

Predictors of Job Satisfaction among Academics in Iranian University

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Abstract

This study investigated the overall level of job satisfaction of faculty engaged in Razi University in Iran. The modified version of the Minnesota Satisfaction Questionnaire (MSQ) was used to elicit information from 128 faculty members using stratified random sampling technique. Iranian faculty members were most satisfied with intrinsic aspects of the work such as "social service", "activity", and "ability utilization" and less satisfied with extrinsic aspect of work such as "security", "university policies, and "compensation". Publication count and tenure (years of teaching experience) contributed significantly to the prediction of overall level of job satisfaction among faculty members. Intervention efforts must involve socializing the faculty at the early stage of their career to engage in research activities and writing for reputable journals, while providing superior monetary compensation and improving job security in order to encourage faculty members to remain in their position.

Introduction

Work, an important aspect of an individual's life, occupies a lot of personal time compared to any other single activity and provides the financial basis for a person's lifestyle. The reason for wanting a job is often considerably more than just a paycheck. Jobs can be looked at as the means used to achieve personal goals. When a job meets or exceeds an individual's expectations, the individual often experiences positive emotions. These positive emotions represent job satisfaction. Job satisfaction in turn is a major contributor to life satisfaction (Smith, 1992), a personal goal that many find worth pursuing. Moreover, it is believed that satisfaction at work influences many aspects of work such as efficiency, productivity, absenteeism, turnover rates, and intention to quit (Baron, 1986; Maghradi, 1999). As a consequence, it is not surprising that job satisfaction is frequently studied phenomenon (Granny et al., 1992). According to Brief (1998), in 1976, there were more than 3,300 research articles and dissertations published on job satisfaction. Two decades later, the desire to comprehend the antecedents and consequences of job satisfaction continued. Brief added that by 1994, more than 12,400 research articles and dissertations had been published on job satisfaction.

To grasp the meaning of a construct like job satisfaction, it seems logical to look at how it is defined in the literature. According to Green (2000), "the search for a universal definition of job satisfaction is not a difficult one; it is an impossible one" (p. 6). Even though many researchers define job satisfaction, the definitions vary. The three definitions most commonly referred to among researchers are Hoppock's, Locke's, and Vroom's. In the thirties, Hoppock's as cited in Green (2000) response to the question "What is job satisfaction?" was: "...any combination of psychological, physiological, and environmental circumstances that causes a person truthfully say, "I am satisfied with my job." Lock's (1976) answer to the same question in the seventies was: "...a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (p. 1300). Vroom (1982), who used the terms "job satisfaction" and "job attitudes" interchangeably, defined job satisfaction as "...affective orientations on the part of individuals toward work roles which they are presently occupying (p. 99). Even though the definitions vary, a commonality among them seems to be that job satisfaction is a job-related emotional reaction.

Two major theoretical frameworks of job satisfaction can be identified in the literature. Framework one is based on content theories of job satisfaction whereas framework two is grounded in process theories of job satisfaction. Content theories specify the particular needs that must be satisfied or the values that must be attained for individuals to be satisfied with their jobs (Lock, 1976). Among the most influential theories are the Herzberg's (1966) two-factor theory and the need-based theories. According to the first theory, the presence of certain factors ("motivators; e.g., achievement, increased responsibility, and recognition) leads to job satisfaction, whereas absence of another set of factors ("hygienes;" e.g., pay, status, working environment) leads to job dissatisfaction. Absence of the "motivators" or presence of "hygienes" factors has neutral effect on job satisfaction.

On the other hand, need-based theories focus on the individuals (e.g., McClelland, 1961). These theories postulate that a job can be a source of satisfaction if it can fulfill several of the individual's needs that are important to them. Thus, job satisfaction is a function of the extent to which one's needs

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are satisfied in a job. In that respect, researchers try to identify facets of job satisfaction, which satisfy specific needs of job holders. Based on the above theories, many instruments have been developed to measure employees' job satisfaction. The Minnesota Satisfaction Questionnaire (Weiss et al., 1967) and the Job Descriptive Index (Smith et al., 1969) are among the most popular instruments for measuring job satisfaction (Cherrington, 1994) and have been derived from need-based satisfaction theories.

