inclusion within the workplace is hypothesized to be positive and significantly related to employees' reported job satisfaction. Inclusive workplaces, characterized by a sense of belonging, respect, and equal opportunity for participation, are expected to contribute to job satisfaction. Research suggests that employees who feel included in decision-making processes and organizational culture report greater satisfaction with their work [24]. For instance, studies have shown that organizations with inclusive cultures have higher levels of employee morale and overall job satisfaction [24]. Hence, organizations can foster higher levels of job satisfaction among their employees, ultimately contributing to organizational performance. Therefore, we formulate the hypothesis below:

*H*₄: *The perceived level of inclusion significantly and positively impacts employees' job satisfaction.*

An increase in job satisfaction levels is expected to lead to increased job performance. Job satisfaction, characterized by employees' overall feelings and attitudes toward their work, is hypothesized to significantly impact their job performance. Research suggests that team members who are satisfied with their jobs become engaged, committed, and productive in their roles [25]. Job satisfaction relates to higher levels of job performance across various industries and organizational contexts [25]. Organizations can create conditions conducive to improved job performance outcomes by prioritizing employee satisfaction and well-being. Investing in strategies to enhance job satisfaction, such as providing opportunities for professional development, recognition, and work-life balance, can lead to higher productivity and, in turn, to organizational success [25]. Therefore, we suggest the following hypothesis:

*H*_{5:} *Higher levels of job satisfaction are expected to lead to better job performance.* Figure 1. Summarizes the research conceptual framework.



3. Methodology

3.1. Research Approach and Method

The study undertakes a quantitative approach to analyze the link between key variables within the energy sector in Saudi Arabia. Quantitative research is chosen for its ability to collect numerical data, examine hypotheses, and identify patterns and trends [26]. The study adopts a survey method for data collection. The instrument consists of two sections: demographic data and research survey questions related to diversity management, inclusion, job satisfaction, and job performance, which were adopted from Ohunakin, et al. [7] Likert-scale items measure participants' agreement or disagreement with statements, capturing nuanced perceptions and attitudes [27]. Prior to data collection, a pilot test with 20 volunteers was conducted to identify and address potential issues in the survey instrument. This process ensures clarity, relevance, and comprehensibility, contributing to the validity and reliability of the instrument within the energy sector in Saudi Arabia.

3.2. Sample

The study includes 180 employees from the Saudi Arabian energy sector. The survey was distributed to a diverse group of employees at large companies in the energy sector, providing a robust dataset for analysis. Employees were accessed via personal networks with approval from management. They were notified of the purpose of the study and their voluntary participation. The sample size adheres to recommended guidelines for conducting structural equation modeling (SEM) analysis, ensuring statistical robustness and reliability of the findings. Moreover, within the specific context of the Saudi Arabian energy sector, obtaining a representative sample can be challenging due to the industry's unique characteristics and workforce demographics. Additionally, given the resource constraints and logistical considerations inherent in survey research, this sample size strikes a balance between feasibility and achieving sufficient statistical power to detect meaningful relationships among the variables of interest [28].

3.3. Data analysis

Using Smart PLS4, this study conducts statistical analyses, specifically Structural Equation Modeling (SEM), to examine the relationships between the research variables: diversity management, inclusion, job satisfaction, and job performance.

4. Results

4.1. Demographics of Participants

The demographic analysis of the sample population revealed a predominance of males, comprising 98.9% of the participants, while females accounted for the remaining 1.1%. Age distribution indicated that individuals aged 18-25 represented a minority at 2.2%, while those aged 26-35 constituted the largest group at 68.9%, followed by individuals aged 36-45 at 22.2%. In terms of education, most respondents had completed high school (66.7%), followed by a bachelor's degree (22.2%), a master's degree (4.4%), and a Ph.D. (1.1%). The occupational distribution showed that technicians/operators comprised 15.6% of the sample, followed by engineers (44.4%), section heads (21.1%), division managers (6.7%), and department managers (12.2%). Regarding professional experience, individuals with 1-2 years of experience accounted for 2.2% of the sample, while those with 3-5 years represented the largest group at 51.1%. Participants with 5-10 years of experience constituted 21.1% of the sample, and those with more than 11 years accounted for 25.6% (see Table 1).

