Job Demands, Job Resources and its Relationship with Job Crafting among Head Nurses

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Abstract

Background: Organizations are continually under stress for existence in the present extremely changed work environment. During these times of continuously and emotionally demanding organizational changes, it is essential for associations to completely use and support nurses to become good crafters in their work to achieve organizational goals. **Aim:** The current study aims to investigate job demands, job resources and its relationship with job crafting among head nurses. **Methods:** A descriptive correlational research design was utilized by 140 head nurse working at all inpatient departments at Main Mansoura University Hospital, which affiliated to Mansoura University. Three tools were utilized in this study, Job Demands Scale, Job Resources Scale, and Job Crafting Questionnaire. **Results:** The results of this study indicated that there was statistical significant positive relation between job crafting with both job demands and job resources. **Conclusion:** There was statistical significant positive correlation between job crafting and both job demands and job resources. So, from the above we can conclude that head nurses demonstrate job crafting activities to cope with high job demands in the present of adequate job resources. **Recommendations:** To promote head nurses' job crafting, it is necessary to acknowledge and reward their good performance. Improve head nurses' autonomy is very important to enhance task crafting, as head nurses have the freedom to plan and carry out their daily activities. Administrators should provide flexibility of scheduling and balance between head nurses' family life and the requirement of their work.

Key words: Head nurses, Job crafting, Job demands, Job resources

Introduction:

Organizations are continually under stress for existence in the present extremely changed work condition. This alteration has been enhanced by issues such as smart work surroundings besides simulated intelligence in the institutional setting. Assumed like uncertainty originating from a rapid level of alteration plus elevated complexity, it is essential for associations to completely use and support employees to become good crafters in their labor to achieve organizational goals **(Dubbelt, et al, 2019).**

Job demands refer to those physical, mental, societal or structural features of the occupation that want continued physical and/or mental effort **(Schaufeli, 2017)**. While, Job resources refer to those physical, mental, societal or structural features of the occupation that may be useful in attaining job objectives, decreasing job demands in addition to inspiring individual growth and development **(Mudrak, et al, 2018)**.

Job demands composed of work load, role ambiguity, job insecurity and work - life conflict. Workload; refers to the greatness of job tasks. Role ambiguity; is the absence of clearness, surety and/or expectedness one may have anticipated with respects to behavior in a work. Job insecurity; is the uncertainty that one's job will continue **(Adil & Baig, 2018)**.

And finally, work - life conflict; is a shape of inter role conflict in which work demands restrain persons from achieving duties and roles connected to life **(Lesener,et al, 2019).**

Job resources composed of job autonomy, performance feedback, growth opportunities, supervisor support, and organizational support, relationship with colleagues and pay & rewards. Job autonomy; is the grade of freedom and independence related to the occupation **(Lee, et al, 2017).** Performance feedback; is a continuous process between worker and supervisor where information is exchanged regarding the performance predicted and the performance showed. Growth opportunities; are professional skills acquisition, goal realization and promotion achievement through continuous education and training. Supervisor support; which is the nurses' perceptions of the quality of their immediate managers' supportiveness, **(Berthelsen, et al, 2018).**

Continually, organizational support; is the employees' global values that the institution estimated their contributions as well as taking care about their well-being. Relationship with colleagues; are the interactions you have with your colleagues and it is very important for career success **(Lee & Eissenstat, 2018)**. And, finally, pay & reward; which covers wholly benefits an organization offers its workers, counting monetary benefits as wages, in addition to non-wage benefits as appreciations, elastic working, chances for growth and continuing training. **(De Leon, 2019).**

Once the individual finds misbalance concerning one's individual awareness of the occupation and the real job demands and resources, employees are probably participate in actions that decrease or relieve the percieved state

through personal job crafting actions **(Cho & Kim, 2020)**. Job crafting refers to the self-started changes that workers create in certain (physical, cognitive or societal) aspects of their occupations, without needing their whole redesign. It has been described as a form of discretionary conduct that is driven by the worker rather than by administration. It is an informal method that employees utilize to form their work practice so that it aligns with their individual interests and beliefs **(Bakker, et al, 2018)**.

