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Influence of Job Design on Staff Retention in Public Level Five Hospitals in Kenya

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Abstract:

Job design refers to a technique of work plan intended to minimize work frustrations that emerge from monotonous and mechanical assignments. Different procedures are utilized in the execution of the various aspects of job design to ease the complexity of work, which would affect workers' retention.

The general objective of the study was to investigate the influence of Job design on staff retention in public level five hospitals in Kenya. The specific objectives of the study were: to establish the influence of Job Autonomy and Job Rotation on staff retention in Public Level five hospitals in Kenya. The study embraced descriptive and correlational research designs. The study's target population was: 472 doctors, 3318 nurses, and 449 clinical officers from the 11 available public level five hospitals in Kenya. The study also used proportionate stratified random sampling to select eight (8) public level five hospitals and a total sample size of 40 doctors, 278 nurses, and 37 clinical officers. Simple random sampling was used to select the study participants in each stratum. Data were collected using a semi-structured questionnaire through drop and pick approach. Cronbach alpha was used to test the reliability of the research instruments. Data were analyzed using SPSS, with descriptive and inferential statistics being used to discuss study findings based on the objectives. The study found that job autonomy within the public health sector was witnessed among high-ranking professionals such as doctors and managers/supervisors, while job rotation was the most popular practice. The study concludes that Job design is negatively associated with employee retention since most medics were comfortable with the current job designs. The study recommends that management should look for ways to improve job rotation and autonomy rather than devising new job design approaches to attract and retain their talented workforce.

Keywords: *Job design, job autonomy, job rotation, public level five hospitals*

1. Introduction

1.1. Background Information

Job design refers to a technique of work plan intended to minimize work frustrations that emerge from monotonous and mechanical assignments. Different procedures are utilized in the execution of the various aspects of job design to ease the complexity of work, which would affect workers' work-life balance and retention (Durai, 2010).

The National Healthcare Retention & Staffing (2019) report indicated that data collected from 221 hospitals in the USA showed that more than a quarter of the newly employed exited before the end of the year, accounting for 33% of the overall employee turnover. Consequently, the participants pointed out various reasons why the exits were high, which included: less autonomy of work, the boredom of work as a result of doing the same job in one department for a longer period of time, too much pressure from work demands, tight work schedules, poor relationship between supervisors and juniors.

A study done in Ethiopia by Assefa (2018) on selected public health sectors indicated that despite efforts by the Ethiopian government to rotate health workers, the health system was still compromised considerably by the migration of trained health workers to other countries. This range was between fifteen (15) to thirty (30) percent for doctors and twenty (20) percent for nurses.

Amir, Hamid & Akhtar (2016) conducted a study in Saudi Arabia on the nursing profession which indicated that retaining skilled employees was a challenge for healthcare institutions hence various retention strategies needed to be adopted. Further, the study noted that there are fewer nurses per 1,000 Saudi persons in Medical institutions, which affected the rotation and autonomy of the work of medics, posing a challenge to retention.

Kenya Health Policy (2012 – 2030) gives direction to the health sector regarding recognizing and laying out the essential undertakings in accomplishing the government's health objectives. As indicated in the policy, the key difficulties

confronting Kenya include: staff deficiencies, unfair distribution, frail human resource systems, and movement of health staff, particularly doctors and nurses (Wambui, Okech & Olweny, (2020).

The Kenyan government has made efforts to address matters relating to health care provision through the devolution of health services. It was anticipated that a devolved health structure would increase expertise and efficiency, encourage invention, expand access and equity, promote accountability and transparency, and reduce the movement of the health workforce from public health facilities (Constitution of Kenya, 2010). For instance, according to the Ministry of Health report 2018, the inequitable distribution and deployment of health workers have brought about the challenge of work-life balance hence poor retention.

1.2. Statement of Problem

The Kenyan healthcare system is highly affected by poor retention compared to other sectors. This is due to the scarcity of experts who migrate from Kenya for preferable employers elsewhere. WHO recommends the ratio of doctors to the population to be 1: 1000 while that of nurses to population should be 1:40, but with the country's estimated population of fifty million people, the ratio of doctors and nurses to population is way beyond the recommended making work excessive in Kenyan hospitals and this poses a challenge on retention.