Gender		Age		Education		Working level		Experience in years	
Male	98.9%	18-25	2.2%	elementary school	0.0%	Technician/operator	15.6%	1-2 years	2.2%
Female	1.1%	26-35	68.9%	high school	4.4%	Engineer	44.4%	3-5 years	8.9%
		36-45	22.2%	BCs	66.7%	Section head	21.1%	5-10 years	51.1%
		46-55	4.4%	master's	27.8%	Division manager	6.7%	more than 11 years	37.8%
		more than 56	2.2%	PhD	1.1%	Department manager	12.2%		

 Table 1.

 Demographics of participants

4.2. The Scale Psychometric Properties

Table 2 presents the loadings, Cronbach's alpha, composite reliability (rho_a and rho_c), and average variance extracted (AVE) for the constructs in the PLS-SEM model: diversity, employee job performance, employee job satisfaction, and inclusion. These metrics are crucial for evaluating the reliability and validity of the constructs [29].

Table 2	2
---------	---

The scale's psychometric properties.

Factors and items	Loadings	Cronbach's alpha	Composite reliability (CR)	Composite reliability (CR)	Average variance
		(a value)	(rho_a)	(rho_c)	extracted (AVE)
Suggested	≥ 0.70	≥ 0.70	≥ 0.70	≥ 0.70	≥ 0.50
threshold			0.001		
Diversity		0.894	0.896	0.927	0.759
H1 a	0.855				
H1 b	0.87				
H1 c	0.891				
H1 d	0.87				
Job performance		0.844	0.858	0.873	0.464
H4 a	0.676				
H4 b	0.746				
H4 c	0.664				
H4 d	0.756				
H5 a	0.619				
H5 b	0.669				
H5 c	0.706				
H5 d	0.598				
Job satisfaction		0.902	0.908	0.932	0.773
H3 a	0.882				
H3 b	0.854				
H3 c	0.919				
H3 d	0.86				
Inclusion		0.797	0.821	0.868	0.623
H2 a	0.749				
H2 b	0.69				
H2 c	0.847				
H2 d	0.859				

The construct of diversity management shows robust reliability and validity. The loadings for the items H1A (0.855), H1B (0.870), H1C (0.891), and H1D (0.870) are above the recommended threshold of 0.7 [29], representing strong correlations between these items and the diversity management construct. The Cronbach's alpha value is 0.894, indicating excellent internal consistency. The composite reliability values are also high, with rho_a at 0.896 and rho_c at 0.927, further confirming the reliability of the variables [29]. Additionally, the average variance extracted (AVE) is 0.759, which is significantly above the acceptable threshold of 0.5, indicating that more than 75% of the variance in the items is explained by the construct. These results affirm that the diversity management construct is both reliable and valid.

For the job performance construct, the loadings vary, with H4A (0.676), H4B (0.746), H4C (0.664), H4D (0.756), H5A (0.619), H5B (0.669), H5C (0.706), and H5D (0.598). While most of the loadings are above the 0.7 threshold [29], H4A, H4C, H5A, and H5D fall slightly below, suggesting that some items are weaker indicators of job performance. Despite this, the construct shows adequate reliability with a Cronbach's alpha of 0.844, indicating good internal consistency. The composite reliability values, rho_a (0.858) and rho_c (0.873), are also above the threshold of 0.7, supporting the construct's reliability. However, the AVE for this construct is 0.464, which is below the desired 0.5 level, indicating that less than 50%

of the variance in the items is captured by the construct. This suggests a need for refinement or reevaluation of some items to improve the construct's validity.

The job satisfaction construct demonstrates strong reliability and validity [29]. The loadings for the items H3A (0.882), H3B (0.854), H3C (0.919), and H3D (0.860) are all significantly above 0.7, indicating that these items are excellent indicators of job satisfaction. The Cronbach's alpha is very high at 0.902, showing excellent internal consistency. Composite reliability values are also high, with rho_a at 0.908 and rho_c at 0.932, affirming the reliability of the construct. The AVE is 0.773, which is well above the 0.5 threshold, indicating that a substantial portion of the variance is captured by the construct. These metrics confirm that the employee job satisfaction construct is both reliable and valid.

The inclusion construct shows satisfactory reliability and validity [29]. The loadings for the items H2A (0.749), H2B (0.690), H2C (0.847), and H2D (0.859) mostly exceed the 0.7 threshold, with the exception of H2B, which is slightly below 0.690. Despite this, the overall reliability of the construct is good, with a Cronbach's alpha of 0.797, indicating acceptable internal consistency. The composite reliability values, rho_a (0.821) and rho_c (0.868), are above the 0.7 thresholds, supporting the construct's reliability. The AVE is 0.623, above the 0.5 threshold, indicating that a good portion of the variance is captured by the construct. These results suggest that the inclusion construct is reliable and valid [29].

