

Original Article

Job Satisfaction Survey Among Healthcare Providers in Alexandria University Hospitals

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Abstract

Background: Job satisfaction is the positive emotional situation that results from the appraisal of one's job or job experience. Moreover, it is an important predictor of well-being in the workplace, having a direct association with the productivity of healthcare providers and the quality of services provided.

Objective(s): The aim of the present study was to evaluate job satisfaction among healthcare providers in Alexandria University hospitals.

Methods: For the present cross-sectional study, which included 300 medical residents and 200 nurses, quantitative data collection was conducted via the 72-item validated Arabic version of the Job Descriptive Index (JDI) and Job in general scale (JIG), and qualitative data collection was conducted as well.

Results: The findings revealed that the majority of the participants were moderately satisfied. Among the five job satisfaction facets examined, coworkers' facet had the highest level of job satisfaction among both groups followed by opportunities for promotion and the facet of the nature of the current job itself (moderately satisfied), and the lowest level of satisfaction was revealed in pay and supervision facets (unsatisfied). Statistically significant differences were observed between the two groups in the overall JIG and in the pay facet ($p < 0.05$). Spearman rho coefficients were computed to correlate the overall job satisfaction for each facet.

Conclusion: Health-care providers at Alexandria University hospitals were moderately job satisfied except for their pay and supervision. Assessment of job satisfaction in the hospital environment is a cornerstone to create a healthy and safe work environment for healthcare staff to provide a high level of services to health service users.

Keywords: JDI, JIG, job satisfaction, healthcare providers, Alexandria University hospitals

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INTRODUCTION

Job satisfaction has been defined in various different contexts by different authors ^(1,2). The most comprehensive definition of job satisfaction was described by Locke EA who defined it as the pleasurable or positive emotional situation that results from the appraisal of one's job or job experience. Porter and Lawler raised the opinion that job satisfaction was a one-dimensional aspect where one was either generally job satisfied or dissatisfied. However, Smith and Hulin posited that job satisfaction was multi-dimensional ⁽¹⁻³⁾. They argued that one may be more or less satisfied with some aspects of his or her job which may include the supervisor and management, pay, condition of work place and others. Spector (1985) defined job satisfaction as a cluster of evaluative feeling about the job, while Kuhlén and Diboye (1959) looked at it in terms of an individual matching his personal needs with the perceived

potentials of the occupation for satisfying his or her needs and where there was a discrepancy between an individual's needs and what the job offers, there will be dissatisfaction ⁽²⁻⁴⁾.

The term "job satisfaction" refers not only to the personal experience and expectations, individual and social values but also related behaviors, such as motivation, faithfulness, professional fulfilment and are interpreted differently for each individual ^(1,4). Employee job satisfaction is the fulfillment, gratification, and enjoyment that comes from work. It's not just the pay or the benefits, but the feelings of appreciation and satisfaction the employees receive from the work itself ⁽⁵⁾.

The level of job satisfaction among frontline healthcare providers is one of the most studied dependent variables in managerial psychology. It is very important for any healthcare organization, being directly related to better quality of services and the provided care, and patient compliance to treatment.

Human resources should take into consideration the fact that the maintenance of high-level job satisfaction among healthcare providers through motivation patterns has a potential direct effect on the quality of care and services that patients receive^(3,5).

The demand for health care services in Egypt has increased in recent years due to population growth, developments in technology and the planned reforms in the health care system. One of the aims in the Health Reform Program in Egypt is to form a health care workforce who are working with high motivation, and accordingly, started a process to take steps to address the professional development and job satisfaction of health care workers. This process covers several policies such as the application of performance management system, and strengthening the technical, administrative and training capacities, intending to our health care providers. In addition to increasing general job satisfaction, this program aims to ensure that our employees provide better health care services and to use our health care human resources in the most productive way with these implemented policies.

Not only is it important in terms of quality of patient care, but assessing healthcare workers job satisfaction is also a critical component in retaining qualified health professionals specially with the recent evident reluctance of fresh graduates of medical and nursing colleges to serve in university hospitals, or their quitting intent after being employed⁽³⁻⁵⁾. Conducting job satisfaction surveys can capture valuable data and keep a close eye on developments over time and provide healthcare providers with a platform for open discussions with the management. This gives them a voice and allows them to actively shape their work environment through their insights. Managers and employees benefit equally and grow from newly gained insights.