Job crafting is primarily connected with individual requirements, skills, abilities, personality, and understanding. Job crafting action can be observed in different shapes. The changes may be on the task-correlated features similar the practical contents of the job; on the relational facets of their jobs alike the amount and the way of interaction with coworkers and costumers and on the individual thoughts about the job like the meanings of their work **(Chang, et al, 2020)**. Accordingly, employees may alter the way that labor is conceptualized and performed, how frequently and with whom they interrelate at labor, and how they mentally ascribe meaning and importance to their job **(Audenaert, et al, 2020)**.

Job crafting creates real alterations in one's individual capability and personality. Crafting is about organizing group actions at work place, creating efforts that workers recognize each other, speaking initiative to give guild lines to novel workers and building novel relations **(Jutengren, et al, 2020)**. Staffs can know their work, with whom they interrelate and build relations and at what kind and in what way they act and display emotional entice with their work place. Job crafting is a hopeful feature that alters the current situation of the work **(Sesen & Ertan, 2020)**.

Job crafting is an innovative technique aims to convert the capabilities and adjustment in the performance for creating effective energy at the work place, support their jobs with their own desires, favorites and drives **(Matsuo, 2019).** It is a self-adjustment which modifies the conduct and through which employees involve in their jobs with their individual selections and concerns, act with their own wants and values for the attainment of important and satisfactory job and for improved growth of the organization **(Cheng, et al. 2020)**.

Significance of the study

During times of continuously and emotionally demanding organizational changes, the role of employee job crafting becomes very important. Job crafters are better capable of responding to the demands of novel situations and choose to craft their jobs in order to deal with increased rates of workload. Job crafting plays an important role for nurses as it help them to control certain aspect of their jobs, motivating them to create positive sense, satisfy their basic wants with the joining with others and achieve better performance as well as better wellbeing condition **(Castner, 2020)**

Job crafting is associated with strong and positive behavior modification allowing nurses to give their best and promote comfortable atmosphere amongst colleagues. To improve job crafting among nurses, it is imperative to provide them with the appropriate job resources to perform their tasks effectively and to cope with the demands of the role. So, the current study aims to investigate job demands, job resources and its relationship with job crafting among head nurses at Main Mansoura University Hospital.

Research hypothesis

1. Job demands are correlated with job crafting among head nurses at Main Mansoura University Hospital.

2. Job resources are correlated with job crafting among head nurses at Main Mansoura University Hospital.

Aim of the study

The aim of the present study is to investigate job demands, job resources and its relationship with job crafting among head nurses at Main Mansoura University Hospital by:-

1- Assess job demands as perceived by head nurses at Main Mansoura University Hospital.

2- Assess job resources as perceived by head nurses at Main Mansoura University Hospital.

3- Assess job crafting activities among head nurses at Main Mansoura University Hospital.

4- Investigate the relationship between job demands, job resources and job crafting among head nurses at studied setting.

Methods:

Design: A descriptive correlational research design was utilized.

Setting: All inpatient departments at Main Mansoura University Hospital. Capacity of beds 1800 and the hospital represent Ministry of Higher education and found in Mansoura city followed Dakahelia governorate and provide

different health care services at Delta Region.

Sample: All available head nurses working at Main Mansoura University Hospital at time of data collection (n= 140).

Data collection tools:-

Three tools were utilized for data collection in this study, namely; Job Demands Scale, Job Resources Scale, and Job Crafting Questionnaire.

Tool I: Job Demands Scale: It was developed by the researchers based on literature review **(Bakker, et al, 2005; Rothmann, et al, 2006; Schaufeli, et al, 2009; Demerouti &Bakker, 2012; Lee, et al, 2017; Lesener, et al , 2019; Cho, et al, 2020).**

It is consists of two parts:-

First part: Personnel characteristics. It was used to identifying personnel characteristics of head nurses such as age, years of experience and marital status.