Even though several studies have been done on the influence of Job Design and employee retention in many organizations, none of the research has been done in the healthcare Sector in Level Five Hospitals in Kenya. It is, therefore, on the basis of this view that the researcher found the necessity for this study. The study was carried out to investigate the Influence of job design on staff retention in Level Five Hospitals in Kenya, meant to offer an enhanced understanding of the correlation among the study variables.

1.3. Objective of the Study

The study was guided by the following objectives:

1.3.1. General Objective

The general objective of this study was to investigate the influence of Job Design on staff retention in PLFH in Kenya.

1.3.2. Specific Objectives

The following are the specific objectives of the study:

- To establish the influence of Job Autonomy on staff retention in PLFH in Kenya.
- To determine the influence of Job Rotation on staff retention in PLFH in Kenya

2. Literature Review

2.1. Herzberg Two Factor Theory

This theory was developed by Fredrick Herzberg in 1959. He based his study on the responses of two hundred accountants and engineers who were drawn from different industries in the United States. He found that factors responsible for job satisfaction were very different from the ones that cause dissatisfaction. Based on research he did on what work elements make employees feel. The result indicated that certain job features are linked to work fulfillment (motivation aspects) while others work discontent (hygiene factor). Herzberg also noted that: the reverse of contentment is not discontentment. He argued that employees are motivated by the values they get from work, not outside work. Therefore, work drive is produced from within and is prompted by fundamental factors called motivators (Armstrong, 2010).

According to Herzberg, a manager who wants to increase job satisfaction of their employees needs to focus more on motivation factors that include: achievements, positive feedback, recognition, more responsibilities, work itself, advancement, and promotion. A job with many satisfiers provides job satisfaction, motivates employees, and enhances productivity. A job with less satisfaction does not result in dissatisfaction and poor performance but results in workers not delivering their best. The United States Energy Division consistently used Herzberg hygiene and motivation factors in engaging and retaining staff and observed that aspects of hygiene are the major contributors to poor employee retention and job dissatisfaction. However, they established prominence on hygiene factor as a retaining aspect though erratic with Herzberg's theory (Tamosaitis & Schwenker, 2002).

The researcher employs this conjecture to show the factors that can cause job satisfaction or dissatisfaction. This theory points out that the hospital staff have two sets of needs which can either be met by motivational or hygiene factors. However, their relationship may not necessarily be linear. The hospital management can put in place measures that ensure job design programs are implemented since their absence may bring about job dissatisfaction. This situation can result in staff looking for alternative jobs where they perceive these programs will be provided.

2.2. Job Characteristics Theory

This theory was designed by Hackman and Oldham. It is based on the notion that the job itself is vital to employee motivation. A boring and monotonous job stifles motivation to perform well and reduces the chances of retaining employees. Job autonomy and Job rotation are the two ways of adding variety and challenge which impact three critical psychological states (experienced responsibility for outcomes, experienced meaningfulness, and knowledge of the actual results), in turn influencing job satisfaction, absenteeism, and retention.

2.3. Job Design and Employee Retention

This section discussed how various aspects of job design affect employee retention, focusing on job rotation and autonomy. Sageer (2012) asserts that jobs whose behavioral elements are specific, relevant, with minimal supervision, and allow feedback enhance employee satisfaction. Findings show that if attention is given to the respective behavioral elements, performance will be improved and quality results achieved hence high employee retention. Rainer, Hamp, and Verlag (2011) carried out a study on job design and satisfaction.

The researcher inquired about work conditions and job design. He sampled people under the age of 65 years to provide information concerning their job satisfaction. He found out that assigning an employee to a workplace with an enriched job, in the sense that he has a high degree of autonomy and varied tasks, will increase the job satisfaction irrespective of his personal suitability for such a workplace. Enriched jobs increase the satisfaction of all employees hence improving employee retention.

According to a study by Pahl *et al.* (2017), allocating work to an employee in an environment with minimal supervision and specific tasks boosts morale and increases productivity and employee retention. A research by Ali and Rehman (2014) on job design and employee performance, where job satisfaction was a mediating variable, indicated that job design played a significant role in satisfying and retaining employees.

Durai (2010) argues that job design enables the organization to effectively meet its objectives and offer work fulfillment to staff. The purpose of work design is to satisfy organizational productivity, quality of service, and operational efficiency. Moreover, job design fulfills employee concentration and achievement and links work features and employees' personal life.