Studies on job satisfaction of faculty have been carried out over the last decades. Some of these studies explore relationships between job satisfaction and intrinsic characteristics of the work, such as, advancement, recognition, supervision, challenge, and the relationship with co-workers. The findings tend to confirm the idea that university faculties are generally satisfied with their jobs. Moreover, Mertler (1992) and Heller et al., (1992) reported that satisfied teachers were more productive, motivated their students more, and increased student achievement. In a recent study, Castillo and Cano (2004) found that the factor "work itself" was the most motivating aspect for agricultural faculty and "working conditions" being the least motivating aspect of faculty member's jobs. Truell et al., (1998) found "work itself" reflected the highest level of satisfaction for both part-time and full-time occupational-technical faculty, a finding that agrees with that of Castillo and Cano (2004).

The impact of background characteristics (e.g., gender, age, years in current position, total years teaching, degree status, and tenure status) has also been investigated by researchers. For instance, Castillo and Cano (1999) found that demographic characteristics were not related to the overall level of job satisfaction among faculties. This is in accordance with the findings of Milosheff (1990), Filan et al., (1986), and Riday et al., (1985). However, Hutton and Jobe's (1985) results showed that women faculty seemed to be more satisfied than men while Hill (1986) found that women tended to be less satisfied than men on several job dimensions and as degree level of faculty increased, so did level of job satisfaction. Another demographic variable that has influenced job satisfaction among faculty members has been tenure status. In general, tenured faculty members have reported higher job satisfaction than have tenure-track faculty members (Clark, 1986; Sanderson et al., 2000; U. S. Department of Education, 2001), but faculty at institutions with no tenure system have reported higher job satisfaction than faculties in tenured or tenure-track positions (Sanderson et al., 2000; U. S. Department of Education, 2001). Other studies relate the job satisfaction of faculties to job related stress. Blackburn et al., (1986) indicated that job related stress is positively related to job related strain which then negatively impacts the health, life satisfaction, and job satisfaction of university faculty and adminis-

trators. They also found that personal factors, social support systems, and health fitness of faculty and administrators moderate the negative relationships between job strain, health, life satisfaction, and job satisfaction, a finding that agrees with that of Diener (1985).

This study was conducted for two reasons. First, the vast majority of studies on job satisfaction are associated with faculty in North America. However, the need to examine job satisfaction within different cultural contexts has been identified (Line and Kinnell, 1993). Yet, no study has examined job satisfaction among faculty in Iranian Universities. Second, Iran has the highest rate of brain drain in the world. According to International Monetary Fund (IMF), which surveyed 91 countries, every year, 150,000 educated Iranians leave their home country to pursue better opportunities abroad (Kamyab, 2007). Moreover, between 1999 and 2002, 285,000 qualified, well-trained Iranians migrated to other countries (Javadian and Dastmalchian, 2003). Most of these well-trained, qualified individuals are university faculty seeking favorable working conditions and expectations of better conditions in the recipient country. For these faculty members, economic hardships is not the only reason to leave their country, the intellectual atmosphere at universities does not encourage qualified faculty members to remain. Kamyab (2007) concluded that a large number of university faculties who go abroad on sabbaticals contact their home institutions requesting unpaid leave, a tacit way of acknowledging they intend to stay abroad. According to Kamyab (2007), officials attribute this to low level of job satisfaction because of insufficient resources, including poor research facilities and laboratories, a lack of new books, uneasy access to internet, and low salaries. As an attempt to fill this gap, the present study was conducted on faculties in Razi University in Iran to examine the job satisfaction experienced by Iranian faculty members. More specifically, the objectives of the study were:

- 1) To validate the Minnesota Satisfaction Questionnaire in the context of Iranian faculties.
- 2) To provide a demographic profile of Razi University faculty members
- 3) To assess facet-specific levels of job satisfaction among faculty members in Razi University
- 4) To determine the overall level of job satisfaction among Razi University faculty members.
- 5) To determine the amount of variance in faculty member's overall level of job satisfaction explained by selected demographic variables.

