Designing a Model of Talent Turnover from the Perspective of Knowledge Workers Who Have Resigned in the Iranian Offshore Oil Company

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Abstract
The present study aimed to design a model of talent turnover from the perspective of knowledge workers who have resigned in the Iranian Offshore Oil Company. Considering the main objective of this research—explaining and presenting an interpretive structural model of the factors influencing talent turnover in the Iranian Offshore Oil Company—this study falls within the scope of applied research and adopts an exploratory mixed-methods approach. The statistical population in the qualitative section included managers from the Iranian Offshore Oil Company, academics, and experts from the company. Using a purposive sampling method, 12 participants were selected as the sample. In the quantitative section, data were also collected from experts in the Iranian Offshore Oil Company. The sample size in this section was determined using Cochran's formula and simple random sampling. With a total population of 250 individuals, the Cochran formula identified a sample size of 152 participants. Data collection employed interviews and a researcher-developed questionnaire. Thematic analysis was used to develop the model, which was ultimately analyzed using structural equation modeling (SEM) with PLS software and the ISM technique. Results indicated that, among the model's components, livelihood status and skills and expertise were prioritized as the most critical factors by the experts, situated at the first level. Cultural and social environments and the political environment were ranked at the second level. Organizational policies, rules and processes, organizational climate, and organizational management were placed at the third level. Finally, influence and impact, along with being overlooked and undervalued, were categorized at the fourth level. From the managers' perspective, the most critical factors driving talent turnover included influence and impact, being overlooked and undervalued, livelihood status, and skills and expertise.

Keywords: *Talent turnover, Knowledge workers, Experts, Job satisfaction*
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1. Introduction

Human resources are considered intelligent assets and the most critical capital of any organization, with employee and organizational performance in terms of efficiency and effectiveness largely dependent on their proper, effective, and appropriate utilization. Consequently, modern organizations pay more attention to human resources than other dimensions and strive to retain and sustain them [1]. Indeed, human capital is regarded as the most valuable and complex asset within any organization, playing a crucial role in achieving organizational objectives. Among them, knowledge workers or talented employees are those with high levels of skill and knowledge expertise. These individuals possess the ability to observe, synthesize, and

interpret data and information for better decision-making and proposing suitable solutions for the organization [2].

However, many organizations lose a significant portion of their knowledge workers due to various reasons, including restrictive regulations, lack of autonomy, excessive control, job burnout, career plateauing, insufficient organizational support, lack of attractiveness, unfair compensation, and reduced authority in decision-making [3]. The role of valuable, innovative, experienced, and creative employees is vital to accomplishing organizational missions. Field studies indicate that premature turnover trends have raised concerns about losing skilled personnel [4].

In today's workplace, skilled and valuable human resources are rare and difficult to replicate, imitate, or replace. Organizations must make every effort to retain their workforce to prevent employee turnover. Traditionally, turnover has been closely associated with job commitment and satisfaction. Turnover refers to the actual transition across organizational membership boundaries. Voluntary turnover has the most negative impact, as it is initiated by the employee and not the organization. The stages of turnover often start with job dissatisfaction, followed by searching for alternative opportunities, and ultimately resignation upon finding another position [5-7].

One of the most significant issues facing organizations today is employee turnover, particularly among skilled workers or talents, which has numerous adverse consequences for organizations. Turnover costs impact organizations in various ways [8, 9]. Poor organizational and job conditions in governmental organizations reduce motivation, alter job attitudes, and ultimately lead to turnover or underperformance. Inevitably, this results in wasted costs related to recruitment, hiring, and training, as well as threats to the quality of goods and services [10]. The financial cost of turnover is estimated to be at least 150–200% of an employee's annual salary. Moreover, the indirect costs of turnover include diminished work ethics, weakened organizational culture, increased pressure on remaining employees, learning costs, and the loss of social capital or organizational memory [11].

In a study of 40 companies, the lack of a talent management strategy was identified as a primary issue, leading to a shortage of skilled workers for strategic positions and limitations on growth [12]. Organizations must therefore exert every effort to retain their employees. Employee support and retention encompass a range of managerial measures and actions aimed at creating conditions that encourage employees to stay. Retention involves maintaining individuals' security, morale, interest, and technical capability. Effective retention efforts include fair compensation systems, training and development, promotion based on merit, and providing welfare and appropriate services to foster long-term organizational commitment. Research has shown that retention systems in Iranian organizations are inefficient and fraught with challenges that hinder the retention process [13].

The subject of talent and effective talent management for developing and presenting strategic organizational plans remains a critical global challenge [14]. Organizations that fail to design mechanisms and strategies for talent retention risk losing their skilled workforce. Studies indicate that many organizations and companies struggle to effectively retain their talents [12]. Higher education levels in a country can lead to better resource utilization and have the potential to improve the national economy [15]. However, modern organizations face multiple challenges, including technology, budget constraints, and high demand, particularly in developing countries [16]. Accordingly, organizations seek to enhance performance through innovation and retaining qualified individuals [17].

While Iranian organizations typically invest in recruiting and training talents, significant turnover rates across various industries adversely affect organizational performance. Consequently, managers in Iranian organizations face serious challenges in understanding the underlying reasons for talent turnover and knowledge worker attrition. Experienced employees, who combine past and current knowledge to manage organizational goals effectively, carry this accumulated knowledge with them when they leave. Researchers have identified departing employees as key factors in organizational knowledge loss [18].

According to the latest reliable statistics, the population of Iranian emigrants in 2020 reached 1.8 million, accounting for 2.3% of the total population of Iran. Compared to 30 years ago, this figure has increased 2.2 times, rising from 820,000 to 1.8 million. Data from the Iranian Passport Office for the period 2001 to August 2020 reveals that 56.6% of medalists in student Olympiads, 69.1% of individuals covered by the Iranian National Elite Foundation, and 78.3% of individuals ranked 1 to 1,000 in national exams remain in the country. These statistics highlight the concerning state of brain drain in Iran, necessitating measures to retain these individuals within the country.