4.3. The Results of Cross Loading

Table 3 presents the cross-loadings of various items under the constructs of diversity, employee job performance, employee job satisfaction, and inclusion. For hypothesis H1, items H1A to H1D evaluate the relationship between diversity management and job satisfaction. Each of these items (H1A: 0.855, H1B: 0.870, H1C: 0.891, H1D: 0.870) shows strong loadings on the diversity construct, well above the 0.7 threshold, indicating that they effectively measure diversity management. Additionally, these items show considerable loadings on job satisfaction (H1A: 0.620, H1B: 0.659, H1C: 0.672, H1D: 0.711). The consistently high loadings suggest a positive and significant relationship between effective diversity management initiatives and increased job satisfaction among employees. This confirms that as organizations implement robust diversity policies and training programs, employees report higher levels of job satisfaction.

Table 3.

Items	Diversity	Inclusion	Job Satisfaction	Job Performance
H1 a	0.855	0.666	0.620	0.540
H1 b	0.870	0.512	0.659	0.553
H1 c	0.891	0.671	0.672	0.621
H1 d	0.870	0.626	0.711	0.571
H2 a	0.652	0.749	0.469	0.505
H2 b	0.388	0.690	0.295	0.475
H2 c	0.511	0.847	0.476	0.623
H2 d	0.662	0.859	0.579	0.643
H3 a	0.674	0.508	0.882	0.564
H3 b	0.569	0.424	0.854	0.472
H3 c	0.724	0.563	0.919	0.569
H3 d	0.705	0.563	0.860	0.573
H4 a	0.619	0.701	0.516	0.676
H4 b	0.496	0.657	0.483	0.746
H4 c	0.547	0.403	0.571	0.664
H4 d	0.503	0.551	0.514	0.756
H5 a	0.205	0.239	0.235	0.619
H5 b	0.330	0.379	0.246	0.669
H5 c	0.299	0.355	0.284	0.706
H5 d	0.264	0.259	0.277	0.598

For hypothesis H2, items H2A to H2D focus on the perceived level of inclusion and its impact on job performance. The loadings on inclusion for these items are notably strong (H2A: 0.749, H2B: 0.690, H2C: 0.847, H2D: 0.859), indicating their strong representation of the inclusion construct. Correspondingly, their loadings on job performance are also significant (H2A: 0.505, H2B: 0.475, H2C: 0.623, H2D: 0.643). The highest loading on job performance is observed in H2D (0.643), suggesting that the inclusion of employees in decision-making processes and their feeling of being valued and respected positively influences their job performance. This implies that when employees perceive a higher level of inclusion within their workplace, their performance tends to improve significantly.

Hypothesis H3 examines the impact of diversity management on job performance. The relevant items (H3A: 0.674, H3B: 0.569, H3C: 0.724, H3D: 0.705) display moderate to strong loadings on the diversity construct. These items also exhibit substantial loadings on job performance (H3A: 0.564, H3B: 0.472, H3C: 0.569, H3D: 0.573), with H3A and H3C showing particularly strong cross-loadings on job satisfaction (H3A: 0.882, H3B: 0.854, H3C: 0.919, H3D: 0.860). These findings suggest a strong positive correlation between effective diversity management practices and enhanced job performance. Implementing diversity initiatives leads to better organizational outcomes by improving individual employee performance.

In hypothesis H4, items H4A to H4D investigate the relationship between inclusion and job satisfaction. These items show strong loadings on the inclusion construct (H4A: 0.701, H4B: 0.657, H4C: 0.403, H4D: 0.551) and significant loadings on job satisfaction (H4A: 0.516, H4B: 0.483, H4C: 0.571, H4D: 0.514). The loadings suggest that feelings of inclusion and belongingness contribute to higher job satisfaction. Notably, H4A and H4B demonstrate relatively high loadings on job performance (H4A: 0.676, H4B: 0.746), indicating that inclusive cultures not only enhance job satisfaction but also may indirectly boost job performance.

Hypothesis H5 explores the link between job satisfaction and job performance. Items H5A to H5D have moderate loadings on job satisfaction (H5A: 0.235, H5B: 0.246, H5C: 0.284, H5D: 0.277) and significant loadings on job performance (H5A: 0.619, H5B: 0.669, H5C: 0.706, H5D: 0.598). The strongest relationship is observed in H5C (0.706), suggesting that as employees' job satisfaction increases, their job performance also tends to improve. This relationship emphasizes the critical role of job satisfaction in enhancing employees' effectiveness and performance outcomes in their roles and responsibilities.