A study conducted on retaining employees in the public sector – which has been undergoing challenges of retention from critical cadres who leave from both inside and outside the country – revealed that turnover was high specifically for employees below age forty (40) due to transfers, and brain drain (Kinyili, 2015). Some of the cadres affected included: health professionals, economics, state law officer, and ICT sector. The high turnover has resulted in staff shortages and succession problems, compromising service delivery.

Additionally, Njora & Ndegwa (2020) identified job design as one of the factors contributing to employee retention. Their findings revealed that a unit increase in job design led to an 18.9% increase in employee retention. Among healthcare workers in Machakos County, it was observed that job design contributed to the level of retention in public hospitals (Wakio, 2019). Positive job satisfaction is highly related to higher performance, increased productivity, and overall life satisfaction of an employee. On the other hand, job dissatisfaction is associated with decreased productivity, absenteeism, lateness, and the decision to retire, transfer or leave the organization. Studies have shown that job rotation contributes to motivation to work both negatively and positively (Mark & Kponee, 2020; Tufail *et al.*, 2017).

Job autonomy is vital for job satisfaction which is a characteristic mostly important for qualified employees. According to Lin and Ping (2016), employees' perception of their job autonomy influences their level of commitment to their employer. The level of independence given to an organization's workforce mirrors the style of leadership adopted by the organization. It has been proved that reduction of turnover is key to medical professionals (Ghapanchi & Aurum, 2011).

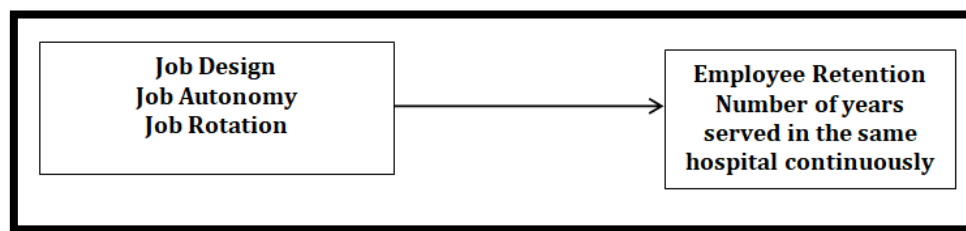


Figure 1: Conceptual Framework
Source: Researcher (2021)

3. Methodology

3.1. Research Design

Descriptive and correlational research designs were embraced for this study. The research designs assisted in establishing the impact of Job Design on employee retention in PLFH in Kenya. The descriptive research design allowed the development of questions for further study without manipulating study variables and enabled the researcher to gather adequate data for analysis. A correlational research design was used to establish the relationship between Job design and employee retention in PLFH in Kenya (Kazdin, 2016).

3.2. Target Population

The populace of concern in this study was the Medical staff (Doctors, Nurses, and Clinical Officers) in PLFH in Kenya. In Kenya, there are a total of eleven (11) Level five hospitals with total medics of approximately four thousand two hundred and thirty-nine (4,239).

The PLFH included Coast General, Embu Level Five, Kisii Teaching referral, Garrisa County Referral, Kakamega Teaching & Referral, Jaramogi Oginga Odinga Teaching & Referral, Machakos Level Five, Meru Teaching & Referral, Rift

Valley General (Level), Mama Lucy Kibaki, Nyeri PGH (Level Five) which serve the national population of the country. They contribute greatly to the health sector since they are the referral points for critical illnesses.

Name of Level Five Hospitals	No. of Doctors	No. of Nurses	No. of Cos	Region
Coast General	36	260	30	Coast
Embu Level Five	35	241	40	Eastern
Kisii Teaching referral	40	265	30	Nyanza
Garrisa County Referral	30	250	35	North Eastern
Kakamega Teaching & Referral	46	262	32	Western
Jaramogi Oginga Odinga Teaching & Referral	50	300	40	Nyanza
Machakos Level Five	60	390	32	Eastern
Meru Teaching & Referral	45	350	50	Eastern
Rift Valley General (Nakuru Level five)	50	400	66	Rift Valley
Mama Lucy Kibaki	40	350	50	Nairobi
Nyeri PGH(Level Five)	40	250	44	Central
Total	472	3,318		449

Table 1: Target Population

Source: Respective Human Resource Departments

3.3. Sample Size

The study used stratified random sampling and considered the provincial regions in selecting the sample of hospitals to be studied.