The Iranian Offshore Oil Company, with vast hydrocarbon reserves, is one of the world's largest oil companies. As advancements in oil industry knowledge and

technology and the complexity of economic and political dynamics continue, the status of the National Iranian Oil Company has also improved. National and regional policies and collaborations with major industrial countries to ensure energy supply and stabilize global oil markets are on the company's agenda. This requires expert and capable personnel to carry out organizational activities effectively. As a result, this organization has greater concerns in this regard compared to others, as the absence or turnover of skilled personnel can cause irreparable harm to both the organization and the country. In addition to conscious employee departures—a significant issue in the oil and gas industry—this sector also faces an aging workforce, for which no adequate measures have been implemented. Although workforce aging is a challenge for all companies, it has uniquely affected the oil and gas sector. Many employees are nearing retirement, and the industry is not an attractive career path for younger generations. This has led to various challenges for the industry. Despite this, the industry has failed to create conditions that encourage experienced and specialized employees to stay, often leading to their departure upon retirement [18].

Human resource statistics for the Iranian Offshore Oil Company reveal that, on average, 20 to 25 skilled and talented employees leave the organization annually through leave, absence, or resignation. With 5,000 employees, of whom 1,000 are knowledge workers, this equates to an annual attrition rate of 2.5% among knowledge workers, raising significant concerns for the organization. This figure, in comparison to other organizations with similar workforce sizes, underscores the importance of addressing this issue.

Effectively managing knowledge workers is of paramount importance; otherwise, organizations risk losing their competitive advantage [19]. Retaining knowledge workers is critical for an organization’s sustained success [20]. Talented and knowledgeable employees form the foundation of an organization’s intellectual capital, representing a renewable and innovative resource that enhances the organization’s capacity through knowledge and experience. Identifying and addressing the factors influencing employee turnover is crucial for minimizing its adverse effects on organizational performance [21].

Organizations must identify the factors influencing employee turnover to implement preventive measures and enhance employee retention [22, 23]. Employee turnover imposes both direct and indirect costs on organizations. Direct costs include recruitment, selection, and training, while indirect costs encompass reduced work ethics, weakened organizational culture, increased pressure on remaining employees, learning costs, and the loss of social capital or organizational memory. Research from 2000 shows that explicit and implicit turnover costs consume a significant portion of organizational budgets annually [24].

Many employees leave Iranian organizations for better opportunities in other countries or organizations. However, understanding the factors that influence retention and turnover of talented employees in these organizations remains a neglected topic that organizations struggle to address and control. Accordingly, the main objective of this study is to identify factors that can prevent talent turnover and formulate necessary policies for retaining these individuals.

The central question of this research is: What are the factors influencing talent turnover in the Iranian Offshore Oil Company, and what relationships exist between them?

2. Methodology

The methodology of this research is categorized based on several criteria. In terms of the objective, the study is applied research. Regarding the type of data, it employs a sequential mixed-methods approach. From the paradigm perspective, the research is pragmatic or combined, incorporating both interpretive and positivist paradigms. Concerning its nature (approach and design), the study initially adopts an exploratory method and subsequently a descriptive-analytical approach. In terms of reasoning (execution logic), the methodology follows a mixed approach, combining inductive and deductive reasoning. Inductive reasoning is applied in the qualitative phase, using meta-synthesis and the Delphi technique, while deductive reasoning is employed in the quantitative phase, which includes surveys and correlation analyses.

In the qualitative phase, the statistical population for the first stage (meta-synthesis) comprised all scientific articles and materials from domestic and international databases, as well as existing documents and regulations relevant to the field. At this stage, twenty articles were selected using a non-random purposive sampling method based on the PRISMA guidelines. The selection criteria for the articles included recency, relevance to the research topic, high scientific quality, credibility from reputable domestic and international databases, appropriate methodology, and diversity in viewpoints. In the second stage (Delphi technique), the statistical population included managers from the Iranian Offshore Oil Company, academics, and

experts. According to Linstone and Turoff (2011), the minimum number of experts in a Delphi panel is typically between 10 and 18. For this study, 12 experts were purposively selected. The criteria for expert selection included holding at least a master's degree and possessing a minimum of 10 years of managerial experience.

In the quantitative phase, the statistical population consisted of experts from the Iranian Offshore Oil Company. The sample size was determined using Cochran's formula and simple random sampling. Out of a total population of 250 individuals, 152 participants were selected.

In the qualitative phase, data collection for the meta-synthesis stage involved a systematic review of literature and reliable scientific resources. This process included a comprehensive and targeted search in scientific databases, articles, books, and theses relevant to the research topic. The PRISMA flow diagram was used for screening and selecting appropriate articles. Screening was conducted at both coarse and fine levels, based on temporal (domestic and international), spatial (databases), research nature (synthesis, review, qualitative, and quantitative), and thematic (keywords) criteria. The validity of the content was assessed using the 27-item PRISMA checklist, independent analysis by the researcher and a statistics expert, Cohen's kappa agreement coefficient, standard criteria, replicability (ensuring transparency in methodology), and MAXQDA software for precise tracking, coding, and feedback refinement. Reliability was ensured through detailed process documentation, intra-researcher alignment, and inter-researcher alignment. In the Delphi technique stage, a Delphi worksheet was used to gather expert opinions. Experts were asked to rate indicators, provide feedback, and suggest additional relevant indicators. The worksheet's validity was confirmed using content validity ratio (CVR) and content validity index (CVI), ensuring the questions were clear, relevant, and comprehensive. Reliability was assessed through internal consistency and temporal stability.