The second part: It includes 25 items related to the head nurses' job demands at their workplace. These items was grouped under four categories namely; workload (9 items), role ambiguity (8 items), job insecurity (3 items), and work - life conflict (5 items). Accordingly, each response was assigned a score from along a 5-point scale, starting from 1 (strongly disagree) to 5 (strongly agree). Scoring system was (<50%) low level of job demands, (50-75%) moderate job demands and (> 75%) high level of job demands based on cut of point 50%.

Tool II: Job Resources Scale. : It was developed by the researchers based

on literature review **(Bakker, et al, 2005; Rothmann, et al, 2006; Schaufeli, et al, 2009; Demerouti &Bakker, 2012; Lee, et al, 2017; Lesener, et al , 2019; Cho, et al, 2020).** It was to define the head nurses' job resources that ease the achievement of work objectives, motivate individual growth or decrease job demands **Borst, et al (2019).** It included 39 items categorized under seven job resources dimensions namely; autonomy (5 items), performance feedback (8 items), growth opportunities (5items), supervisor support (5 items), organizational support (6 items), relationship with colleagues (5 items) and finally, pay & rewards (5 items). Responses were measured on a five-point rating scale ranged from 1 (strongly disagree) to 5 (strongly agree). Scoring system was (<50%) low level of job resources, (50-75%) moderate job resources and (> 75%) high level of job resources based on cut of point 50%.

Tool III: Job Crafting Questionnaire (JCQ): This tool was developed by **Slemp &Vella-Brodrick (2013).** It utilized to measure nurses job crafting behaviors, and it contains 15 item categorized under three dimensions which are: Task crafting includes (5 items), that refers to altering the numeral, scope, as well as kind of work tasks; Cognitive crafting includes (5 items), that associated with altering the quality and/or extent of contact with others faced in occupation; and finally, relational crafting includes (5 items), that concerning alters social relations in a work place. Answers were measured on a five-point rating scale extended from never, rarely, sometimes, very often, always were scored respectively as 1, 2, 3, 4, and 5. Scoring system was (<50%) low level of job crafting, (50-75%) moderate job crafting and (> 75%) high level of job crafting based on cut of point 50%.

Validity and reliability

The tools were translated by the researchers into Arabic, and tested for its content validity and relevance via five experts in nursing administration from faculties of nursing, and consequently the needed alteration was completed. The reliability for the tools were done using cronbach's alpha test. It was (0.93) for job demands, (0.89) for job resources, and (91) for job crafting.

Pilot study

A pilot study was done on 10% of head nurses working at Main Mansoura University hospital that randomly selected and excluded from the study contributors to; check and confirm clearness and applicability of the tools.

Ethical Consideration

Ethical approval was gotten from the Research Ethical Committee of Faculty of Nursing, Mansoura University, sharing in the study was voluntary, and confidentiality of the gathered data was sustained. Privacy of the study sample was secure, as well as the findings were utilized as a component of necessary research, and for future publications and education. The reason of this research was clarified to the administrative persons, the written agreement was attained from the faculty of nursing, Mansoura University to the hospital administrators, and the directors of nursing service department to perform this study.

Data collection

The actual field work started from October to December 2019. Data collected through meeting with the head nurses, and explains the purpose of the study to them. The questionnaire sheets were allocated to participants discretely in their job places, and the time required to complete the sheets ranged from 20-25 minutes.

Data analysis:-

The gathered data were prepared tabulated and statistically analyzed utilizing SPSS software (Statistical Package for the Social Sciences, version 22, SPSS Inc. Chicago, IL, USA).

For quantitative data, the range, mean as well as standard deviation were estimated. For qualitative data, comparison between two groups and further was done utilizing Chi-square test (2). For comparison between means of two groups of parametric data of independent samples, student t-test was utilized.