Name of Level Five Hospital	No. of Doctors	No. of Nurses	No. of COs	Region
Coast General	36	260	30	Coast
Garrisa County Referral	30	250	35	North Eastern
Kakamega Teaching & Referral	46	262	32	Western
Jaramogi Oginga Odinga Teaching & Referral	50	300	40	Nyanza
Machakos Level Five	60	390	32	Eastern
Rift Valley General (Nakuru Level five)	50	400	66	Rift Valley
Nyeri PGH(Level Five)	40	250	44	Central
Mama Lucy Kibaki	40	350	50	Nairobi
Subtotal	352	2,462	329	

Table 2: Sample Size of the Hospitals

The sample size was calculated using Yamane formulae to find out the sample from the eight (8) hospitals. The formula was preferred as it is not complicated and has a higher power of accuracy. The formulae assume a confidence level of 95%, which assisted the researcher in having a decision representative of the total population (Barlett, J.E., Kotrlik, J., & Higgins, C., 2001).

$$n = \frac{N}{1 + N(e)^2}$$

$$N=3143$$

$$e= 5\%$$

Where:

n is the desired sample size

N is the population size

e is the confidence level/ level of precision

n = 3143

$$1 + 3143 (0.05)^2$$

$$= 355$$

The eight (8) sampled hospitals were estimated to have three thousand one hundred and forty-three (3143) employees, out of which three hundred and fifty-five (355) respondents were used in the study as calculated using Yamane

formulae. Proportional allocation under stratified random sampling was done per each category of employees to identify the total number of doctors, nurses, and clinicians in all the hospitals. The allocation was done as follows:

$$\frac{N_n \times n}{N}$$

$$n_d = \frac{352 \times 355}{3143} = 40$$

$$n_n = \frac{2,462 \times 355}{3143} = 278$$

$$n_c = \frac{329 \times 355}{3143} = 37$$

Further, the proportional allocation was done again to get the specific number of doctors, nurses, and clinicians per sampled hospitals that were studied as per table 3.

Hospital	Number of Doctors	Number of Nurses	Number of Clinicians
Coast	$n_d = \frac{36}{352} \times 40 = 4$	$n_n = \frac{260}{2462} \times 278 = 29$	$n_c = \frac{30}{329} \times 37 = 3$
Machakos	$n_d = \frac{60}{352} \times 40 = 7$	$n_n = \frac{390}{2462} \times 278 = 44$	$n_c = \frac{32}{329} \times 37 = 4$
Kakamega	$n_d = \frac{46}{352} \times 40 = 5$	$n_n = \frac{262}{2462} \times 278 = 30$	$n_c = \frac{32}{329} \times 37 = 4$
Jaramogi	$n_d = \frac{50}{352} \times 40 = 6$	$n_n = \frac{300}{2462} \times 278 = 34$	$n_c = \frac{40}{329} \times 37 = 4$
Mama Lucy	$n_d = \frac{40}{352} \times 40 = 5$	$n_n = \frac{350}{2462} \times 278 = 40$	$n_c = \frac{50}{329} \times 37 = 6$
Rift Valley	$n_d = \frac{50}{352} \times 40 = 6$	$n_n = \frac{400}{2462} \times 278 = 45$	$n_c = \frac{66}{329} \times 37 = 7$
Nyeri	$n_d = \frac{40}{352} \times 40 = 5$	$n_n = \frac{250}{2462} \times 278 = 28$	$n_c = \frac{44}{329} \times 37 = 5$
Garissa	$n_d = \frac{30}{352} \times 40 = 3$	$n_n = \frac{200}{2462} \times 278 = 23$	$n_c = \frac{35}{329} \times 37 = 3$

Table 3: Sample Size of Medics

3.4. Data Collection Instruments

Primary data was collected using questionnaires that had both open and closed-ended questions. The questionnaire was designed to address the research hypothesis and specific objectives. Open-ended questions were not prohibitive to the respondents as they had a chance to disclose information in a realistic way, while the close-ended items gave precise information, which minimized information bias and facilitated data analysis. Opinion data were collected using a Likert scale, as it is the most frequently used. Respondents were asked to rate statements pertaining to the variables under study, where each response was given a numerical score to reflect its degree of favorableness. The basis for using questionnaires was because they are free from the bias of the interviewee, and respondents have ample time to give well-thought-out answers. The questionnaires were administered by the researcher in person through the drop-and-pick-later method to the sampled respondents (Delpont & Roestenburg, 2011). For secondary data, online books, journals, and articles were used for purposes of literature review.