In the quantitative phase, data collection utilized a researcher-developed questionnaire derived from qualitative findings (internal validity) and the final model (external validity). The questionnaire construction involved a systematic review and meta-synthesis of the literature in domestic and international databases, following the PRISMA protocol as a standard approach. Identified articles were screened based on specific criteria, resulting in twenty articles that were analyzed using thematic analysis. Dimensions identified through this process formed the basis for the Delphi worksheet. Expert consensus during three Delphi rounds finalized these dimensions. The questionnaire included 33 items measured on a Likert scale ranging from very low to very high, addressing individual factors (e.g., influence, recognition, livelihood, skills), organizational factors (e.g., policies, regulations, climate, management), and environmental factors (e.g., cultural-social and political environments). The validity of the questionnaire was verified using CVR and CVI, with input from 10 experts. Construct validity (convergent and divergent validity) was assessed using SmartPLS-3 software. Reliability was calculated using Cronbach's alpha, composite reliability, and McDonald's omega, all of which exceeded 0.7, confirming the tool's reliability.

For data analysis, in the qualitative phase, thematic analysis was conducted using MAXQDA Analytics Pro 2018 to identify dimensions, components, and indicators of employee turnover from selected articles and open-ended Delphi questions. For Delphi closed-ended questions, mean and standard deviation were used to evaluate results and agreement levels, while Kendall's coefficient of concordance was calculated using IBM SPSS Statistics 16 to assess expert consensus on priorities. In the quantitative phase, descriptive statistics were used to describe demographic characteristics (e.g., age, gender, education, work experience) through frequency percentages, tables, and charts. Variables were described using mean, standard deviation, skewness, and kurtosis. Inferential statistics included confirmatory factor analysis (for internal validity) and one-sample t-tests (for external validity), performed using IBM SPSS Statistics 23 (2015) and SmartPLS V3 (2016).

3. Findings

This section presents the demographic characteristics of participants and respondents, as summarized in Table 1.

Table 1. Demographic Information of Respondents

Dimensions	Components	Frequency	Percentage
Gender	Female	59	38.81%
	Male	93	61.18%
Age	Below 40 years	42	27.63%

	40–49 years	59	38.81%
	50–59 years	32	21.05%
	60 years and above	19	12.5%
Work Experience	1–10 years	52	34.21%
	11–20 years	52	34.21%
	21–30 years	33	21.71%
	Above 30 years	19	12.5%

Table 1 illustrates the demographic characteristics of participants and respondents, including age range, work experience, gender, and job nature.

Based on data collected through in-depth semi-structured interviews, which continued until reaching theoretical saturation and were analyzed using a zigzag coding approach, fundamental themes were extracted. Notably, in-depth semi-structured interviews were conducted with 12 experts in this field.

To estimate validity, the questionnaire was distributed among 15 experts, and its content validity index (CVI) and content validity ratio (CVR) were assessed and confirmed.

Table 2. Dimensions, Components, and Indicators Identified in the Qualitative Phase

Dimension	Component	Indicator	Source	Interview Code
Organizational Factors	Job Nature	Job pressure	[25]	I1
		Academic-job mismatch	[26-30]	I10
		Safety and health	[19, 30, 31]	I9
		Working conditions	[8, 14]	I2
		Role clarity	[8, 14]	I9, I11
	Management	Promotion opportunities	-	-
		Lack of necessary or practical training	[26-30]	I8
		Constant managerial changes	[26-30]	I3, I7
		Uneven resource distribution	[26-30]	I12
		Ignoring employees' career history	[26-30]	I4
		Excessive control and monitoring	[26-30]	I8
		Lack of effective retention strategies	[26-30]	I4
		Opportunities for advancement and supportive leadership	[30, 32]	I5, I7
	Organizational Culture	Uncertainty about employment status	[26-30]	I6
		Increased mental pressure and unreasonable demands	[26-30]	I6
		Social stability within the organization	-	I1, I10, I12
		Cultivating intimacy	-	I6, I11, I2
		Teamwork culture	-	I12, I1
		Collective decision-making	-	I2, I1, I6
		Lack of meritocracy and preference for personal connections	[26-30]	I9, I10, I2
Individual Factors	Motivation	Job satisfaction	[14, 23, 30]	I7, I5
		Background knowledge	Sambal et al. (2018)	I5
		Salary and benefits	[31, 33]	I3
		Job insecurity	[2]	-
		Unhealthy and negative competition	[26-30]	I4
		Organizational injustice	[11]	I2
	Demographic Features	Educational attainment	[18, 25]	I2, I3, I6
		Work experience	-	I2, I9
		Marital status	-	I3, I4, I12
		Number of dependents	-	I8, I3, I10
		Gender	-	I5, I4, I11
		Age	[33]	I8, I12
	Psychological Factors	Emotional connection to work	[8]	I1

		Personal desires and fears	[1]	I3
		Ethical commitment to stay in the organization	[3]	I9
		Inability to assert oneself	[26-30]	I10
		Personal issues	[26-30]	I6, I8
		Job engagement	[34]	I4, I6, I3
		Emotional exhaustion	[19]	I10, I11
		Job stress	[23]	I12, I8, I9
Environmental Factors	Regulations	Lack of effective policies for elites	-	I11, I5
		Lack of security mechanisms for elites	-	I1, I12, I6
		Restrictive and obstructive regulations	[26-30]	I7, I11
	Environmental Pressures	Structural injustice in developing countries	[12]	I8
		Declining quality of work-life globally	-	I12, I9, I7
		Unemployment rate	[16]	I2, I10