4.4. The Results of the Heterotrait-Monotrait Ratio (HTMT) matrix.

Table 4 presents the Heterotrait-Monotrait ratio (HTMT) for the constructs of diversity, employee job performance, employee job satisfaction, and inclusion, which are used to assess discriminant validity in the PLS-SEM model. All HTMT values are below the commonly accepted threshold of 0.90, and most are below the more stringent threshold of 0.85, indicating good discriminant validity. Specifically, the HTMT values are 0.678 (diversity and employee job performance), 0.845 (diversity and employee job satisfaction), 0.830 (diversity and inclusion), 0.645 (employee job performance and employee job satisfaction), 0.774 (employee job performance and inclusion), and 0.673 (employee job satisfaction and inclusion). These values confirm that the constructs are distinct from each other, supporting the validity of the model.

Table 4.

	Diversity	Employee job performance	Employee job satisfaction	Inclusion
Diversity				
Job performance	0.678			
Job satisfaction	0.845	0.645		
Inclusion	0.830	0.774	0.673	

Heterotrait-Monotrait ratio (HTMT) matrix.

4.5. The Results of Fornell-Larcker Criterion Assessment

Table 5, showcasing the Fornell-Larcker criterion, substantiates the discriminant validity of the constructs within the PLS-SEM model. Each construct's square root of the average variance extracted (AVE) is compared against its correlations with other constructs in the model. The results reveal that the square root of the AVE for each construct exceeds its correlations with other constructs, affirming their distinctiveness. Specifically, for diversity, employee job performance, employee job satisfaction, and inclusion, the square root of the AVE values are 0.871, 0.681, 0.879, and 0.789, respectively, all surpassing their correlations with other constructs. This alignment with the Fornell-Larcker criterion underscores the reliability of the model's measurement and the robustness of the relationships between the constructs.

Table 5.

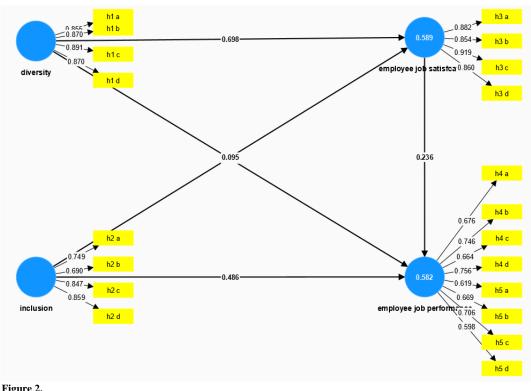
Fornell-Larcker criterion assessment.

	Diversity	Employee job performance	Employee job satisfaction	Inclusion
Diversity	0.871			
Job performance	0.656	0.681		
Job satisfaction	0.765	0.623	0.879	
Inclusion	0.710	0.718	0.590	0.789

The findings from Table 5 provide strong support for the discriminant validity of the constructs in PLS-SEM analysis. By demonstrating that each construct is more strongly correlated with itself than with other constructs, the Fornell-Larcker criterion confirms the distinctiveness of diversity, employee job performance, employee job satisfaction, and inclusion within the model. This validation enhances the credibility of research findings, instilling confidence in the interpretation of the relationships between these constructs. Thus, the results from the Fornell-Larcker criterion bolster the overall validity and integrity of PLS-SEM analysis, reinforcing the significance of the identified relationships and contributing to the robustness of research conclusions.

4.6. PLS-SEM Model Results

The results of SEM-PLS modeling, along with the graphical output, are presented in Figure 2, and more details of the relationships are provided in Table 6.



SEM-PLS model.

Table 6. Hypothesis testing

	VIF	F- square	Path	Minimum Sample Size (Alpha 5%, power 80%)	T- Statisti c	P- Value	Result
H1: Diversity \rightarrow job satisfaction	2.016	0.588	0.698	13	3.1	0.009	Accepted
H2: Inclusion \rightarrow job performance	2.038	0.278	0.486	27	2.2	0.036	Accepted
H3: Diversity \longrightarrow job performance	3.201	0.013	0.131	361	2.5	0.013	Accepted
H4: Inclusion \longrightarrow job satisfaction	2.016	0.011	0.095	689	1.8	0.074	Rejected
H5: Job satisfaction \longrightarrow job performance	2.435	0.055	0.236	112	2.8	0.005	Accepted