Procedure

Population and sample

The study was a descriptive survey design. This type of research was grounded in the need to describe and interpret the current status of job satisfaction

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among Razi University faculty. The target population for the study included all faculty members in Razi University (N = 259). The frame was established from the most current list of faculties in Colleges of Agriculture, Veterinary Science, Biological Science, Engineering, Physical Education, Literature and Human Sciences. College of Agriculture has 800 students and was established long before other colleges in Razi University. Its student-centered learning approach has made it a unique college in the western region of Iran. The so called "Learn and Lease Approach" (Zarafshani, 2006) was introduced by faculty members to enhance students' experiential learning abilities. This model encourages students to lease a small land on campus and practice farming through learning by doing. Several colleges of agriculture across the country have used this model since its introduction in 1991 to increase students' motivation to stay in college and upgrade their employability skills. The frame of the study consisted of stratified random sample of 155 faculty members across six colleges. This sample represents a 5% margin of error at the 95% confidence level (Krejcie and Morgan, 1970). To address nonresponse error in this study, early and late respondents were compared for statistical differences. Late respondents were defined as the later 50% of the respondents (Lindner et al., 2001). There was no statistically significant difference between early and late respondents. Therefore, the resulting sample is representative of the entire population targeted in the study.

A packet containing an instrument and a cover letter describing the purpose of the study was hand delivered to each faculty member in the respective departments. Two weeks following the first delivery, a follow up phone call was made to each participant. A total of 128 accessible faculty members returned questionnaires yielding an overall response rate of 83%.

Instrumentation

The modified version of Minnesota Satisfaction Questionnaire, long form (MSQ) (Weiss et al., 1967) was used to assess faculties' job satisfaction. Since MSQ was developed in North America, translating it was deemed important. However, translating research instruments to another cultural context with people speaking different languages is a complex and difficult task (Candell and Hulin, 1987). Moreover, Cross-cultural research has systematically shown that concepts or ideas present in one culture are not necessarily present or as meaningful in another (Sperber et al., 1994). Therefore, in translated instruments, one must use a rigorous methodology to establish the relevance of the instrument in the new culture before

they can be considered valid. In order to meet the first objective of the study, we used back-translation technique as suggested by Sperber et al., (1994), to translate the MSQ from English into Persian and back-translated by bilingual translators. Finally, a consensus was formed to produce the final translation. In addition, few modifications were made focusing the instrument to meet the context pertaining to faculty members in Razi University. The basic building blocks of the MSQ are 100 items also known as re-enforcers.

The 100 items are designed to measure satisfaction with 20 facets of the work environment that corresponds to 20 psychological needs (see Table 1). Each of the 20 facets is measured by the sum of five items which are rated on a 5-point Likert scale (very dissatisfied, 1; dissatisfied, 2; neither dissatisfied nor satisfied, 3; satisfied, 4; very satisfied, 5). The job security facet, for example, is measured by the following five items excerpted from Minnesota Satisfaction Questionnaire (MSQ): (a) My job security, (b) the way my job provides for a secure future, (c) the way my job provides for steady employment, (d) how steady my job is, and (e) the way layoffs and transfers are avoided in my job. The MSQ was accompanied by questions regarding demographic characteristics.

Although there were many instruments to measure job satisfaction, MSQ was preferred for several reasons. The MSQ allows the computation of more facet-specific levels of job satisfaction than any other reputable instrument as well as the computation of general job satisfaction. The general satisfaction scale consists of the following twenty MSQ items: 24, 25, 28, 30, 35, 43, 51, 61, 66, 67, 69, 72, 74, 77, 82, 93, 96, 98, 99, and 100 (Weiss et al., 1967). Measurement of the facet-specific levels of job satisfaction potentially provides knowledge about what aspects of the work environment ought to be changed in an effort to support organizational effectiveness.

Table 1. Facets of job satisfaction.

1. Ability utilization: The chance to do something that makes use of my abilities.
2. Achievement: The feeling of accomplishment I get from the job.
3. Activity: Being able to keep busy all the time.
4. Advancement: The chance for advancement on this job.
5. Authority: The chance to tell other people what to do.
6. Company policies and practices: The way company policies are put into practice.
7. Compensation: My pay and the amount of work I do.
8. Co-workers: The way my co-workers get along with each other.
9. Creativity: The chance to try my own methods of doing the job.
10. Independence: The chance to work alone on the job.
11. Moral values: Being able to do things that don't go against my conscience.
12. Recognition: The praise I get from doing a good job.
13. Responsibility: The freedom to use my own judgment.
14. Security: The way my job provides for steady employment.
15. Social service: The chance to do things for other people.
16. Social status: The chance to be "somebody" in the community.
17. Supervision-human relations: The way my boss handles his/her workers.
18. Supervision-technical: The competence of my supervisor in making decisions.
19. Variety: The chance to do different things from time to time.
20. Working conditions: The working conditions (Weiss et al., 1967, p. 1)