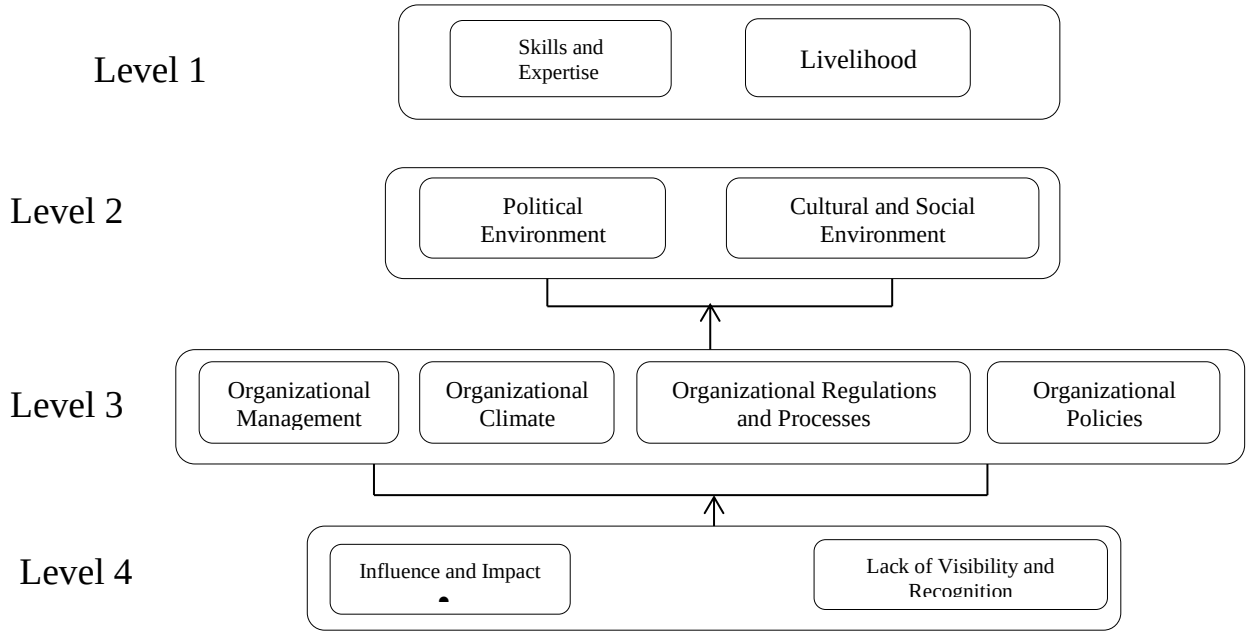

Figure 1. ISM Model

The qualitative analysis categorized the findings into several dimensions, components, and indicators based on their relevance to organizational, individual, and environmental factors. For instance, within organizational factors, the components included "job nature," such as job pressure, academic-job mismatch, safety and health, working conditions, and role clarity. Similarly, components under "management" involved issues like lack of necessary training, constant managerial changes, uneven resource distribution, and lack of strategies for retaining employees, with references from several foundational studies.

Within individual factors, components such as motivation, demographic features, and psychological elements were identified. Motivation factors included job satisfaction, background knowledge, salary and benefits, and job security. Psychological factors examined included emotional attachment, personal issues, and occupational stress.

Environmental factors focused on issues such as regulations, which included ineffective policies for elites, lack of security mechanisms, and restrictive rules. Environmental pressures such as structural injustice in developing countries and declining quality of work-life globally were also highlighted.

The analysis identified 47 indicators across eight components within three main dimensions. The dimensions included organizational, individual, and environmental factors. For example, within organizational factors,

indicators such as "inadequate attention to employees' career history" and "lack of effective strategies for retention" were critical. Similarly, under individual factors, indicators such as "emotional exhaustion" and "unhealthy competition" emerged as significant.

The findings revealed that from 47 identified indicators, three main dimensions and eight components could be categorized, emphasizing the multifaceted nature of turnover among knowledge workers. This comprehensive analysis provides a detailed understanding of the driving factors, facilitating the development of effective retention strategies.

The validation of the proposed model is addressed in two aspects: internal and external validity. Model validity, as a key aspect of research, not only indicates the accuracy and precision of the designed model but also its applicability in real-world environments. To evaluate the causes of elite turnover, the model's validity was assessed. A 33-item questionnaire, based on a five-point Likert scale ranging from "very low" to "very high," was distributed among 12 experts in the research field. This questionnaire evaluated the external validity of the designed model through components such as goal, research design, control of confounding variables, and alignment, as well as the internal validity of the model through logical review, expert feedback, and sensitivity analysis. To examine the validity of each component, a one-sample t-test was employed. The results of this test demonstrated high validity for the various components of the elite turnover assessment from both internal and external perspectives. The statistical results of the one-sample t-test are detailed in Table 3.

Table 3. Results of the One-Sample t-Test for Validating Factors Affecting Elite Turnover in the Iranian Offshore Oil Company

Component	Mean	Standard Deviation	Calculated t	Significance Level	Mean Difference	Lower Bound	Upper Bound
External Validity	4.20	0.65	9.00	0.000	1.20	3.90	4.50
Goal	4.20	0.70	8.90	0.000	1.20	3.90	4.50
Research Design	4.25	0.70	9.10	0.000	1.25	3.90	4.60
Control of Confounding Variables	4.10	0.75	8.30	0.000	1.10	3.80	4.40
Alignment	4.05	0.80	7.50	0.000	1.05	3.70	4.40
Internal Validity	4.35	0.60	9.20	0.000	1.35	4.00	4.70
Logical Review	4.15	0.75	8.00	0.000	1.15	3.80	4.50
Expert Feedback	4.30	0.60	9.50	0.000	1.30	4.00	4.60
Sensitivity Analysis	4.40	0.55	9.80	0.000	1.40	4.10	4.70

Table 3 that the significance level for both external and internal validity and all their respective components is less than 0.001, with calculated means ranging from 4.05 to 4.40. This clearly indicates the statistical significance of the findings at a 99% confidence level. It means that the obtained results are not random and confirm the high validity of the model. Therefore, it can be inferred that the designed model possesses significant validity and can be used as an effective framework for understanding factors contributing to elite turnover.