Table 6 provides the results of hypothesis testing, including the variance inflation factor (VIF), f-square, path coefficient, minimum sample size (for alpha 5% and power 80%), t-statistic, p-value, and whether each hypothesis is accepted or rejected. Regarding H1, the influence of diversity on job satisfaction, the VIF is 2.016, indicating a low level of multicollinearity. The f-square value is 0.588, suggesting a large effect size. The path coefficient is 0.698, indicating a strong positive relationship between diversity and employee job satisfaction. With a minimum sample size of 13, the t-statistic is 3.1, resulting in a p-value of 0.0094, below the significance level of 0.05. Therefore, this hypothesis is accepted, indicating that diversity significantly enhances employee job satisfaction.

Regarding H2, the influence of inclusion on job performance, the VIF is 2.038, indicating a low level of multicollinearity. The f-square value is 0.278, suggesting a medium effect size. The path coefficient is 0.486, indicating a moderate positive relationship between inclusion and employee job performance. With a minimum sample size of 27, the t-statistic is 2.2, resulting in a p-value of 0.0358, below the significance level of 0.05. Therefore, this hypothesis is accepted, indicating that inclusion significantly affects employee job performance.

Regarding H3, the influence of inclusion on job satisfaction, the VIF is 2.016, indicating a low level of multicollinearity. The f-square value is 0.011, suggesting a small effect size. However, with a minimum sample size of 689, the t-statistic is 1.8, resulting in a p-value of 0.0736, above the significance level of 0.05. Therefore, this hypothesis is rejected, indicating that inclusion has no noted impact on employee job satisfaction.

Regarding H4, the influence of diversity on job performance, the VIF is 3.201, indicating a low level of multicollinearity. The f-square value is 0.013, suggesting a small effect size. The path coefficient is 0.131, indicating a weak positive relationship between diversity and employee job performance. With a minimum sample size of 361, the t-statistic is 2.5, resulting in a p-value of 0.0127, which is below the significance level of 0.05. Therefore, this hypothesis is accepted, indicating that diversity has a significant positive effect on employee job performance.

Regarding H5, the influence of job satisfaction on job performance, the VIF is 2.435, indicating a low level of multicollinearity. The f-square value is 0.055, suggesting a medium effect size. The path coefficient is 0.236, indicating a moderate positive relationship between employee job satisfaction and employee job performance. With a minimum sample size of 112, the t-statistic is 2.8, resulting in a p-value of 0.0052, below the significance level of 0.05. Therefore, this hypothesis is accepted, indicating that employee job satisfaction significantly impacts employee job performance.

Table 7 presents specific indirect effects within the model, focusing on the pathways through which inclusion and diversity influence employee job performance via employee job satisfaction. The analysis unveils two significant indirect effects: first, the pathway from inclusion to employee job satisfaction to employee job performance exhibits a specific indirect effect of 0.022, illuminating the role of inclusion in enhancing job performance indirectly through its impact on employee job satisfaction. Second, the pathway from diversity to employee job satisfaction to employee job performance demonstrates a more substantial specific indirect effect of 0.164, underscoring the significant influence of diversity initiatives on job performance mediated by employee job satisfaction. P-values of both indirect paths are less than 0.05, showing statistical significance. These findings shed light on the intricate mechanisms underlying the relationships between organizational diversity, inclusion, employee job satisfaction, and, ultimately, job performance, offering valuable insights for organizational strategies aimed at optimizing workplace outcomes.

Table 7.

Specific indirect effects.

Indirect path	Specific indirect effects	P-value	Result
Inclusion \rightarrow job satisfaction \rightarrow job performance	0.022	0.0391	Accepted
Diversity \longrightarrow job satisfaction \longrightarrow job performance	0.164	0.0073	Accepted

5. Discussion

The results of H1, which examined the direct impact of diversity management on job satisfaction, are accepted, indicating a positive and significant relationship between diversity management initiatives and employees' job satisfaction. The literature underscores that effective diversity management fosters an inclusive environment where individual differences are valued and leveraged, leading to enhanced job satisfaction [21]. Organizations that prioritize diversity management are found to boost employee morale, engagement, and overall job satisfaction. This is supported by the study of Jerónimo et al. [14], showing that employees in organizations with comprehensive diversity management initiatives report greater satisfaction with their work, aligning with the positive association posited by the hypothesis.