Many Egyptian health care providers feel frustrated and disappointed in jobs they were passionate and excited to find satisfying. They have less time to do a quality job of caring for patients; they are continually expected to achieve their best, but feel their skills are underestimated and underappreciated. This leads to low morale, absenteeism, staff turnover, and overall dissatisfaction with job opportunities in health care^(2,3).

Knowledge of healthcare providers' job satisfaction was also confirmed useful in the prediction of future behavior and wage model. It stimulates employee thinking and awareness about themselves and others. Further, both quantitative and qualitative surveys can objectively and impersonally provide feedback about behavior or attitudes and can serve as the basis for discussion and learning as well as for personal and organizational development^(5,6).

However, despite the importance of job satisfaction in understanding workforce well-being, commitment, productivity, organizational performance and its importance to economies, little attention has been given to job satisfaction studies for this sector in Egypt⁽³⁻⁵⁾.

The objectives of the present study were to assess the extent to which full-time residents and nurses in Alexandria University hospitals are job satisfied, and to identify their commitment attitudes, and perspectives of job satisfaction, quit intent and related factors.

METHODS

Research design and setting

A cross-sectional survey was conducted in Alexandria University Hospitals.

Population and Sample

In this study, the study population refers to the healthcare providers who are currently working full-time in Alexandria University hospitals. A representative sample of study respondents was recruited from the university hospitals; the vast majority (90%) were from the Main University Hospital, Elhadara Nariman and Elshatby University Hospitals.

The sample population was formed by taking the residents and nurses list. The proportional quota sampling technique was adopted. A representative sample of 300 medical residents and 200 nurses serving in Alexandria University hospitals during the period of the study was recruited.

Data Collection and Data analysis

Quantitative and qualitative tools were adopted. The self-administered questionnaire was distributed as online Google Form for the medical residents. The researchers sent an email to each study participant resident which provided a link to the google form of the survey for him/her to fill in, meanwhile the survey was handed directly to nurses to fill and return.

Respondents were certain that their anonymity was maintained as the survey was anonymous.

Study tools (quantitative and qualitative)

Data were collected using a validated Arabic version of the Job Descriptive Index (JDI) including its related scale the Job in general scale (JIG)⁽⁶⁻¹²⁾.

Since the official introduction of the JDI by Smith et al. (1969), researchers have continuously worked on improving the scale. These included confirming the factor structure of the JDI in a racially diverse sample by Smith & Rollo, in 1974, establishing and justifying the validity of the JDI response format in comparison with Likert scaled format by Hanisch in 1992, and frequently updating the item content, validity evidence and national norms of the JDI in 2010. Reasons for its

popularity include the measure comprehensibility by workers of different educational levels, its simplified response format, and the availability of norms ⁽⁶⁾.

Reliability and Validity of the JDI and JIG ^(4,9,13): Reliability of JDI was proved good in previous studies where Cronbach alpha score ranged for different facets from 0.78- 0.89 (0.7 is satisfactory) and high consistency ^(9, 13).

The coefficient alpha values for the JGI reliability ranged from 0.82 to 0.94, meanwhile, for the validity, the job general satisfaction correlated positively with affective organizational commitment, trust in management, satisfaction with the job itself and satisfaction with supervision and promotion opportunities and pay ^(9,13).

The provided questionnaire in the present study comprised three parts:

- The Job Descriptive satisfaction (JDI and its related JIG scale),
- Sociodemographic data sheet that captured respondents sex, age, job, department and hospital, marital status and children, and years of experience.
- Qualitative data collection: 4 questions about possible reasons behind reluctance, dissatisfaction or quitting intent of healthcare providers from their job, and recommendations to improve job satisfaction and retention.

The questionnaire took 15 minutes to complete.

The Job Descriptive Index (JDI) is a 72-item instrument designed to measure five facets of job satisfaction: satisfaction with supervision (18 items), coworkers (18 items), pay (9 items), promotional opportunities (9 items), and the current work itself (18 items). Each item consists of an adjective or a phrase. The JIG is an 18-item scale that measures overall global job satisfaction ^(6,13,14).