For similarity between means of two groups of non-parametric data of independent samples, Z value of Mann-Whitney test was utilized. Relationship between variables was calculated utilizing Pearson's correlation coefficient (r). Significance was adopted at $p<0.05$ for explanation of findings of tests of significance.

Results:

Table (1) represents personal characteristics of head nurses. The table shows that most of head nurses were in the age group (31-40), The majority of them were married (87.1) and more than two thirds of them had more than 10 years' experience (63.6).

Table (2) illustrates mean scores of job demands, job resources and job crafting domains as perceived by head nurses. The total head nurses' job demands mean score was 88.52±15.43. The item of head nurses' workload had the highest mean score (37.22±6.71), while the least item was job insecurity

(6.50±2.90). As regard to head nurses' job resources, the total mean score was (121.95±17.39). Performance feedback domain had the highest mean score (22.25±3.54), while pay and rewards was the lowest mean score (10.42±3.51). According to head nurses' job crafting, the total mean score was (55.95±9.64). Cognitive crafting had the highest mean score (21.07±3.54) of job crafting, while task crafting was the lowest (17.32±3.85).

Table (3) shows levels of job demands, job resources and job crafting as perceived by studied head nurses. The highest percent of job demands, job resources and job crafting presented in moderate level (86.4%, 61.4, 56.4) respectively.

Table (4) shows relationship between head nurses' job demands and job crafting in the selected setting. The findings in this table revealed that there was a significant correlation between total components of job demands and job crafting (r= 0.82, p<0.001). Additionally, the results revealed that there was a significant correlation between all job demands with task crafting, cognitive crafting and relational crafting.

Table (5) presents relationship between head nurses' job resources and job crafting in the selected setting. The results in this table revealed that there were a significant correlation between total components of job resources and job crafting (r= 0.71, p<0.001). Moreover the results revealed that there is a significant correlation between all job resources with task crafting, cognitive crafting and relational crafting.

Table (6) shows relationship between head nurses' job demands, job resources, and job crafting. The results in this table displayed that there was a significant correlation between total job demands and job crafting (r= 0.82, p<0.001). Also, there was a significant correlation between total job resources and job crafting (r= 0.71, p<0.001).

Figure (1) This figure illustrated relation between total job crafting and total job demands as perceived by studied head nurses, there is significance relation between total job crafting and total job demands (** p <0.01)

Figure (2): This figure illustrated relation between total job crafting and total job resources as perceived by studied head nurses, there is significance relation between total job crafting and total job resources (** p <0.01)

Table (1): Personal characteristics of the head nurses (n=140).

Variables	No	%
Age years:		
▪ 20-30	33	23.6
▪ 31-40	88	62.9
▪ >40	19	13.6
Marital status		
▪ Single	18	12.9
▪ Married	122	87.1
Years of experience:		
▪ 1-5	11	7.9
▪ 6-10	40	28.6
▪ >10	89	63.6

Table (2): Mean scores of head nurses' job demands, job resources, and job crafting (n=140).

Variables	Min-max	Mean±SD
Total job demands	49.0 – 125.0	**88.52±15.43**
Workload	17.0 – 45.0	37.22±6.71
Role ambiguity	14.0 – 40.0	25.63±6.11
Job insecurity	3.0 – 15.0	6.50±2.90
Work - life conflict	10.0 – 25.0	19.15±3.48
Total Job resources	72.0 – 180.0	**121.95±17.39**
Job autonomy	9.0 - 25.0	17.16±2.96
Performance feedback	12.0 – 30.0	22.25±3.54
Growth opportunities	5.0 – 25.0	17.74±3.78
Supervisor support	10.0 – 25.0	18.80±2.71
Organizational support	10.0 – 30.0	20.52±3.92
Relationship with colleagues	8.0 – 20.0	15.03±2.97
Pay and rewards	5.0 – 25.0	10.42±3.51
Total Job crafting	28.0 – 75.0	**55.95±9.64**
Task crafting	5.0 – 25.0	17.32±3.85
Cognitive crafting	10.0 – 25.0	21.07±3.54
Relational crafting	8.0 – 25.0	17.55±3.38