Furthermore, based on expert opinions, the internal validity of the designed model, with a mean of 4.35 and a calculated t-value of 9.20, is higher than its external validity. Among the components of external validity, the "Research Design" component has the highest validity with a mean of 4.25 and a calculated t-value of 9.10. On the other hand, among the components of internal validity, the "Sensitivity Analysis" component has the highest validity with a mean of 4.40 and a calculated t-value of 9.80.

In the next stage, the internal validity of the model was assessed using confirmatory factor analysis (CFA) and the coefficient of determination (R^2), while the external validity of the model was evaluated through model fit indices and the Q^2 statistic.

Confirmatory Factor Analysis (Measurement Model) for Each of the Three Dimensions: At this stage, CFA based on partial least squares (PLS) was employed to confirm the model's fit. The findings show that the significance values of all components and indicators are greater than 1.96. Therefore, it can be said that the present model is significant and possesses the necessary validity.

Coefficient of Determination (R^2) for Dependent Variables to Assess Internal Validity of the Model Evaluating Factors Affecting Elite Turnover in the Iranian Offshore Oil Company for All Three Dimensions: The R^2 coefficient relates to endogenous (dependent) latent variables and shows the effect of an independent variable on a dependent variable. The values of 0.19, 0.33, and 0.67 are considered as criteria for weak, moderate, and strong R^2 values, respectively. The R^2 value for all three dimensions was obtained as more than 0.67.

Predictive Relevance (Q^2) Index to Assess External Validity of the Model Evaluating Factors Affecting Elite Turnover in the Iranian Offshore Oil Company: This criterion indicates the model's predictive power for dependent variables. The interpretation criteria for Q^2 are values of 0.02 (low), 0.15 (moderate), and 0.35 (high) predictive power. A positive Q^2 value is desirable. The Q^2 values for the dimensions of the main construct are 0.312, 0.238, and 0.295, which are positive and at an acceptable level. Therefore, it can be said that the model's predictive power for all three dimensions is satisfactory.

GOF Index: This index, introduced by Tenenhaus et al. (2005), is a general fit measure calculated by taking the geometric mean of the average communality and average R^2, computed as follows:

$$GOF = \sqrt{(\text{average communality} \times \text{average } R^2)}$$

Using the calculations:

$$GOF = \sqrt{(0.561 \times 0.76)} = 0.652$$

Experts in structural equation modeling using PLS consider a GOF less than 0.10 as small, between 0.10 to 0.25 as moderate, and above 0.36 as large. Considering these criteria, the GOF index for the model under study is 0.652, which is considered large. Based on these findings, it can be concluded that the tested model has a suitable fit in the sample under study. Additionally, given that all factor loadings of the observable variables in the model are greater than 0.5 and the significance values are greater than 2.58, it can be said that the construct has desirable validity.

Figures below illustrate the model testing for factors affecting elite turnover in the Iranian Offshore Oil Company, showing the factor loadings and t-statistics, respectively.

These results collectively confirm the robustness and applicability of the designed model for identifying and addressing the factors contributing to elite turnover in the organizational context.