Based on the manual on proper usage of the JDI ⁽⁶⁾ received via email, the participants responded to JDI and JIG by marking “yes” if the item describes their job, “no” if it does not, and “?” if the respondent cannot decide, scored 3, 0, and 1, respectively. A JDI facet score and a JIG score was calculated for each respondent by summing the values for the items in each JDI facet and the JIG.

Overall scores for the Supervision, Coworkers and Work facets of the JDI and the JIG were compiled by summing the values of the 18 items. Two of the JDI facets, Pay and Promotion, have only 9 items. For these two facets only, the final scores were calculated by summing the value of the 9 items on each facet and doubling the sum to produce final scores. This doubling of the two shorter facets effectively equates the lengths of all JDI and JIG scales. Hence the range of possible scores on each scale is 0 to 54. The “?” was always scored in the negative direction. ⁽¹⁵⁾. To ensure that higher scores reflected higher levels of

satisfaction, negatively worded items were reverse scored.

The JDI and JIG among both groups were classified as being dissatisfied if the sum of scores for the facet or the JIG was between 0-27 (50%), while 28-41 (75%) was moderately satisfied and 42-54 was highly satisfied ^(5,12).

After completing data collection, the raw data were cleaned, scored (Each JDI facet was scored separately. The JIG provided an overall measure of job satisfaction). Data were entered into SPSS 22 system files (IBM Corp). Quantitative variables were examined for normality of their distribution. The appropriate descriptive and analytic statistics were used for interpretation of the results at 5% level of significance. Spearman rho coefficients were computed for correlating the overall job satisfaction levels and each facet of JDI.

Pilot study: Prior to distributing the survey to the entire sample, a pilot study was carried out. This kind of test run revealed unanticipated problems with question wording or the attitude of respondents toward the study, and estimated their response rate, detected various difficulties encountered at the execution of the study so as to avoid and/ or to deal with, and finally estimated the time needed to obtain the required information.

Ethical Considerations

The study participants received a cover letter with the aims of the study and were informed beforehand regarding the conditions of participation, that approval was voluntary and confidentiality of data handling. Ethical committee of Faculty of Medicine approved the study. Alexandria University also approved the study.

RESULTS

Of the outreached medical residents, currently serving, as full time, in one of Alexandria University hospitals during the period of the study (April 2023 through July 2023), 300 residents responded, giving a response rate of 75 %, and 200 nurses with a response rate of 80%.

In the demographic data of the respondent residents (Table 1) more than two thirds of them were males (n = 200; 66.7 %), between the ages of 25–29 years, married (n = 225; 75 %). Around a quarter of them did not have children (n = 78; 26 %). More than half of the residents were in their 2nd-3rd year of residency (55%). Twenty-three different departments were included, 66.6% of the enrolled residents were from general surgery, ophthalmology, gynecology and obstetrics, neuropsychiatry and orthopedic surgery, and 6% preferred not to mention their department.

Meanwhile, for the nurses, they were all females between the ages of 25–45 years, married (n = 120;

60%). 51% of them have 2-4 children (n = 102). Half of the nurses have been working for 5 years or more and almost one third of the nurses have been working in Alexandria hospitals for more than 10 years (n=65,32.5%).

Table 1: Distribution of residents and nurses of Alexandria University Hospitals by demographic data

Variable	Medical Residents (n=300) No. (%)	Nurses (n=200) No. (%)
Sex		
Males	200 (66.7%)	0
Females	100 (33.3%)	200 (100%)
Age (years)		
Min-max	25-29	25-45
Mean SD	26 ± 0.77	30 ± 3.12
Marital status		
Single	70 (23.3%)	60 (30%)
Married	225 (75%)	120 (60%)
Divorced	5 (1.6%)	20 (10%)
Having Children		
None	78 (26%)	98 (49%)
Yes	222 (73%)	102 (51%)
Years of Working		
<5 years	300 (100%)	100 (50%)
≥5 years	0	100 (50%)

- Job Satisfaction Questionnaire (JDI and JIG)

The mean scores of the different facets and the overall job satisfaction score are presented in Table 2.

As the table demonstrates, co-workers facet had the highest level of job satisfaction among both groups (highly satisfied) followed by opportunities for promotion and present job satisfaction (moderately satisfied). Meanwhile, the lowest level of satisfaction was observed in pay and supervision facets (unsatisfied).