The results of H2, which examined the direct impact of inclusion on job performance, are also accepted, supporting the idea that inclusion within the workplace positively impacts employees' job performance. The literature highlights that inclusive environments cultivate trust, collaboration, and mutual respect, enhancing teamwork and problem-solving abilities [17]. Research suggests that employees who feel included in decision-making processes and organizational culture exhibit higher engagement, commitment, and productivity levels [22]. Thus, fostering an inclusive culture that values diversity and promotes open communication can create conditions conducive to employees thriving and excelling in their roles [23].

The results of H3, which examined the direct impact of diversity management on job performance, are accepted, indicating that effective diversity management practices positively and significantly impact job performance. Studies suggest that organizations with robust diversity management programs tend to have higher employee engagement, commitment, and productivity levels [18]. The positive influence of diversity management on job performance is evident as employees feel valued and respected, leading to increased motivation and a conducive environment for higher job performance [16]. This aligns with broader organizational research indicating that inclusive workplaces foster better job performance among employees [15].

Contrary to the initial H4, which examined the direct impact of inclusion on job satisfaction, this relationship is rejected, suggesting that the perceived level of inclusion within the workplace does not have a significant impact on employees' reported job satisfaction. While inclusive environments are generally associated with higher job satisfaction, the specific context of the energy industry in Saudi Arabia might present unique challenges or cultural factors that could affect this relationship. The literature does emphasize the importance of inclusive workplaces for employee morale and satisfaction [24], but in this study, the statistical significance was not strong enough to confirm the hypothesis.

The results of H5, which examined the direct impact of job satisfaction on job performance, are accepted, affirming that an increase in job satisfaction levels leads to an increase in job performance. The literature consistently shows that employees who are satisfied with their jobs are more engaged, committed, and productive [25]. Higher job satisfaction correlates with better job performance across various industries and organizational contexts, as satisfied employees are more likely to invest effort and show higher performance outcomes [25]. This supports the idea that prioritizing employee satisfaction can lead to enhanced job performance, ultimately benefiting organizational success [13].

The results also showed that job satisfaction was able to mediate the link between both diversity management and inclusion on job performance. This means that job satisfaction could enhance the link between both diversity management and inclusion on job performance. This result is important for organizations that want to connect the dots between all of the variables, which implies that they should pay higher attention to job satisfaction since it has the ability to affect these relationships.

5.1. Limitations

Despite the research following a rigorous method, the study also has some limitations that warrant acknowledgment. Firstly, the reliance on cross-sectional data may limit the ability to establish causal relationships between variables [30]. Longitudinal studies or experimental designs could provide deeper insights into the temporal dynamics of diversity, inclusion, job satisfaction, and job performance over time. Additionally, the generalizability of the findings may be constrained by a small sample in a specific context of the energy sector in Saudi Arabia. Future research could explore similar phenomena in different industries or cultural contexts to enhance the external validity of the findings.

5.2. Implications and Recommendations

The implications of the research findings are significant for both theory and practice. The identification of diversity management and inclusion as key drivers of employee job satisfaction and job performance underscores the importance of prioritizing these initiatives within organizations. By fostering diverse and inclusive workplaces, organizations can enhance employee engagement, creativity, and innovation, ultimately leading to improved organizational performance and competitiveness. Moreover, the findings highlight the critical role of job satisfaction in mediating the relationship between diversity, inclusion, and job performance, emphasizing the need for organizations to prioritize employee well-being and satisfaction as integral components of their strategic initiatives.

Based on the research findings, several recommendations can be made for organizational leaders and policymakers in the energy sector in Saudi Arabia and those in similar contexts. First, organizational leaders should invest in comprehensive diversity management and inclusion programs. It is crucial to prioritize creating and implementing robust diversity management programs that foster a culture of respect, equity, and belonging. These programs should include policies and practices that ensure diversity is promoted and valued at all organizational levels, from entry-level positions to top management. Immediate actions include conducting an organizational audit to assess current diversity levels and identify gaps, developing a strategic plan for diversity and inclusion with clear goals, timelines, and accountability measures. Future actions involve regularly reviewing and updating diversity policies to reflect evolving best practices and organizational needs and establishing a diversity council to oversee and guide these initiatives.

Second, providing training and development opportunities is essential. Human resources leaders in the energy sector must offer continuous training and development opportunities to raise awareness and reduce biases within the organization. Training programs should educate employees about the importance of diversity and inclusion and equip them with skills to foster an inclusive workplace, helping mitigate unconscious biases and promote equity. In the short term, implementing mandatory diversity training sessions for all employees and developing workshops focusing on unconscious bias, cultural competency, and inclusive leadership are necessary steps. Long-term actions include creating mentorship and sponsorship programs to support the career growth of underrepresented groups and evaluating the effectiveness of training programs through employee feedback and performance metrics.