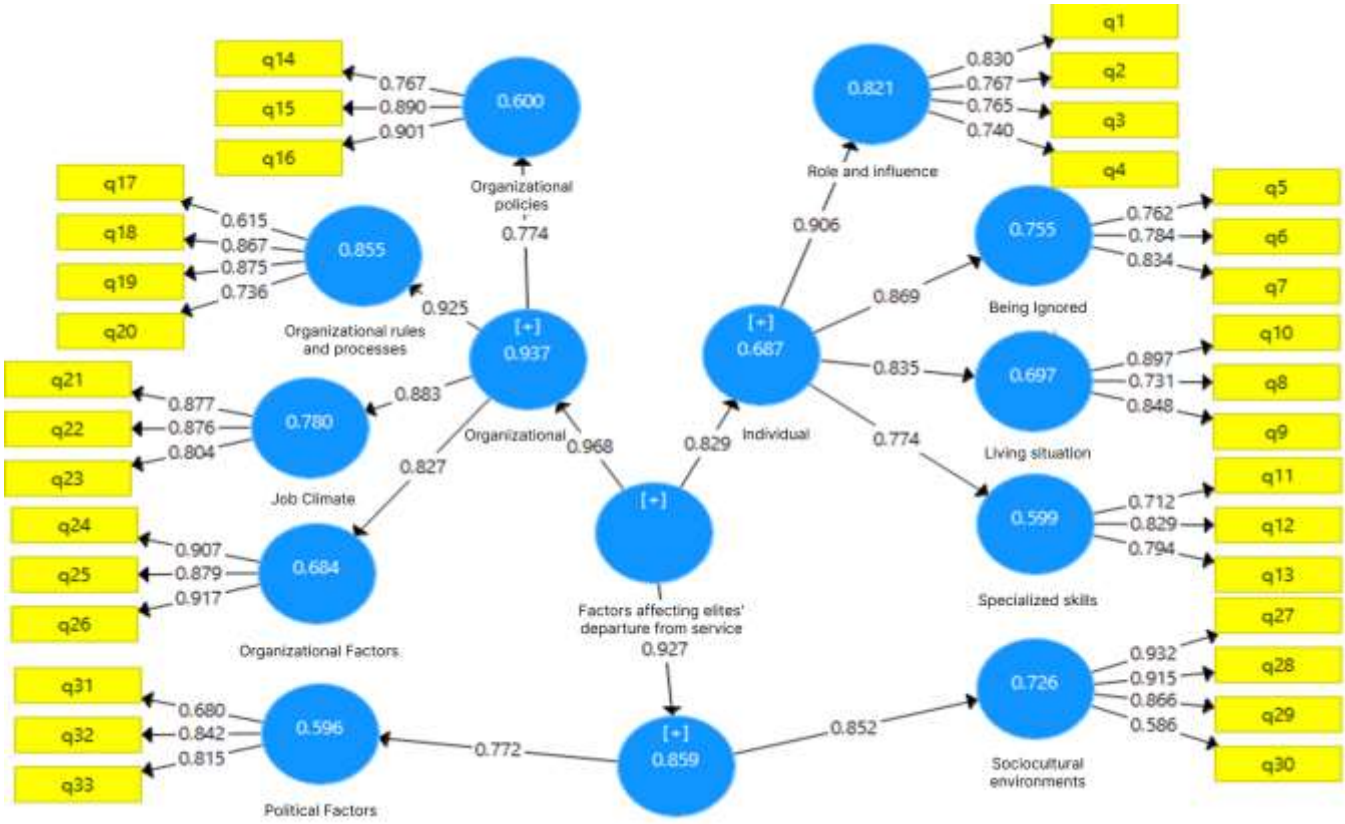

Figure 2. Model with Factor Loadings

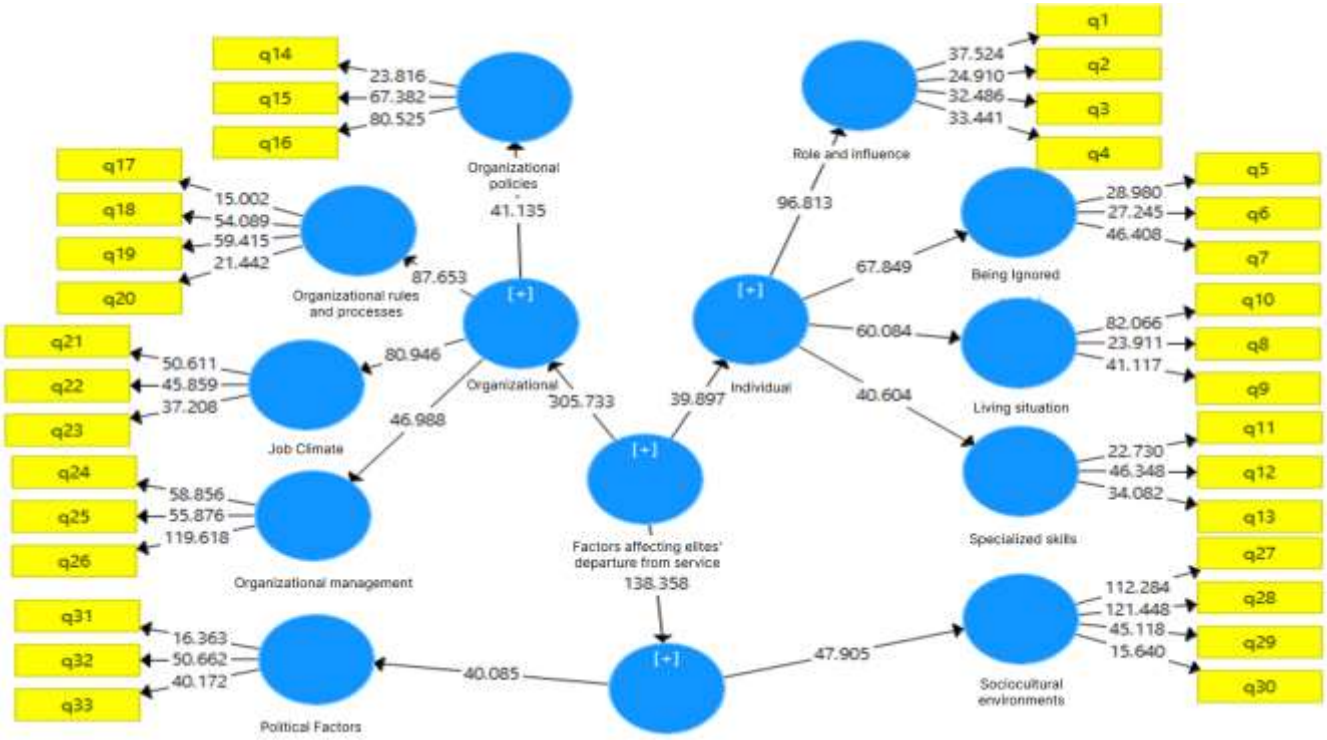

Figure 3. Model with T-Values

Table 4. Factor Loadings Extracted Using Smart PLS Software

Row	Second-Level Latent Variables	First-Level Latent Variables	Indicators	Indicator Number	Factor Loadings	t-Statistic	Significance Level
1	Individual	Influence and Impact	Lack of effectiveness in organization	Q1	0.830	37.524	0.001
			Role clarity	Q2	0.767	24.910	0.001
			Lack of creativity and innovation	Q3	0.765	32.486	0.001
			Lack of application of expertise	Q4	0.740	33.441	0.001
		Lack of Visibility and Recognition	Participation in decision-making	Q5	0.762	28.980	0.001
			Membership in committees and commissions	Q6	0.784	27.245	0.001
			Attendance in scientific forums	Q7	0.834	46.408	0.001
		Livelihood	Insufficient benefits	Q8	0.731	23.911	0.001
			Inadequate welfare services	Q9	0.848	41.117	0.001
			Disproportionate salary to living costs	Q10	0.897	82.066	0.001
		Skills and Expertise	Educational attainment	Q11	0.712	22.730	0.001
			Level of experience	Q12	0.828	46.348	0.001
			Academic-job mismatch	Q13	0.794	34.082	0.001
2	Organizational	Organizational Policies	Organizational injustice	Q14	0.767	23.816	0.001
			External appointments	Q15	0.890	67.382	0.001
			Organizational humiliation	Q16	0.901	80.525	0.001
		Organizational Rules and Processes	Bureaucratic processes	Q17	0.615	15.002	0.001
			Non-digitized processes	Q18	0.867	54.089	0.001
			Restrictive regulations	Q19	0.875	59.415	0.001
			Lack of necessary or practical training	Q20	0.736	21.442	0.001
		Organizational Climate	Unhealthy competition	Q21	50.611	0.001	
			Surveillance-oriented mindset	Q22	0.876	45.859	0.001