Regarding the general job satisfaction score, both groups were moderately satisfied, however the nurses were significantly more satisfied than the residents). The overall satisfaction of all respondents was moderate (Mean score: 31.32 ± 1.58).

Statistically significant differences were observed between the two groups in the overall JIG and in the pay facet (p<0.05).

To determine the main JDI facets that were correlated with overall job satisfaction or dissatisfaction, the relationship between overall job satisfaction for all respondents and job facets was analyzed (Table 3). Spearman's ratio demonstrated that the strongest correlation factor was in payment and relationships with co-workers (0.82 and 0.81 respectively), other facets that influenced satisfaction were Opportunities for promotion and high

management supervision and present job conditions (0.72, 0.71, 0.70 respectively).

Table 2: Mean scores of the five facets of JDI and JIG among residents and nurses of Alexandria University hospitals

Domain of JDI survey (0-54 for each facet & JIG)	Residents (n=300) Mean ± SD	Nurses (n=200) Mean ± SD	All respondents Mean ± SD
Job satisfaction overall (JIG)*	29.78±1.77	33.87±3.34	31.32±1.58
Coworkers	41.86±0.77	41.90±0.66	41.88±0.82
Present Job satisfaction	29.67±0.29	29.04±3.13	28.08±1.89
Pay*	17.08±2.34	26.09±0.08	21.17±1.68
Opportunities for promotion	31.22±0.80	33.55±0.17	32.25±0.35
Supervision	26.09±2.34	24.05±0.07	25.25±1.28

*Differences between the two groups were statistically significant using t test (P <0.05)

Table 3: Correlation between overall job satisfaction and each facet of JDI by Spearman for the enrolled residents and nurses of Alexandria University hospitals

JDI facet	Spearman correlation coefficient	P-value
Coworkers	0.81	0.001
Pay	0.82	0.001
Opportunities for promotion	0.72	0.001
Supervision	0.71	0.001
Present Job satisfaction	0.70	0.001

- Qualitative data collection

Regarding the reasons behind dissatisfaction and quitting of healthcare providers, and their recommendations for job satisfaction, Table 4 shows that 80% of the residents and 90% of nurses knew other residents or nurses who quit their practice or refused to take the job from the start. Upon asking the respondents about the potential reasons in their opinion for dissatisfaction or quitting, the vast majority mentioned leaving their jobs for better opportunities in private sector or in another well-paying country, insufficient pay and reimbursement in the university hospitals especially with the economic inflation, short-staffed departments and associating over workload, and unrecognized by the management head or bodies. Other factors that contributed to less extent were the aftermath of COVID pandemic, workplace safety threats and culture, and social reasons.

More than half of the enrolled residents and nurses (56% and 55% respectively) experienced burnout during their practice and dissatisfaction that ever made them want to leave their job. They coped differently by spending time with their friends or overeating or exercising or just doing nothing. Table 4 demonstrates

respondents' recommendations to increase job satisfaction. Pay raise with compensations and incentives came at the top of the list followed by management and seniors' recognition and appreciation and increase staffing to avoid burnout then other recommendations.

Table 4: Qualitative responses to job satisfaction of residents and nurses of Alexandria University hospitals