3.5. Validity and Reliability

Validity and reliability of the research instruments were done through a pilot study which was undertaken for pretesting the questionnaire. According to Saunders *et al.* (2009), a pilot study is a pretest study carried out to refine the questionnaire so that the respondents have no problems answering the questions and avoid problems in recording data. For this study, thirty-six (36) questionnaires, which are ten percent of the study population, were issued to hospitals not included in the sample for the main study, and mistakes on the questionnaires were corrected before embarking on the main study. The Cronbach alpha, a mode of measuring internal consistency, was used to test the reliability of the research instruments. The Cronbach coefficient was used to calculate the internal consistency coefficient of the items included in the questionnaire through a pilot study of thirty-six (36) medical professionals. The acceptable alpha levels for the study were between 0.70 and 0.90, which indicates that the instrument has an acceptable level of self-consistency. Constant consultations with the university supervisors and other experts were done to ensure the validity of the research instrument. Modifications to the structure of research tools were done as advised by the supervisors.

3.6. Data Analysis, Processing, and Presentation

Primary data were sorted, edited, coded, and analyzed to eliminate inaccuracies and inconsistencies. For reliable analysis, SPSS-generated Cronbach's alpha was used to form the basis for determining reliability. The hypotheses of the study were tested using Wald-Test, and the fitness of the model was checked using Hosmer and Lemeshow test. The findings of the analysis results were presented using tables as they are easy to comprehend and deduce. (Mertler and Reinhert (2016)

4. Research Findings

To determine the influence of Job design on employee retention, the researcher investigated job autonomy and rotation. Job rotation was the most popular method practiced (87.8%), with only 26.8% reporting that job autonomy was accorded to them. The findings were attributed to the fact that job rotation was commonly witnessed among the nurses, who comprised the majority of the study's respondents. Additionally, job autonomy within the public health sector was witnessed among high-ranking professionals such as doctors and managers/supervisors. This is in agreement with Wakio (2019), who found that job rotation was widely utilized at Machakos Level Five Hospital, implying that Level Five Hospitals employ Job rotation and autonomy as a strategy to promote productivity and work efficiency. The findings further show that employees perceived low job autonomy, as 73.2% reported that autonomy was not available to them. Similar findings have been reflected by Maru et al. (2013), who found that nurses employed in Kenyan national referral hospitals felt that their employer had few or no provisions for job autonomy. Additionally, more than half of the employees (Agree 49.6% & strongly agree 8.4%) felt that job rotation was a strategy utilized by their employers to reduce workload. This implies that the hospital management utilized job rotation as retention rather than a strategy to reduce workload. It was also established that eight in every ten employees (79.9%) did not consider job rotation as a retention strategy by their employers but rather a strategy to reduce workload. This implies that employees in public hospitals were used to and expected to rotate among various departments hence did not view this as a retention strategy but rather a normal practice.

Correspondingly, job autonomy was rarely practiced (47.2%) as compared to job rotation (87.8%). Almost three-quarters of the respondents (73.4%) felt that job autonomy did not exert any considerable effect on their ability to stay. Sadly, it is also evident that efforts done by the management in these hospitals are geared at improving productivity by reducing workload rather than employee retention strategy. These findings agree with Katua et al. (2014), who noted that nurses found job autonomy practices to be lacking, with the only autonomy attributed to them being the opportunity to develop work schedules. Overall, job autonomy largely affected the employees' organizational skills but had minimal effect on both the employees' retention. When employees' organizational skills are improved, their general work performance improves. Therefore, based on study findings, and observations by Abekah-Nkrumah and Nkrumah (2021), the management adopts job autonomy not as an employee retention strategy but as a means of improving productivity.

4.1. Hypotheses Testing to Show the Relationship

The study envisaged establishing whether there is a relationship between job design and employee retention by testing the following null hypotheses.