			Lack of strategies for employee retention	Q23	0.804	37.208	0.001
		Organizational Management	Managerial changes	Q24	0.907	58.856	0.001
			Managerial controls	Q25	0.879	55.876	0.001
			Technical competence of managers	Q26	0.917	119.618	0.001
3	Environmental	Cultural-Social Environment	Children's education	Q27	0.932	112.284	0.001
			Social controls	Q28	0.915	121.448	0.001
			Religious programs and ceremonies	Q29	0.866	45.118	0.001
			Official and behavioral norms	Q30	0.586	15.640	0.001
		Political Environment	Domestic political tension	Q31	0.680	16.363	0.001
			Political screening	Q32	0.842	50.662	0.001
			International relations	Q33	0.815	40.172	0.001

4. Discussion and Conclusion

This study aimed to identify, evaluate, and prioritize the factors influencing elite turnover in the Iranian Offshore Oil Company. According to the findings, the influential factors fall into three categories: individual, organizational, and environmental.

The "influence and impact" component includes factors such as lack of effectiveness in the organization, unclear roles, failure to utilize creativity and innovation, and failure to consider professional opinions. When employees feel they are valuable and significant to an organization, they are more likely to remain, as this sense of worth fosters job satisfaction and commitment. Conversely, employees who do not feel they play a critical role may experience dissatisfaction and reduced organizational commitment, eventually leading to turnover. This highlights the importance of human resources in an organization. Creating a strong connection with employees, valuing them, and fostering proper motivation can increase their satisfaction and commitment. On the other hand, unfair comparisons or undervaluation can lead to dissatisfaction and reduced commitment. Addressing employees' needs and recognizing their contributions is therefore vital. Providing opportunities for creative input can encourage elite employees to stay, as there is a direct link between the ability to present creative ideas and a sense of self-worth. When employees perceive that their ideas are appreciated, their commitment and connection to the organization strengthen. Thus, fostering a work environment that values creative ideas and promotes employee development can enhance retention. If the organization fails to share critical information or ensure transparency in decision-making processes, employees may feel unable to influence organizational decisions and lose their motivation to stay. In this regard, Moqri et al. (2021) found that unclear organizational roles contribute to employee turnover. They also highlighted role conflict as a significant factor [32].

The "lack of visibility and recognition" component includes participation in decisions, membership in committees and commissions, and teamwork. Engaging elite employees in organizational decision-making can enhance their retention. When employees feel that their opinions and ideas contribute to decisions, their sense of commitment and connection to the organization increases. This direct involvement in decision-making processes fosters a sense of value and strengthens employees' organizational ties, encouraging retention. A work environment that values employee participation in decision-making processes can promote retention. Teamwork also fosters collaboration and a sense of belonging among employees, increasing their commitment to the organization. Furthermore, teamwork encourages innovation and creativity, which can contribute to employee retention. Creating an environment that emphasizes teamwork and collaboration can support this goal. Employee participation in decision-making can enhance their sense of value and significance within the organization. When employees actively contribute to decision-making processes, they develop a stronger connection and sense of belonging, leading to increased organizational commitment and enthusiasm.

The "livelihood" component includes insufficient benefits, inadequate welfare services, and disproportionate salaries relative to living costs. Providing adequate benefits, fair rewards, and competitive salaries to elite employees positively impacts retention. These measures foster a sense of value and commitment, encouraging employees to stay. Fair compensation acts as an incentive, boosting motivation and commitment, which in turn supports retention. Salary alignment with living costs ensures employees can meet

their personal and family needs. When employees perceive that their compensation reflects the value of their work and adequately supports their living expenses, they feel recognized and valued. This alignment enhances job satisfaction and strengthens employee ties to the organization. A balanced salary structure fosters growth opportunities and skill development, while also building trust and motivation, encouraging employees to remain. Setting salaries to match living costs is critical for retaining skilled and committed employees. In this context, studies [25, 31, 33, 35] emphasized the importance of fair compensation and benefits aligned with workload and responsibilities.

The "skills and expertise" component includes educational qualifications, experience, and alignment between education and job roles. Employees with specialized expertise are more likely to continue working in an organization that values their skills. When job responsibilities align with employees' skills and interests, they experience satisfaction and are less likely to leave. Strong and cohesive relationships with colleagues and managers also play a key role in retention. Positive interactions and supportive working relationships reduce turnover intentions. Offering opportunities for career advancement and professional development can further enhance employee satisfaction and performance. Additionally, providing internal training programs can improve employee skills and encourage retention. Studies [26-30] also highlighted the impact of misalignment between education and job roles.

The "organizational policies" component includes organizational injustice, external appointments, and organizational humiliation. Organizational policies significantly affect employees' willingness to stay. When an organization adheres to fairness as a core principle in decision-making, it fosters trust and satisfaction among employees. Perceptions of fairness in processes such as employee appointments ensure that all members benefit equitably, reinforcing their value and encouraging active participation. Fair distribution of opportunities and professional growth is also essential. Employees who perceive fair decision-making processes are more motivated to improve their performance and contribute to organizational growth. Organizational justice acts as a stabilizing force, increasing employee commitment and reducing turnover intentions. Thus, promoting fairness and equity within the organization creates a positive and sustainable work environment. In their study, Abedin et al. (2020) emphasized the importance of organizational justice. Similarly, Safarkhanlou (1998), Alavi (1996), Saatchi (2001), Rezghi Rostami (1993), and Majidi (1998) pointed to the adverse effects of unequal resource distribution and uncertainty about employment status.

This research highlights the critical factors influencing elite turnover and provides insights into strategies for retention, emphasizing the importance of individual, organizational, and environmental components in fostering employee satisfaction and commitment.

