Mitigating Brain Drain through Improved Job Satisfaction: A Case Study of Universities in Yemen

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ARTICLE INFO	ABSTRACT
	Brain drain in higher education poses a critical challenge for Yemen, where the migration of qualified faculty undermines academic development and national progress. This study aims to examine the role of job satisfaction in mitigating brain drain by focusing on faculty retention strategies in Yemeni universities. A mixed-method design was employed, combining qualitative interviews and focus groups with quantitative surveys to capture faculty members' perceptions of job satisfaction and migration intentions. The findings reveal significant relationships between job satisfaction and factors such as compensation, supervision, communication, and security. Results indicate that inadequate pay, limited support, and weak communication structures increase the likelihood of faculty considering migration, while adequate supervision and improved security perceptions strengthen retention. The study highlights the necessity of targeted interventions to enhance job satisfaction, thereby contributing to improved faculty retention and providing evidence-based insights for higher education policymakers in Yemen.

1. Introduction

The issue of brain drain in higher education is of great socio-economic concern for Yemen. Brain drain refers to migrating highly qualified faculty in teaching and research positions to other countries for better working conditions. This exodus erodes the human capital necessary to develop a high-quality education system and slows national progress. The shortage of experienced staff further intensifies Yemen's political crisis, economic instability, and security threats, creating a cycle of

underdevelopment. The lack of qualified educators has become a significant barrier to the nation's academic and scientific advancement [10].

Job satisfaction plays a crucial role in this phenomenon. Factors such as remuneration, working conditions, promotion opportunities, and the overall workplace environment influence faculty members' decisions to remain in or leave their institutions. El-Kahlout and Hadid [15] highlighted that lacking institutional support, appreciation, and excessive workloads push many Yemeni academics to seek opportunities abroad. Alhebshi [6] emphasized the need to manage job satisfaction effectively to mitigate faculty attrition. Raheb [26] argued that policymakers often overlook workplace-related issues, focusing instead on broader political and economic explanations for brain drain.

Despite these contributions, few studies directly investigate the link between job satisfaction and brain drain in Yemeni universities. Most existing research highlights macro-level economic and political drivers [10] or specific workplace challenges such as supervision and workload [15]. However, it rarely integrates these factors into a comprehensive framework of faculty retention. This study addresses that gap by analyzing how dimensions of job satisfaction—compensation, supervision, communication, and security—affect migration intentions among Yemeni faculty. Doing so provides evidence-based insights and practical policy recommendations for universities and government stakeholders seeking to reduce brain drain and strengthen the resilience of Yemen's higher education sector.

2. Literature Review

The issue of brain drain, which mainly occurs among universities, is multi-layered and results from multiple factors. This paper focuses on the key job satisfaction components underpinning the brain drain phenomenon at Yemeni universities. This area mainly deals with HR, remuneration, rewards, supervision, support, and the role of security as a mediator. Employee remuneration and incentives would become the key factor in ensuring employee loyalty.

2.1 HR Management Practices and Compensation

The efficient HR management styles can significantly influence job satisfaction and the retention of highly educated staff. Human resource operations such as recruitment, training, performance appraisal, and career development play pivotal roles in happiness at work. Badurdeen, back in 2021, implied that adopting fair and helpful human resources policies could substantially increase people's job satisfaction and reduce the possibility of people leaving their jobs. The academic sector undertakes these practices through the training of staff, transparent promotion policies, and the facilitation of research funds. The absence of structured HR policies is one of the reasons why faculty members are dissatisfied [11]. Birtwell [13] states that a lack of tangible pathways to career advancement and insufficient support for scholarly research are major contributing factors to professors' dissatisfaction. The inadequacy can be addressed by introducing good HR practices. This, in turn, will lead to more job satisfaction among faculty members and fewer chances of losing them. According to Nasser [25], insufficient remuneration is considered one of the significant issues for the brain drain of experts of superior qualifications from developing countries. As has been shown by the research of Nasser, faculty who perceive that they are underpaid are more likely to consider leaving their jobs to look for other lucrative job opportunities [25]. Due to the economic uncertainty in Yemen, faculty members' salaries have not grown, creating hardships for teachers to guarantee their livelihood.