The second reason for selecting the MSQ was that the instrument has been used in a variety of settings, is internationally recognized, and has been reported as being reliable and valid (Cook et al.,1981). Content and face validity were established by a panel of experts consisting of faculties in Open Universities in Kermanshah province. Each of the experts on the panel was asked to examine the instrument for content, clarity, wording, length, format, and overall appearance prior to implementing the study. The Cronbach's alpha was computed to measure the internal consistency of the 20 MSQ scales used in this study. The reliability coefficients ranged from 0.86 for the responsibility scale to 0.72 for the security scale (see Table 2).

Results

For the second objective of the study, we provided a profile of Razi University faculty members. The mean age for faculty was 44 years (SD = 7.7). The mean years of teaching experience was 13 years (SD = 2.1). Sixty percent of respondents were native faculty (born and raised in Kermanshah province) whereas 40% were non-native faculty (born and raised in other provinces). As far as faculty ranks were concerned, almost 2% of the respondents were professors, 8% associate professors, and 48% assistant professors. The remaining 42% hold a master degree and therefore considered as lecturers. Moreover, six college faculties were presented in the sample: College of Biological Sciences with 47 members (30%), College of Agriculture with 28 members (18%), College of Veterinary Science with 6 members (4%), College of Engineering with 28 members (18%), College of Physical Education with three members (2%), and College of Literature and Human Sciences with 43 members (28%). Average publication count for the faculty was 6, whereas 45% of faculty members advised graduate students in their thesis.

For the third objective, the researchers sought to determine facet-specific levels of job satisfaction among faculty members. Table 3 presents a hierarchy of the 20 facet-specific MSQ scales. The mean and standard deviation for each scale are documented. Job facets of relatively greater satisfaction included intrinsic factors such as social service, activity, and ability utilization as reflected by their means of 4.27, 4.05, and 4.00, respectively. Job facets of relatively lesser satisfaction included extrinsic factors such as security, university policies, and compensations as reflected by their means of 3.03, 2.97, and 2.55, respectively.

For the fourth objective, overall level of job satisfaction was determined. Based

Table 2. Cronbach's alpha reliability coefficients for MSQ scales

Scales	Cronbach's alpha reliability coefficients
Ability utilization	0.84
Achievement	0.79
Activity	0.80
Advancement	0.84
Authority	0.77
Company policies and practices	0.84
Compensation	0.85
Co-workers	0.80
Creativity	0.81
Independence	0.82
Moral values	0.78
Recognition	0.85
Responsibility	0.86
Security	0.72
Social service	0.83
Social status	0.82
Supervision-human relations	0.85
Supervision-technical	0.83
Variety	0.79
Working conditions	0.85

Table 3. Means and Standard Deviations for job satisfaction subscales for faculty members (N=128)

Scale	Mean	S.D	Rank
Social Service	4.27	0.27	1
Activity	4.05	0.68	2
Ability Utilization	4.00	0.70	3
Responsibility	3.97	0.81	4
Recognition	3.91	0.64	5
Achievement	3.84	0.63	6
Advancement	3.82	0.55	7
Authority	3.81	0.71	8
Creativity	3.77	0.74	9
Working Conditions	3.74	0.66	10
Moral Values	3.71	0.79	11
Status	3.53	0.59	12
Independence	3.50	0.43	13
Supervision- Human Relations	3.46	0.35	14
Co-workers	3.46	0.45	15
Technical Supervision	3.38	0.97	16
Variety	3.07	0.86	17
Security	3.03	0.88	18
University Policies	2.97	0.65	19
Compensation	2.55	0.79	20

Scale: 1=Very Dissatisfied, 2=Dissatisfied, 3=Somewhat Satisfied, 4=Satisfied, 5=Very Satisfied

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on a five point Likert type scale with responses ranging from very dissatisfied (1) to very satisfied (5), the mean for overall level of job satisfaction was 3.4 (SD = 0.28). This suggests that faculty members were somewhat satisfied with their job. Overall level of job satisfaction, as shown in Table 4, reflect that 22 participants were very dissatisfied, 23 participants were dissatisfied, 38 were somewhat satisfied, 21 were satisfied, and 24 were very satisfied.