Table (3): Levels of head nurses' job demands, job resources, and job crafting

Variables	Low (<50%)		Moderate (50-75%)		High (>75%)	
	No	%	No	%	No	%
Job demands	9	6.4	121	86.4	10	7.1
Job resources	7	5.0	86	61.4	47	33.6
Job crafting	10	7.1	79	56.4	51	36.4

Table (4): Relationship between head nurses' job demands domains and job crafting domains (n=140).

Job demands domains	Task crafting		Cognitive crafting		Relational crafting		Total job crafting	
	r	p	R	p	R	p	r	p
Workload	0.67	0.000**	0.78	0.000**	0.67	0.000**	0.79	0.000**
Role ambiguity	0.57	0.000**	0.45	0.000**	0.63	0.000**	0.61	0.000**
Job insecurity	0.40	0.000**	0.19	0.000**	0.48	0.000**	0.40	0.000**
Work - life conflict	0.60	0.000**	0.61	0.000**	0.66	0.000**	0.69	0.000**
Total job demands	0.73	0.000**	0.69	0.000**	0.78	0.000**	0.82	0.000**

Table (5): Relationship between head nurses' job resources domains and job crafting domains (n=140).

Job resources domains	Task crafting		Cognitive crafting		Relational crafting		Total job crafting	
	r	p	R	p	R	p	r	p
Job autonomy	0.47	0.000**	0.37	0.000**	0.42	0.000**	0.47	0.000**
Performance feedback	0.49	0.000**	0.50	0.000**	0.52	0.000**	0.56	0.000**
Growth opportunities	0.59	0.000**	0.37	0.000**	0.50	0.000**	0.55	0.000**
Supervisor support	0.53	0.000**	0.50	0.000**	0.52	0.000**	0.58	0.000**
Organizational support	0.60	0.000**	040	0.000**	0.58	0.000**	0.59	0.000**
Relationship with colleagues	0.54	0.000**	0.63	0.000**	0.44	0.000**	0.61	0.000**
Pay and rewards	0.35	0.000**	0.21	0.000**	0.36	0.000**	0.34	0.000**
Total job resources	0.69	0.000**	0.57	0.000**	0.65	0.000**	0.71	0.000**

Table (6): Correlation between head nurses' job demands, job resources, and job crafting (n=140).

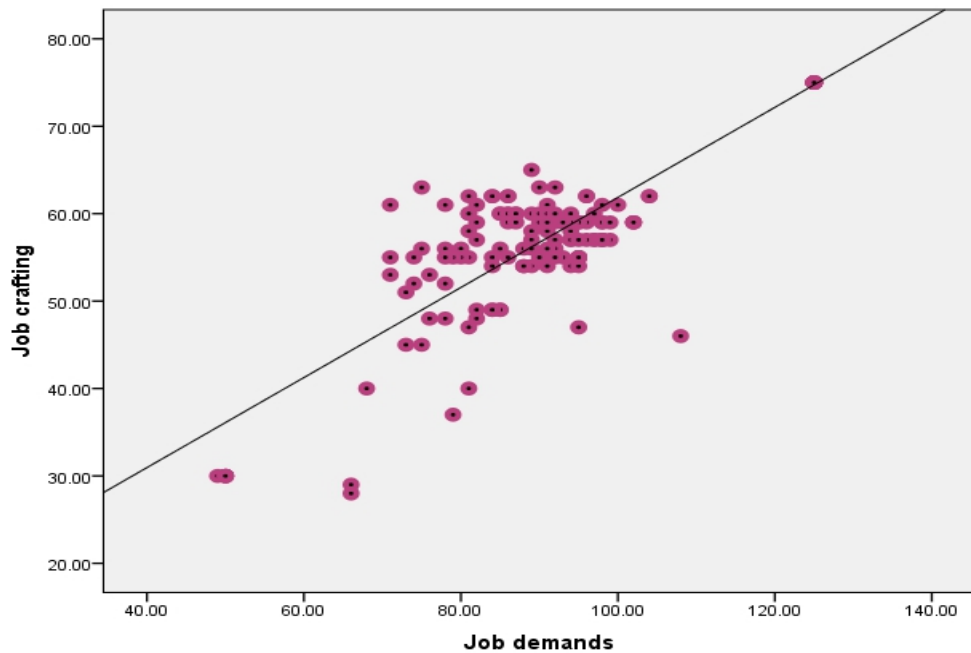| Variables	Job crafting	
	R	P
Job demands	0.82	**0.000****
Job resources	0.71	**0.000****