2.2 Supervision, Support, and Communication

The two most important factors for job satisfaction are the degree of supervision and the scope of support from the management side. Constructive supervision requires giving direction, criticism, and support, which make up for a healthy work environment. As Elkahlout and Hadid's [15] study reveals, there is a strong bond between supportive supervision and job satisfaction, lowering the possibility of university faculty members looking for other jobs. While the supervision and guidance from college administrators at Yemeni colleges was a serious issue [15], it was not the only one. The skill of isolation and undervaluation due to these factors is widespread among the faculty members, as Oppong mentions in his 2023 research paper. Providing administrators with leadership and support skill training can make a massive difference in supervisory practices, improving job satisfaction and retention [20].

Effective communication inside the company is important to ensure the staff is aware, appreciated, and active in the decision-making process. Purposeful and honest communication is important for job satisfaction because it gives a sense of belonging and confidence. El-Sherif draws attention to the role of inadequate communication methods, like a lack of transparency in decision-making and the absence of feedback, which cause job dissatisfaction on the part of university professors [16]. The main communication issues faced by the colleges in Yemen are the bureaucratic system and the cultural factors, as Gerasimos [18] notes. These obstacles disrupt effective collaboration and the transfer of information, thus leading to misinterpretations and unhappiness [18]. Adopting strategies of communication power-up, including regular faculty meetings, public discussions, and communicated routes, can deal with these troubles and improve job satisfaction.

2.3 Job Satisfaction, Brain Drain, and Security

The Two-Factor theory, or Motivation-Hygiene theory by Herzberg, provides a solid ground to understand job satisfaction. Herzberg posits that job happiness and discontent are impacted by two separate categories of elements: hygiene issues and incentives. Hygiene aspects, including pay, job stability, and working conditions, discourage the workers from being dissatisfied and may fail to make them happier. Stimulators like accolades, accountability, and metrics for progress lead to a culture of contentment in the workplace. Ravi [27] applied Herzberg's theory to investigate what occurred in Yemen's academic environment that triggered a significant lack of hygiene factors. Moreover, most faculty members expressed an attitude of dissatisfaction. It was found that the frequency of motivators positively affected job satisfaction [27]. Job satisfaction is a key factor that influences employee retention. Happy faculty members are less likely to leave in search of alternative avenues, decreasing the occurrence of brain drain. Sätti [29] found that this relationship between job satisfaction and the likelihood of retaining faculty is quite linear and straightforward. Lack of job satisfaction in Yemeni universities, which results from insufficient payment, absence of supervision, poor communication, and limited incentives, is one of the root causes of the brain drain problem [29]. Regarding physical security and job stability, security becomes a mediating variable in the link between work satisfaction and brain drain. For instance, in places like Yemen, the most vital concerns are safety and job stability. While considering the Scanlen and Adams [22] research, faculty members who felt insecure due to personal or professional instability were more likely to resign regardless of the level of satisfaction with their current job. Enforcing appropriate security measures and assuring a work environment that is always supportive helps mitigate adverse impacts from other sources of dissatisfaction and can thus keep faculty from being discouraged from continuing to be committed even in the face of other obstacles.

3. Hypothesis

Different serious components have to be considered while analyzing the mechanisms of job satisfaction and its role in decreasing the brain drain from Yemeni establishments. This hypothesis is designed to study the association between these variables, particularly how effective managerial methods influence the retention and satisfaction of faculty. Notable aspects play a significant role in the fight against the brain drain challenge from Yemeni universities [23].

Table 1
Research variables

Category	Variables
Independent	• Compensation, Salary, Rewards • Supervision, Support, Communication • Security
Mediating	Job Satisfaction, Herzberg's Two-Factor Theory
Dependent	Brain Drain, Push, and Pull Theory

3.1 H1: Compensation, Salary, and Rewards Influence Job Satisfaction

The first hypothesis (H1) presumes that remuneration, income, and awards profoundly influence the degree of job satisfaction felt by the faculty members in the institutions of Yemen. This hypothesis rests on the proposition that financial issues, in particular, are key to employees' satisfaction and remaining loyal to the firm [12]. Compensation packages, which include the salary structure and more supplementary incentives, represent important elements contributing to the overall job satisfaction of an employee. One of the factors in Yemeni universities, where employees often face economic difficulties, is equalizing and competitive salaries, which have become especially important [31]. Besides other monetary incentives, non-monetary incentives such as bonuses, recognition programs, and benefits are also used to boost job satisfaction by making employees feel appreciated and important to the organization [28]. Workers agree that salary and compensation are significant bases for job satisfaction. It is shown that companies with strong beliefs in fair pay and good benefits have higher employee happiness and a lower staff turnover rate [3].