Third, executive-level leaders should create inclusive decision-making processes within the organization. Ensuring that decision-making processes consider diverse perspectives and involve a wide range of employees can lead to more innovative solutions and better outcomes. Immediate action involves establishing diverse committees and task forces to ensure representation in decision-making bodies and implementing anonymous suggestion systems to gather input from all levels of the organization. Future actions include monitoring and measuring the impact of inclusive decision-making on organizational performance and adjusting strategies based on feedback and outcomes to continually improve inclusivity.

6. Conclusion

The findings presented in this study underscore the critical importance of diversity, inclusion, and job satisfaction in shaping performance within the energy sector in Saudi Arabia. The study demonstrates that effective diversity management positively influences both job satisfaction and job performance. However, the relationship between inclusion and job satisfaction appears less robust, indicating the need for further exploration. Inclusion does significantly impact job performance, but its direct effect on job satisfaction requires additional investigation. Overall, the results suggest that by understanding the complex interplay between diversity, inclusion, and job satisfaction, and by implementing targeted interventions, organizations can cultivate a supportive and inclusive work environment. This environment fosters employee engagement, innovation, and sustainable success. The study calls for further research to explore the nuanced dynamics of inclusion and its impact on job satisfaction, particularly within the context of the energy sector in Saudi Arabia.

References

- [1] S. Tagliapietra, "The impact of the global energy transition on MENA oil and gas producers," *Energy Strategy Reviews*, vol. 26, p. 100397, 2019. https://doi.org/10.1016/j.esr.2019.100397
- [2] S. Griffiths, B. K. Sovacool, J. Kim, M. Bazilian, and J. M. Uratani, "Decarbonizing the oil refining industry: A systematic review of sociotechnical systems, technological innovations, and policy options," *Energy Research & Social Science*, vol. 89, p. 102542, 2022. https://doi.org/10.1016/j.erss.2022.102542
- [3] E. Menichetti, A. El Gharras, B. Duhamel, and S. Karbuz, "The MENA region in the global energy markets," *Middle East and North Africa Regional Architecture*, pp. 75-119, 2018.
- [4] L. Pingkuo and H. Xue, "Comparative analysis on similarities and differences of hydrogen energy development in the World's top 4 largest economies: A novel framework," *International Journal of Hydrogen Energy*, vol. 47, no. 16, pp. 9485-9503, 2022. https://doi.org/10.1016/j.ijhydene.2022.01.125
- [5] A. M. Islam, D. Moosa, and F. Saliola, *Jobs udone: Reshaping the role of governments toward markets and workers in the middle East and North Africa.* Washington, DC: World Bank Publications, 2022.