- H_{02} : There is no statistical significant Influence of job design on Employee Retention in PLFH in Kenya at 5% significance level.
- H_{12} : There is a statistical significant Influence of job design on Employee Retention in PLFH in Kenya at 5% significance level.

Results showed that there is a significant statistical relationship between job design and employee retention ($p=0.01$; $p<0.05$). Therefore, the study rejects the null hypothesis, H_{02} ; hence concluding that job design in Public Level Five Hospitals in Kenya has contributed significantly to the retention of employees in these hospitals while holding other factors constant. Further observations showed that B is -0.087 which is less than 0.00 , implying that the probability of retaining an employee decreases as the job design increases. By looking at the odds ($e^{-0.087} = 0.917$), it shows that the odds (likelihood) of employee retention decreases by a factor of 0.917 with a marginal increment in job design.

The Nagelkerke R Square was 0.028 (2.8%), which indicates that approximately 2.8% of the variations in the retention of employees are explained by the variations in job design. Hosmer and Lemeshow test for goodness of fit tests the null hypothesis that the model fit is good against the alternate hypothesis that the model fit is not good. The results show that $\chi^2(8) = 11.047$ and $p = 0.199$; hence since $p > 0.05$, the study fails to reject the null hypothesis. Therefore, it implies that the model fit is good at 5% significance level.

5. Discussions

Employee retention is a persistent problem experienced globally and in different sectors. Any organization that seeks to succeed must find sustainable means of managing and retaining its employees (Kiplagat, 2017).

This study revealed that job design negatively affected employee retention ($\beta = -0.087$, $P=0.011$). Any changes in the job design (JD) reduced the odds of employee retention by 0.92 times, hence, alluding that the employees were comfortable with their current job design practices and were less likely to leave if this remained constant. This contrasts with Njora and Ndegwa (2020), who noted that job design positively affected employee retention. The variations in the present study findings could be attributed to their smaller sample size, and the sampling frame was drawn from a localized region in Kenya rather than evenly distributed in all parts of the country. Further, the authors explored job design in terms of job responsibilities, autonomy, flexibility, and working conditions, whereas the present study explored job autonomy and rotation only.

Job autonomy has been associated with increased job retention. This study observed that the employees were comfortable with their job autonomy, hence, less likely to have turnover intentions. This contrasts with Lin and Ping (2016), who revealed that although perceived job autonomy resulted in a higher likelihood of organizational commitment, it did not significantly predict employees' turnover intention. This discrepancy could be explained by the difference in sample use, as the study focused on office employees who may have little autonomy. A review of previous findings (Kossivi, Xu & Kalgora, 2016) cited job autonomy as a factor that influenced an employee's decision to stay with their current employer.

Working in one department for an extended period could contribute to role stress, especially among healthcare workers. This study evaluated job rotation as a factor contributing to the employee's likelihood to stay with the organization. Findings indicated that level five hospitals in Kenya practice job rotation with their employees shifting from department to department every 2 - 3 years. These findings are supported by Mark and Kponee (2020), who deduced that job rotation enhances motivation, reducing employees' likelihood of leaving their current employer. Similarly, Wakio (2019) agreed that job design exerted a significant positive effect on employee retention in level four and five hospitals in Machakos County. Contrary to these findings, a study conducted among banking employees (Tufail *et al.*, 2017) revealed that job rotation could demotivate workers, resulting in increased counterproductive work behavior and decreased employees' commitment to the organization.

6. Summary

The researcher explored job autonomy and job rotation. Overly, the employees perceived a low job autonomy, whereas, job rotation was the most popular practice. This was partly because job autonomy was mostly accorded to managerial and supervisory staff which had a lower proportion in the study. Furthermore, it was established that the availability of job designs significantly contributed to the intention to continue working in the institution.

7. Conclusion

Job designs such as job autonomy and rotation have been negatively associated with employee retention. Most of the doctors, clinical officers, and nurses were comfortable with the current job design. This was attributed to the rampant staff shortage evident in the health sector.

8. Recommendations

Since most of the doctors, nurses, and clinicians were comfortable with their current job design, the management should look for ways to better improve the job rotation and autonomy rather than devising new job design approaches. Any alteration in job design was expected to negatively influence employee retention. There is also a need for policies addressing the issue of staff shortage to reap the maximum benefits of job design as a retention strategy.

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