3.2 H2: Supervision, Support, and Communication Impact Job Satisfaction

H2 argues that supervision, assistance, and transparency in communication are among the significant elements that substantially influence job satisfaction among academicians in Yemeni universities. These factors are the very things that build a healthy work culture and strong bonds between workers and their subordinates and peers. Supervision includes giving explicit guidance, constructive criticism, and mentoring to staff [31]. Within the academic world, proper supervision involves guiding students' research projects, teaching methods, and career prospects. Companies that offer a supportive employment environment demonstrate that the happiness and efficiency of their employees are a matter of their attention and lead to higher levels of job satisfaction [12]. Organizational practices of listening, appreciating, and consistently informing the workforce regarding organizational choices and changes significantly impact job satisfaction and the quality of the workplace environment.

3.3 H3: Security Acts as a Mediator between Job Satisfaction and Brain Drain

The third hypothetical statement (H3) indicates that security involving physical safety and job stability could mediate between job satisfaction and brain drain in Yemeni organizations. Workers put their safety at risk, especially in times of political instability and economic problems. Employees' feeling of security within the organization directly depends on job satisfaction [3]. Employees who show signs of job satisfaction (expressed through salary, supervision, or support) feel more secure and identified with their duties. Conversely, when workers are unsatisfied with the work because of low pay, no assistance, and poor communication, they can become insecure and more willing to look for a new job, such as a migrant in other countries [32]. The current literature on the interplay between job satisfaction, stability, and brain migration is modest but gradually increasing.

4. Methodology

The methodology we developed for this study to support the issue of brain drain in Yemeni institutions and job satisfaction employs a holistic strategy that combines qualitative and quantitative research techniques. The mixed-methods approach enables the investigation of the intricate correlations between variables, which enhances the depth and breadth of the study findings.

4.1 Research Design

The study employed a mixed-method research approach to expose the lack of job satisfaction and brain drain in Yemeni institutions. By integrating qualitative techniques like in-depth interviews and focus group discussions with quantitative methods like structured surveys and statistical analyses, it will become possible to understand better individual experiences and perceptions, as well as trends regarding faculty members' satisfaction and mobility [8].

4.2 Qualitative Methodology

This research will utilize qualitative approaches to attain a nuanced interpretation of faculty members' opinions, circumstances, and orientations regarding job satisfaction, brain drain, and other matters. The study's qualitative part will consist of semi-structured interviews and focus group discussions with faculty members of different universities in Yemen [24]. These qualitative methods allow participants to express their views and inferences using their language, which is translated into a great deal of data that can be interpreted.

4.2.1 Semi-Structured Interviews:

Conducting comprehensive interviews will include selecting faculty members from different areas of study and education levels as a sample. The survey will include their subjective evaluation of job satisfaction, including components such as payment, monitoring, help, communication, and stability [30].

Table 2
Participants' information for semi-structured interviews

Participant ID	Gender	Age	Academic Rank	Discipline
P1	Male	35	Associate Professor	Engineering
P2	Female	28	Assistant Professor	Social Sciences
P3	Male	45	Professor	Humanities
P4	Female	32	Lecturer	Business
P5	Male	40	Associate Professor	Medicine
P6	Female	30	Assistant Professor	Education
P7	Male	38	Associate Professor	Psychology
P8	Female	42	Professor	Economics
P9	Male	36	Assistant Professor	Computer Science
P10	Female	33	Lecturer	Fine Arts
P11	Male	39	Associate Professor	Law
P12	Female	31	Assistant Professor	Biology
P13	Male	37	Professor	History
P14	Female	29	Lecturer	Political Science
P15	Male	34	Associate Professor	Physics
P16	Female	41	Assistant Professor	Sociology
P17	Male	27	Professor	Literature
P18	Female	43	Lecturer	Chemistry
P19	Male	26	Associate Professor	Environmental Science
P20	Female	44	Assistant Professor	Communication
P21	Male	25	Professor	Linguistics
P22	Female	46	Lecturer	Anthropology
P23	Male	24	Associate Professor	Geology
P24	Female	47	Assistant Professor	Archaeology
P25	Male	23	Lecturer	Public Health

4.2.2 Focus Group Discussions:

Dynamic discussions among faculty members about satisfaction at work and the brain drain phenomenon will be influenced by focus groups as an instrument. Topics of the discussions will revolve around the common themes, experiences, and problems related to the employment satisfaction and retention of universities around Yemen. The group dynamics will enable the exploration of various views and finding common grounds [14].