- M. C. Thompson and H. Almoaibed, ""Good jobs and bad jobs": Employment attitudes, perceptions, and priorities in Saudi [6] Arabia," Dirasat No. 61, King Faisal Center for Research and Islamic Studies, 2021.
- [7] F. Ohunakin, A. Adeniji, O. O. Ogunnaike, F. Igbadume, and D. I. Akintayo, "The effects of diversity management and inclusion on organisational outcomes: A case of multinational corporation," Business: Theory and Practice, vol. 20, no. 3, pp. 93-102, 2019. https://doi.org/10.3846/btp.2019.09
- A. E. E. Sobaih and A. E. A. Elnasr, "Local versus foreign worker perceptions, commitment and attitudes toward careers in [8] restaurants and cafés: Evidence from Saudi Arabia," Sustainability, vol. 15, no. 6, p. 5244, 2023. https://doi.org/10.3390/su1506524
- A. E. E. Sobaih, "Challenges in effective implementation of saudization policy in the restaurant sector," Sustainability, vol. 15, [9] no. 9, p. 7654, 2023. https://doi.org/10.3390/su15097654
- [10] Q. M. Roberson, "Diversity in the workplace: A review, synthesis, and future research agenda," Annual Review of Organizational Psychology and Organizational Behavior, vol. 6, no. 1, pp. 69-88, 2019. https://doi.org/10.1146/annurev-orgpsych-012218-015243
- V. Hunt, S. Prince, S. Dixon-Fyle, and L. Yee, "Delivering through diversity," McKinsey & Company, vol. 231, pp. 1-39, 2018. [11]
- [12] E. Chun and A. Evans, The new talent acquisition frontier: Integrating HR and diversity strategy in the private and public sectors and higher education. Abingdon, UK: Taylor & Francis, 2023.
- W. Joanna and K. Jerzy, "Conceptualizing job satisfaction and its determinants: A systematic literature review," Ekon. [13] Sotsiologiya, vol. 21, no. 5, pp. 138-167, 2020.
- H. M. Jerónimo, P. L. Henriques, and S. I. Carvalho, "Being inclusive boosts impact of diversity practices on employee [14] engagement," Management Research: Journal of the Iberoamerican Academy of Management, vol. 20, no. 2, pp. 129-147, 2022. https://doi.org/10.1108/MRJIAM-02-2022-0493
- E. Bohórquez, W. Caiche, V. Benavides, and A. Benavides, "Motivation and job performance: human capital as a key factor for [15] organizational success," presented at the Congress in Sustainability, Energy and City, Cham, Springer International Publishing., 2021.
- [16] A. El-Amin, Improving organizational commitment to diversity, equity, inclusion, and belonging," in Social justice research methods for doctoral research. Hershey, PA: IGI Global, 2022.
- H. Le, C. Palmer Johnson, and Y. Fujimoto, "Organizational justice and climate for inclusion," Personnel Review, vol. 50, no. 1, [17] pp. 1-20, 2021. https://doi.org/10.1108/PR-10-2019-0373
- T. L. Hayes, K. A. Oltman, L. E. Kaylor, and A. Belgudri, "How leaders can become more committed to diversity management," [18] Consulting Psychology Journal: Practice and Research, vol. 72, no. 4, p. 247, 2020. https://doi.org/10.1037/cpb0000189
- E. Angawati and K. Kurniawati, "The influence of diversity oriented leadership towards knowledge sharing through transparent [19] Internal communication, intrinsic needs satisfaction, and job engagement," Jurnal Ekonomi Trisakti, vol. 2, no. 1, pp. 1-14, 2022. https://doi.org/10.25170/jet.v2i1.426
- A. E. E. Sobaih, A. Alomran, and S. E. Joubran, "Influences of financial compensation and role stress on tourism employees' job [20] satisfaction: Evidence from Saudi Arabia," GeoJournal of Tourism and Geosites, vol. 50, no. 4, pp. 1483-1493, 2023. https://doi.org/10.30892/gtg.50404-1134
- [21] M. Vanderschuere and C. Birdsall, "Can diversity management improve job satisfaction for military veterans in the federal government?," The American Review of Public Administration, vol. 49, no. 1, pp. 116-127, 2019. https://doi.org/10.1177/0275074018784375
- [22] K. A. Oladimeji, A. K. Abdulkareem, and A. A. Ishola, "Talent management, organizational culture and employee productivity: The moderating effect of employee involvement," Journal of HRM, vol. 26, no. 1, pp. 43-56, 2023. https://doi.org/10.46777/jhrm.2023.01.028
- W. A. Umrani, A. A. Bachkirov, A. Nawaz, U. Ahmed, and M. H. Pahi, "Inclusive leadership, employee performance and well-[23] being: an empirical study," Leadership & Organization Development Journal, vol. 45, no. 2, pp. 231-250, 2024.
- N. Isac, C. Dobrin, L. P. Raphalalani, and M. Sonko, "Does organizational culture influence job satisfaction? A comparative [24] analysis of two multinational companies," Revista de Management Comparat International, vol. 22, no. 2, pp. 138-157, 2021.
- L. Kašpárková, M. Vaculík, J. Procházka, and W. B. Schaufeli, "Why resilient workers perform better: The roles of job [25] satisfaction and work engagement," Journal of Workplace Behavioral Health, vol. 33, no. 1, pp. 43-62, 2018.
- P. M. Nardi, Doing survey research: A guide to quantitative methods. London, UK: Routledge, 2018. [26]
- [27] A. T. Alabi and M. O. Jelili, "Clarifying likert scale misconceptions for improved application in urban studies," Quality & Quantity, vol. 57, no. 2, pp. 1337-1350, 2023. https://doi.org/10.1007/s11135-022-01415-8
- [28]
- D. Lakens, "Sample size justification," *Collabra: Psychology*, vol. 8, no. 1, p. 33267, 2022. J. F. Hair, M. Gabriel, and V. Patel, "AMOS covariance-based structural equation modeling (CB-SEM): Guidelines on its [29] application as a marketing research tool," Brazilian Journal of Marketing, vol. 13, no. 2, pp. 1-12, 2014.