For the fifth objective, the researchers sought to determine the amount of variance in faculty member's overall level of job satisfaction explained by selected demographic variables. Prior to step-wise multiple regression analysis, correlations were

publication count and years of teaching experience. According to Cohen (1988), this is a large effect.

Conclusions and Discussion

The findings of this study suggest that Razi University faculties are generally satisfied with their jobs. This result is congruent with the results of several of the previous studies conducted in college environment (Chieffo, 1991; McBride et al., 1992; Truell et al., 1998; Castillo and Cano, 2004; Rumberger and Radhakrishna, 1991). "The chance to do things for other people" (social service) provided the faculties with the highest level of satisfaction.

This job facet was closely followed by "Being able to keep busy all the time" (activity) and then by "The chance to do something that makes use of my abilities" (ability utilization). The faculties experienced the least job satisfaction with "The way my job provides for steady employment" (security). This facet was preceded by "The way company policies are put into practice" (company policies and practices) and "My pay and the amount of work I do" (compensation). The results provide additional support for the notion that university faculties are most satisfied from the intrinsic aspects of their work and least satisfied

with extrinsic factors external to the faculties' job such as salary in relation to amount of work they perform and universities' rules and regulations. Satisfaction with intrinsic job considerations has been also reported by Matthews and Weaver (1989) and Ben-Porat (1978). These findings are also in accordance to the results of previous studies. Except for activity and ability utilization, Green (2000) in a study of community college faculty found that social service was among the most satisfying factors. Dissatisfaction with compensations and company policies and administration have also been reported by Rumberger and Radhakrishna (1991), Green (2000), and Murray and Murray (1998).

From the multiple regression analysis, it is apparent that age, being native or non-native faculty, advising graduate students, and university rank were not significant predictors of overall level of job satisfaction. This implies that based upon these variables, faculty members are stable with regard to their overall level of job satisfaction. Age was the only variable that was consistent with other studies (Castillo and Cano, 1999, 2004; Thobega and Miller,

Table 4. Frequency distribution of level of job satisfaction among faculty members (N=128).

Level of Satisfaction	Frequency	Percentage	Cumulative Percentage
Very Dissatisfied	22	17.2	17.2
Dissatisfied	23	17.9	35.1
Somewhat Satisfied	38	29.7	64.8
Satisfied	21	16.4	81.2
Very Satisfied	24	18.8	100

Table 5. Stepwise Regression of Overall Job Satisfaction on Selected Independent Variables

Variable	R ²	Δ R ²	b	t	f
Number of scientific publications	.16	.16	0.8	0.41	*.03
Teaching experience	.28	.08	0.6	0.57	*.04
Age	.29	.01	.022	.31	.55
Being native or non-native	.30	.01	.031	.22	.67
Advising graduate students	.31	.01	.020	.21	.69
Tenured non-tenured	.32	.01	.03	.17	.75
Constant			3.48	7.48	.001

*P = 0.05

calculated to describe the relationships between faculty members' overall level of job satisfaction and selected demographic variables. Demographic variables included age, publication count, years of teaching experience, being native or non-native faculty member, university rank, and whether or not the faculty members supervised graduate students. Results indicated that only two characteristics "publication count" (r = 0.71) and "years of teaching experience" (r = 0.51) significantly correlated with overall level of job satisfaction. It appears that the higher number of papers published by faculties and the longer years of teaching experience, the higher was faculty's overall level of job satisfaction.