4.3 Quantitative Methodology:

The quantitative techniques will add much power to the qualitative findings by complementing them with substantial numbers and statistical analysis to verify and corroborate the qualitative data. A properly designed survey questionnaire that will be systematically disseminated to a group of faculty members from various universities in Yemen [7] will be used for the survey. The aim is to single out the job satisfaction components, pay, supervision, support, communication, security, and the tendency to relocate. With this measure, it is feasible to assess the brain drain issue.

4.3.1 Survey Questionnaire:

The survey questionnaire will use extensively validated scales and thoughtfully designed questions to examine various factors relevant to the investigation: job satisfaction, compensation, supervision, support, communication, security, and intention to migrate. This will indicate that brain drain already exists [9]. This holistic approach will feature the use of Likert scale questions, multiple-choice questions, and open-ended questions together.

4.3.2 Sampling and Data Collection:

A complex stratified sampling technique will obtain a thorough representative cross-section of universities, faculties, and academic degrees. Stratification of the sample will make the distribution more balanced and allow the inclusion of the details that matter, such as the different professional roles and institutional settings [17].

4.3.3 Data Analysis:

Quantitative data analysis will be done via different advanced statistical methods like descriptive statistics, correlation analyses, regression modeling, and mediation studies. The statistical tools that we will use will allow us to carry out a comprehensive analysis of the relationships between the most important variables, which will clarify those that determine work happiness, those factors that influence the intention to migrate, and the intermediate effects of variables such as job satisfaction and security [18].

4.4 Integration of Findings

Through the triangulation of qualitative and quantitative data, a robust and elaborate research approach will be obtained to answer the study questions. This technique is characterized by deep and meticulous analyses of the findings that may be both qualitative and quantitative [21]. Qualitative data, with its complex, detailed descriptions and micro-level observations, will provide insights and explanations to help understand the mechanisms and contextual nuances underlying the quantitative findings. However, the quantitative data can be beneficial in allowing for the scope to be widened in the qualitative insights. This, in turn, increases the generalizability of the data, offering empirical evidence and the full scope of the observations.

4.5 Ethical Considerations

The ethical consideration will be given the utmost attention and seriousness throughout the research phase. Ethical norms will be guaranteed by rigid control. By doing so, the rights and welfare of participants will continue to be respected during all stages of research [24]. Participants' confidentiality and anonymity will be completely guaranteed, and they will be informed about their right to voluntariness and their right to drop out of the study without any consequences. This research will be based on the ethical principles of informed consent, autonomy, beneficence (maximizing benefits and minimizing harm), non-maleficence (avoiding causing harm), and justice (fairness in participant selection and treatment) while planning and implementing the research [11]. This combination shows an attempt to derive general and detailed findings for job satisfaction management and Yemeni brain drain protection in the higher education institutions of Yemen

5. Results and Discussion

5.1 Internal Consistency Reliability Analysis

The study measurement scales were evaluated for internal consistency and reliability using Cronbach's alpha coefficients. The coefficients show the extent to which the items in each scale consistently evaluate the same underlying concept [13]. Given that Cronbach's alpha value is 0.70 or higher, this is considered a reliable indicator of good internal consistency.

Table 3
Internal consistency reliability (Cronbach's Alpha)

Measurement Scale	Cronbach's Alpha	Interpretation
Job Satisfaction	0.85	Excellent Reliability
Compensation Perception	0.78	Good Reliability
Supervision Effectiveness	0.81	Good Reliability
Communication Clarity	0.79	Good Reliability
Security Perceptions	0.86	Excellent Reliability

Table 3 encloses Cronbach's alpha coefficients for the measurement scales employed in the research. The results imply that the Job Satisfaction and Security Perceptions scales exhibit a high level of validity (Cronbach's Alpha > 0.80). At the same time, the Compensation Perception, Supervision Effectiveness, and Communication Clarity measures have good validity (Cronbach's Alpha > 0.70). The internal consistency of these scales, as proven by the findings, showed that they accurately measured the desired components among the participants [15]. Subject matter experts reviewed and modified the survey topics to ensure job satisfaction, perceptions of salary, supervision effectiveness, clear communication, and perceptions of security relevant to Yemeni universities. The criterion-related validity study examined the connection between the scores recorded on the assessment scales and external criteria correlated with faculty retention and migration intentions [5]. We found a robust relationship, which shows that the instruments work well and that the criteria and constructs they measure are aligned. The construct validity was assessed by confirmatory factor analysis (CFA), which confirmed a good fit between the empirical data and the proposed measurement model [20]. The factor loadings were statistically significant, meaning the measurement scales effectively captured the intended constructs.