Question*	Residents	Nurses
	No. (%)	No. (%)
1- Do you know colleagues who refused to start their job as resident/ nurse, or they quit after they got the job		
Yes, I know	240 (80%)	180 (90%)
No, I never met any	60 (20%)	20 (10%)
2- In your opinion what has contributed the most for burnout or quitting their job in the hospitals?		
- Finding better opportunity (private hospital/ another country)	240 (80%)	180 (90%)
- Insufficient pay/ declining reimbursement	240 (80%)	180 (90%)
- Short-staffed department	150 (50%)	110 (55%)
- Unrecognized or not well appreciated by the management	120 (40%)	110 (55%)
- Tremendous workload and poor work-life balance	120 (40%)	110 (55%)
- Safety threats in workplace (ex. Pregnancy risks, radiation...etc.)	15 (5%)	50 (25%)
- The aftermath of COVID pandemic	30 (10%)	25 (12.5%)
- Lack of autonomy/ career control	15 (5%)	10 (5%)
- Family reasons	10 (3.3%)	100 (50%)
- Poor relationship with seniors, colleagues	10 (3.3%)	20 (10%)
- Specialty stresses or frustration (ex. Oncology)	10 (3.3%)	20 (10%)
- The economic inflation and unchanged salaries	10 (3.3%)	25 (12.5%)
- Workplace culture	5 (1.6%)	25 (12.5%)
- A lack of time to recover from traumatic experiences	5 (1.6%)	5 (2.5%)
3- Have you ever intended to quit?		
Yes	168 (56%)	110 (55%)
No	130 (44%)	90 (45%)
If yes, how do you cope with this job dissatisfaction and burnout?		
- Spending time with friends and family	80 (53.3%)	50 (45.4%)
- Eating junk food/ Overeating	20 (13.3%)	10 (9%)
- Exercising	10 (6.6%)	5 (4.5%)
- Nothing, so as not to be judged negatively	40 (26.6%)	45 (40.9%)
4- What are your recommendations to increase job satisfaction?		
• Pay raise	300 (100%)	200 (100%)
• Compensations and incentives	300 (100%)	110 (55%)
• Well recognized and appreciated by the management	150 (50%)	100 (50%)
• Increase staffing levels to reduce workload	100 (33.3%)	180 (90%)
• Better work/life balance	90 (30%)	180 (90%)
• Periodic surveys for job satisfaction and job problems	80 (26.6%)	100 (50%)
• Workplace good communication	15 (5%)	10 (5%)
• The need for a considerable higher wage scale for seniority	5 (1.6%)	30 (15%)
• Developmental opportunities	5 (1.6%)	25 (12.5%)

*: Values are not mutually exclusive

DISCUSSION

The healthcare organization needs to recruit competent healthcare providers, and to invest in their training and capacity development so as to assure their efficacy. Thus, their level of satisfaction cannot be underestimated to fulfill individual, team or organizational goals, and as an important predictor of turnover and retention, absenteeism, psychological

well-being, and the whole achievement of the healthcare system^(4,7,13). In 2016, the World Health organization, through the Global Strategy on Human Recourses for Health clearly illustrated that efforts should be made to improve working conditions, reward system, continuous educational programs and career opportunities by adopting evidence-based health working policies which are similar to the local structure so as to make feasible the best possible use

of limited recourses and augment motivation for improved performance for healthcare workers⁽¹⁷⁾. Given the fact that the reasons for dissatisfaction vary, they must be combated preventively.

The results showed overall “moderate job satisfaction” for both groups of residents and nurses, with highest levels of satisfaction for the coworkers’ facet, followed by opportunities for promotion and present job satisfaction and the lowest level of satisfaction was observed in pay and supervision facets. This was in accordance with Tsounis *et al.*⁽¹⁸⁾ who conducted a similar survey in Vietnam among 319 healthcare workers that revealed highest satisfaction with co-workers domain, while presenting a lower level of job satisfaction for pay⁽⁸⁾. Moreover, the researchers demonstrated that the older male healthcare workers who were married and those who had a higher monthly salary reported a higher level of job satisfaction in several aspects. Similarly, in Diakos *et al.*⁽⁴⁾, study in 2023, only the co-worker factor received a high job satisfaction score in the entire sample and by contrast, the other motivating factors were classified as unsatisfactory, namely pay, promotion, fringe benefits, contingent rewards and communications. In AI Hong *et al.* study⁽¹²⁾, that assessed job satisfaction among health care professionals, including nurses, physiotherapists, occupational therapists, medical laboratory technologists, dieticians, medical imaging practitioners, and environmental health officers, all 8 professions respondents were moderately satisfied; and were relatively more satisfied in terms of supervision, and the nature of the work, but were less satisfied with current work conditions and promotion. In Egypt, a study in Mansoura University hospital⁽¹⁹⁾ in 2018 indicated that nearly two thirds of the hospital nurses expressed low job satisfaction, especially concerning supervisors support and coworkers.

In a cross-sectional study including 1052 nurses serving in 94 units in two hospitals in Boston in USA, results suggested that safety practices were the most important parameter for nurses job satisfaction. This study highlighted the importance that hospital management should routinely calibrate personal safety assessments with in-depth evaluations⁽²⁰⁾.