The organizational regulations and processes component includes bureaucratic procedures, restrictive regulations, lack of necessary or practical training, and superficial decision-making. Unnecessary and complex regulations and processes can limit employees' effectiveness, reducing their focus and performance. These limitations can increase stress, dissatisfaction, and fatigue, ultimately leading to reduced motivation and intent to remain in the organization. Excessive enforcement of rules and procedures may erode trust in organizational methods and structures. If employees feel burdened by excessive accountability and perceive organizational rules as unfair, their likelihood of staying decreases. Furthermore, complex regulations often stifle creativity and innovation. Reduced direct communication between employees and managers and inflexible organizational policies can also lower employees' willingness to continue working. A lack of opportunities for career advancement and recognition of abilities and efforts may diminish employees' motivation to stay. Studies [26, 28, 30] have also pointed out the lack of necessary or practical training in a similar study.

The organizational climate component includes unhealthy competition, a surveillance-oriented approach, and a lack of strategies for employee retention. Organizations with a hostile, closed, or rigid work environment may dissuade employees from staying. Healthy communication, effective opportunities for interaction, and a balanced work environment are critical factors that encourage employees to continue working. Failing to provide employees with clear and transparent organizational information—such as policies, decisions, and achievements—can create trust and communication gaps, leading to frustration and distrust, which discourage employees from staying. Studies [13, 28-30] also noted the lack of appropriate strategies for retaining employees.

The organizational management component includes managerial changes, management styles, and technical competencies of managers. One reason organizational

management may reduce employees' willingness to remain is the lack of employee involvement in decision-making processes. When employees feel that their opinions are undervalued and significant decisions are made unilaterally, their motivation to stay decreases. Moreover, management styles that emphasize control and power can harm relationships and trust, leading to dissatisfaction and a reluctance to remain. Management styles that disregard fairness, trustworthiness, and opportunities for growth further reduce employees' willingness to stay. Employees seek opportunities for personal and professional growth, and organizations that fail to provide such opportunities risk losing them to competitors. Studies [13, 26-30] highlighted managerial incompetence and frequent managerial changes. Pirayesh et al. (2020) emphasized the importance of supervisors' qualities, and Qasempour et al. (2020) discussed toxic leadership.

The socio-cultural environment component includes children's education, social controls, religious programs and ceremonies, and formal and behavioral norms. Cultural and social environments play a powerful role in shaping employees' attitudes and behavior. Unhealthy or undesirable cultural and social environments may reduce employees' inclination to remain in the organization. If organizations fail to offer proper support and encouragement, employees may feel dissatisfied and leave. Social norms can also influence turnover, particularly if there is a conflict between personal values, needs, and organizational values. Employees who perceive a misalignment between their values and the organization are less motivated to stay. As a result, social norms can undermine employees' sense of fulfillment and drive them to leave the organization.

The political environment component includes domestic political tensions, political screening, and international relations. Achieving a balance between personal and professional life is essential. Employees who can maintain equilibrium between work, family, and personal time are more likely to experience satisfaction and less likely to leave the organization. Imbalanced socio-cultural environments, resulting from unfair distribution of work and free time, can reduce satisfaction and retention. Political tensions often create organizational instability, fostering uncertainty and doubt among employees regarding their career prospects, which may drive them to seek opportunities elsewhere. Indirectly, political tensions can also impact organizational finances, reducing resources and financial rewards for employees, which further encourages turnover. Abedin et al. (2020) identified structural injustice in developing countries as a significant factor in their research [12].

The results indicate that all relationships between model components are significant, emphasizing that individual, organizational, and environmental factors influence turnover among knowledge workers. Elite employees, in particular, seek opportunities for growth and advancement. Organizations that fail to provide such opportunities risk losing talented individuals. Organizational culture also plays a significant role in employee satisfaction and commitment. When values and behaviors align with employees' personalities, retention is more likely. Strong leadership is critical for retaining elite employees, requiring managers to inspire and create a supportive work environment. Talented employees are attracted to organizations that offer competitive compensation, flexible work environments, work-life balance, and performance-based rewards.

Among the model's components, livelihood and skills and expertise rank highest in importance, followed by socio-cultural and political environments. Organizational policies, regulations and processes, climate, and management rank third. Finally, influence and impact and lack of visibility and recognition rank fourth. The most critical turnover factors, as identified in this study, are influence and impact and lack of visibility and recognition.

The study revealed differences between elite employees' and managers' perspectives. While both agreed on the importance of livelihood and skills and expertise, elites prioritized the political environment as a significant factor, which managers ranked lowest. Managers tend to attribute turnover to internal organizational factors and employee-related issues, whereas elites highlight the role of environmental and political factors. This discrepancy suggests that elites view the political environment as significantly influencing organizational processes and policies.

Managerial and Practical Recommendations:

1. **Enhance Recognition of Talents:** Develop programs to highlight the contributions and importance of elite employees' work.
2. **Establish a Reward System for Unique Skills:** Create recognition and reward programs for employees with exceptional skills, including certifications, financial incentives, or exclusive project opportunities.
3. **Streamline Bureaucratic Processes:** Form a task force to identify and simplify bureaucratic procedures using methods like Six Sigma or Lean

Management to eliminate unnecessary steps and increase efficiency.

4. **Develop Transparent Policies for Appointments and Promotions:** Create clear, documented policies for appointments and promotions, emphasizing fairness and merit-based decisions. Conduct sessions to communicate these policies to employees to build trust.
5. **Conduct Future Research:** Investigate the drivers and barriers to elite turnover and explore retention strategies across diverse industries and regions.

This research highlights the need for organizations to align their policies, leadership, and work environments with employees' expectations, values, and aspirations to retain elite talent effectively.

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Authors equally contributed to this article.

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Declaration of Interest

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Ethical Considerations

All procedures performed in this study were under the ethical standards.

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