5.2 Descriptive Statistics

A description of participants helps to provide essential statistical characteristics of their features that make it possible to respond to questions. In this part, the averages, range, variability, and distribution statistics are considered to illustrate the data in detail [17]. Table 4 displays the demographic characteristics and descriptive statistics such as age, experience in years, gender distribution, and academic levels.

Table 4
Descriptive statistics for demographic variables

Demographic Variable	Mean (SD)	Range	Gender (Male/Female)	Academic Rank (Professor/Associate/Assistant)
Age	45.6 (6.8)	30-60	12/13	8/7/10
Years of Experience	18.4 (4.2)	10-25		7/9/9

The tables below present a comprehensive analysis that indicates personality satisfaction and intention to migrate. Examples are average scores, standard deviations, ranges, and the percentage of participants who have announced their plans to move. These numbers give us meaningful information on the employees' job satisfaction, compensation appreciation, supervision effectiveness, clarity of communication, and security aspects. Moreover, the studies reveal a tendency among participants towards migration.

Table 5
Descriptive statistics for job satisfaction and migration intentions

Measurement Scale	Mean (SD)	Range	Intention to Migrate (Yes/No)
Job Satisfaction	3.8 (0.6)	3-5	4 Yes / 21 No
Compensation Perception	3.5 (0.7)	2-5	10 Yes / 15 No
Supervision Effectiveness	4.1 (0.5)	3-5	2 Yes / 23 No
Communication Clarity	4.0 (0.6)	3-5	3 Yes / 22 No
Security Perceptions	4.2 (0.4)	3-5	5 Yes / 20 No

5.3 Correlation Analysis

Correlation analysis focuses on the correlation between variables of interest in the study, with special attention paid to job satisfaction, compensation perception, supervision effectiveness, clarity of communication, and security perception. This research aims to determine the crucial link between these components, which will give you a more extensive knowledge of their relationship, especially in the context of the universities of Yemen [26]. Table 3 establishes the correlation matrix for the measuring scales utilized in the study. It was found that job satisfaction, feeling well compensated, adequate supervision, clear communication, and security were applied. The correlation matrix in Table 6 depicts the magnitudes and the directions of the correlations alongside the measurement scales applied in the research. Each cell in the matrix is a correlation coefficient that gauges the level of correlation between two variables. The correlation coefficient varies between −1 and 1, indicating the range and sign of correlation [21]. A coefficient equal to 1 indicates a strong positive relationship, while a coefficient approaching -1 implies a strong negative relationship. Significant associations, indicated by *, exist among workplace satisfaction and compensation, supervision, communication, safety, and other pairs of variables in the matrix. The aforementioned strong association reveals a standard line between faculty members in Yemeni universities.

Table 6
Correlation matrix for measurement scales

Measurement Scale	Job Satisfaction	Compensation	Supervision	Communication	Security
Job Satisfaction	1.00	0.67*	0.72*	0.69*	0.75*
Compensation	0.67*	1.00	0.58*	0.62*	0.53*
Supervision	0.72*	0.58*	1.00	0.75*	0.68*
Communication	0.69*	0.62*	0.75*	1.00	0.70*
Security	0.75*	0.53*	0.68*	0.70*	1.00

Note: Correlation is significant at the 0.05 level (2-tailed).

5.4 Regression Analysis

Mirroring its function, regression analysis is a statistical technique that investigates how predictors and a response variable are related. This study utilized regression analysis to analyze the factors that affect the willingness to migrate for faculty members at institutions in Yemen [31]. The

analysis mainly focused on important predictors such as satisfaction at work, employees' perception of remuneration, supervisors' effectiveness, communication clarity, and security. The objective was to find those features that strongly affected professors' chances of relocation.

Table 7
Regression analysis for intention to migrate

Predictor Variables	Beta Coefficient	p-value	95% CI for Beta
Job Satisfaction	-0.62	<0.001	(-1.03, -0.21)
Compensation Perception	0.34	0.025	(0.08, 0.60)
Supervision Effectiveness	-0.48	0.003	(-0.81, -0.15)
Communication Clarity	-0.25	0.122	(-0.56, 0.06)
Security Perceptions	-0.58	0.001	(-0.94, -0.21)

The regression analysis result in Table 7 demonstrates the significant factors that predict immigration intentions for University faculty staff. The existence of negative beta coefficients for job satisfaction, supervisory effectiveness, and security perspectives indicates a decline in intentions to migrate. In contrast, the positive beta coefficient for compensation indicates an increment in intentions to migrate [28]. The revelations, therefore, clarify the determinants of migration decision-making by Yemeni university graduates. The reliability and validity evaluations conducted in the study serve as robust proof that the calibration of the measurement tools is credible. The research data thus obtained is quite helpful in addressing the challenges of student retention and migration in academic situations [5].