In the present study, statistically significant differences were observed between the males and the females ($p < 0.05$). Female doctors and nurses showed higher levels of job satisfaction, especially in the overall JIG and the pay facet and even in the narrative questions as satisfaction with working environment, remuneration compared to workload, chance of promotion, supervision, and sense of achievement. This might be due to the fact that male and female value job characteristics and environment differently. Females are socialized to have lower expectations about jobs. Those findings are in line with previous

studies that compared job satisfaction by sex⁽²⁰⁻²²⁾, where females placed less value on remuneration and promotion, so they were more easily satisfied.

Regarding the qualitative data collected, medical residents and nurses responded negatively of several work conditions and suggested some recommendation for its management as shown in table 4. This was in general agreement with Grant Thornton survey in July 2023, one of the world’s largest professional services networks, recently released its State of Work in America Survey, which asked 500 healthcare workers what they thought of working in health care. Overall survey of different jobs discovered that different American employees felt most negatively about their job financial and mental well-being, those findings were more pronounced in the healthcare sector. Only 27% of healthcare workers indicated that their mental well-being was better or somewhat better. The remaining health care workers were found to be worsening in mental, financial and physical health over the past 12 months, and they repeatedly indicated that their top reason for leaving their jobs was because of not feeling valued by their organization. Health care workers’ stress over employee shortages and understaffing were on the top responses within the survey. According to Kim Jacoby, Grant Thornton people and organization director, mental and emotional stress have been the largest factors in the health care industry this past year⁽²³⁾.

When it came down to determining what has been making more than half the respondents in the present study know colleagues who entirely quit their jobs or have strong desire to quit, the survey revealed that they were not happy with their pay when linked to their performance, or their higher management and supervisors’ perception and lack of proper appreciation of them. This problem will exacerbate when more health care workers leave their job, and more health care workers feel overwhelmed and overworked from the worker shortage and having to work someone else’s duties without enough compensation. This was in agreement with a recent poll from Morning Consult in 2021 and updated in 2023⁽²⁴⁾ that surveyed 1,000 health care workers and found that, since early 2020, 18% of health care workers had quit their jobs and 12% had been laid off. Meanwhile, 31% of those who remained in their jobs said they have considered leaving their job during the COVID pandemic, including 19% who said they've considered leaving the health care industry entirely. Among those who quit or were laid off, more than half cited the Covid-19 pandemic as a strong predictor they left, while half said they wanted more pay or better benefits. Meanwhile, nearly 80% of survey respondents said they had been impacted by the national shortage of medical professionals in some way⁽²⁴⁾.

This also was in general agreement with Diakos study⁽⁴⁾.

Similarly, the post COVID-19 pandemic aftermath was mentioned by 55 respondents in the present study as one of the common reasons for quitting. Health care workers in Egypt have struggled to bear the weight of the Covid-19 pandemic, and many of the physicians and nurses passed away whether after catching the infection or, they have completely collapsed under the heaviness of their job. Few others quit their job. So, Egyptian hospitals experienced loss of its health providers where already there have been a shortage prior to the pandemic hit.

The present study highlights and portrays the alarming number of people considering quitting and seeking other jobs in better well-paying hospitals in or outside Egypt, or entirely quit outside the health industry. In Egypt, it takes a lot of effort, time and money to earn qualifications to work in health industry and particularly university hospitals, but once they excitedly embark on this job, after graduation, unfortunately a considerable percentage of them get burnout and consider quitting.

CONCLUSION AND RECOMMENDATIONS

So, assessing job satisfaction is an essential indispensable effort to create a healthy and safe work environment for healthcare providers to provide a high level of services to the users. Further, it is recommended that in the Egyptian national health system, human resource and planning departments need to communicate with specialists as psychiatrists, and occupational experts to assess and secure a high level of job safety and satisfaction among healthcare providers, and develop policies in the planning, delivery and improvement processes of the health services in Egypt.

Besides, it is recommended, that all healthcare services organizations in Egypt be encouraged to conduct timely periodic JS surveys among their health care providers to improve the services provided to patients by early intervention in any dissatisfaction expressed towards various facets of the job. So instead of focusing on higher-level aims like "engagement" right now, the top management should instead aim to address the foundational problems undermining the team's resilience and endurance^(4,24). Moreover, and as Carrier et al.⁽²⁵⁾ suggest that organizational and career development interventions aiming to enhance employees need satisfaction at work should aim to promote growth-oriented work values endorsement rather than instrumental work values.

CONFLICT OF INTEREST

The authors have no conflict of interest to declare.

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