Step-wise multiple regression analysis was conducted to investigate how well demographic variables predict overall level of job satisfaction among faculty members. Those characteristics that demonstrated significance at p < 0.05 only were presented in Table 5 Publication count and years of teaching experience significantly predicted overall level of job satisfaction. The adjusted R² value was 0.28. This indicated that 28% of the variance in overall level of job satisfaction was explained by

2003; Bowen and Radhakrishna, 1991; Tanova and Nadiri, 2007). According to Tanova and Nadiri (2007), job satisfaction increased with university rank. The present study demonstrates that publication count and tenure (years spent with the employing organization) were the only significant source of variance in overall level of job satisfaction. This finding suggests that faculties with more publications exhibit higher level of job satisfaction. This might be due to publish or perish syndrome (Gad-el-Kak, 1997) in which faculties are in constant pressure to publish in order to survive and prosper. Moreover, faculty performance is usually assessed and rewarded based on scholarly output and publication counts, with less priority being accorded to the performance of teaching and service roles (Massey and Zemsky, 1994; Milem et al., 2000). It appears that not much research has been carried out to understand the relationship between publication output and job satisfaction. However, it is assumed that publication output is a function of job satisfaction. In other words, it is satisfaction that brings productivity in publishing rather than the other way around. Moreover, happy faculties are efficient and productive; therefore, one can assume that if faculties are happy and satisfied, they will become productive in terms of publishing.

Results of the study also show that those with high tenure exhibit higher overall level of job satisfaction. Tenure seems to play a role in job satisfaction of faculties but researchers have not reached a consensus on this issue. For example, (McKee, 1991; Bedeian et al., 1992; O'Rielly and Roberts, 1975) found that there is no relationship between job satisfaction and tenure. However, research done by Bowen et al., (1994), McCaslin and Mwangi (1994), Manthe (1976), Boltz et al., (1995), and Bertz and Judge (1994) found that overall level of job satisfaction increased among tenure faculties. Perhaps an argument in favor of this finding is that tenured faculties are free to teach what they consider to be right without fear of retribution and that they feel their jobs are relatively secure. It might be premature to generalize the findings reported here to all faculty members working in Iranian universities. Moreover, the results of this study may not be generalizable to other types of universities (e.g., public or private), which differ in many aspects from public universities, and thus differences could be observed.

Implications

There is a need for additional research to obtain a better comprehension of the factors affecting job satisfaction of faculties in Iran. Longitudinal research is needed to determine how the level of job satisfaction for faculties in Razi University compares with that of other university faculty over time. Finally, the employment of a wider range of study design and the combination of self-reported instruments with qualitative research methodologies, such

as interviews, will allow for a more in-depth analysis of job satisfaction and its correlates.

Moreover, our findings can be used to show the validity of the MSQ in the context of Iranian faculties. Therefore, it is advisable to use MSQ among other university faculties across Iran to further test the validity of the instrument.

In addition, our findings have major practical implications for policymakers in higher education in Iran. Each year, Iran suffers a major loss of academic elites in the hope of finding better working conditions. The result of this study shows that faculties are least satisfied from the extrinsic job satisfaction dimensions (e.g., salary, university policy, job security) and this might be the reason why each year as many as 150,000 educated Iranians (Kamyab, 2007) leave the country. These so called "flying brains" are costing the government some \$50 billion a year making it comparable to eradication of 10 oil wells. Moreover, it seems that the Ministry of Science, Research, and Technology can enhance faculties' satisfaction by improving the context in which faculties' job is performed. To enhance the context in which faculty members are working, funds should be sought and secured to eliminate the ever growing rate of brain drain in Iran.

Finally, intervention efforts by university administrators or Ministry of Science, Research, and Technology at enhancing the productivity of faculty members must be multifaceted. At the early stage of the faculty career, efforts must be made to socialize the faculty to engage in research activities that are tailored toward the needs of the local environment, instead of engaging in research for the instrumental reason of gaining advancement on the job, or recognition in the academe. To make more satisfied faculties, an advancement criterion that is based solely on works in ISI (Information Sciences Institute) rated publication outlets needs to be reviewed to accommodate works that are relevant in the local environment, and so are published locally. Moreover, since tenure (years of teaching experience) influences peer loyalty and professional orientation of faculties (Ladebo, 2003) and this tends to explain the publication behavior of faculties, university officials should encourage faculties to continue to stay in his or her current place of work. In order to encourage faculties to stay, they should feel that their work is appreciated and that they are provided with superior monetary compensation, access to research facilities, a more substantial role in running the country, and improved job security. Yet another way to encourage faculties to remain is to make use of the knowledge and expertise of Iranian specialists no matter where they are in the world by extending invitations to them to participate in workshops, seminars, and conferences in Iran. By extending opportunities to return home on a short-term basis for the exchange of knowledge and expertise, the government would make the potential brain drain participants aware of the country's urgent need for their services.

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