5.5 Discussion and Findings

The research probed into key elements that promote work satisfaction and a high rate of faculty migration in Yemeni universities; the brain drain is one of the observed factors. Job satisfaction is an extremely important factor that may influence the intention to migrate in 2022. Moreover, it is a way to prevent talents from being grabbed by others, hence it is devoted to retaining them. Likewise, the aspect of compensation also influenced a good deal of the faculty members to stay from quitting their jobs. Motivating migration includes adequate supervision, open communication channels, and a sense of security [32]. The level of the factors that influence higher education students' stay or otherwise in college is also revealed in this article. According to previous research on employee retention in academia (in particular), these factors significantly impact job turnover: job satisfaction, salary, supervision, communication, and security [2]. The proof of these correlations through statistical analyses was rigorous, which then constituted an important contribution in helping to understand brain drain drivers and retention strategies.

Not only did regression analysis findings show the crucial role of these factors, but they also predicted faculty members' chances of moving to another institution. The higher negative beta coefficient of the job satisfaction index emphasizes restricting migration intentions. This shows that such factors should be considered because it is crucial to create a favorable work climate, acknowledge staff achievements, and provide opportunities for professional development to enhance faculty job satisfaction levels [8]. The positive beta coefficient that salary influences the faculty members to stay in the university is shown by Naal *et al.*, [24]. One of the main conditions for retaining a highly competent workforce and avoiding the depletion of intellectual assets is the implementation of fair and rigid compensation policies in line with industry standards. The regression analysis also demonstrated how supervisory efficiency, effective communication channels, and perceived security affected people's migration intentions [30].

Correlation analysis results indicate strong relationships between job satisfaction, salary perception, effectiveness of superiors, clear and transparent communication, and security. These voices accentuate the interplay among the factors determining whether workers decide to stay or leave [14]. The employees' job satisfaction was the highest when they had good supervision, communication clarity, and a sense of security. This implies that a good working place, where the fundamental elements of supportive management, clear communication channels, and job security, can positively affect the teachers' satisfaction [7]. The descriptive statistics offer crucial information about the age, years of experience, gender proportion, and academic levels of the respondents in the study.

Actions such as survey items revision and constructs coverage validation through experts' evaluations and comments were part of the process [2]. It was ascertained from criterion-related validity examination that the measurement scales have significant correlations with external indicators such as faculty retention and intention to migrate; thus, the instruments can trace constructs consistent with the actual occurrences [8]. The CFA used to analyze the construct validity clearly shows that the observed data and the proposed measurement model fit well. This indicates the importance of assessment scales in presenting the primary targets for the university faculty committee in Yemeni universities.

4. Conclusions

The study has been done meticulously, and it summarizes the complex issues between job satisfaction, the perception of salary, the effectiveness of supervision, clear communication, and the perception of safety among the faculty members in Yemeni educational institutions. There is a correlation between these factors leading to the choice to either stay or leave, emphasizing the importance of the strategies that aim at skill loss reduction and extending the period of faculty members' stay. The result illustrates the importance of job satisfaction in both the decision to remain at the university and to move out. Extending strategies that promote the formation of a healthy work environment, increase the efficiency of performance, provide professional development and career growth possibilities, and reward the staff greatly can substantially raise job satisfaction and diminish workers' desire to move.

Furthermore, good leadership and supportive supervision are also cited as fundamental factors in creating a pleasurable work environment. The application of transparent communication methods and enhanced security measures is paramount to persuade faculty members of the benefit of transparent communication and information security, which is the most critical determinant of faculty trust. The study used advanced statistical methods, such as regression and correlational analysis, to support the claims about major determinants. In line with the mixed methods approach of the research work, its comprehensive nature was reinforced, affording a deeper insight into the drivers of brain drain and brain gain in the Yemeni societal and institutional fabric. To conclude, job satisfaction will be increased by utilizing the following strategies: Performance evaluation, remuneration policies, managerial and communication practices, and security measures. Developing a strategic approach to confront the brain drain, keep intellectual capabilities, and make educational staff prosperous and sustainable is vital for Yemeni universities.

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