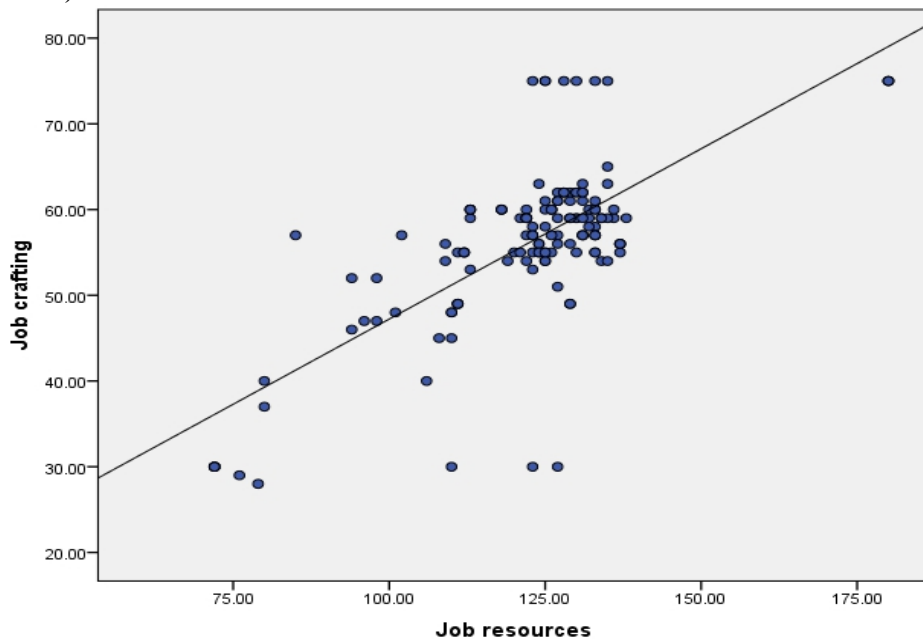**Figure (1): Correlation between head nurses' job demands, and job crafting (n=140).**

Figure (2): Correlation between head nurses' job resources, and job crafting (n=140).

Discussion

Job crafting is a self-started change that nurses make regarding their job demands and job resources, with the aim of aligning their jobs with their own favorites, drives and desires. And as a basis for the job demands-resources (JD-R) model, job crafting itself is influenced by the level of job demands in the setting and the given job resources of the place of work **(Lee, et al 2017).**

The findings of the current study indicated that the head nurses' total job demand was at the moderate level. This may due to high workload, work life conflict and role ambiguity. This was in the same line with **Cho, et al (2020)** who stated that nurse' job demands was at moderate level which is expected to reason undesirable outcomes, but in the same time it reasons positive outcomes through job crafting actions. This was consistent with **Castner, (2020)** who specified that job demands among nurses were high confirmed that this are costly as workers, who are challenged with increase job demands are required to spend time and energy to participate in performance-protection strategies through investing mental as well as physical resources.

As regard to head nurses' total job resources, the result of the existing study showed that it was at moderate level. This may due to that head nurses receiving sufficient performance feedback, discus their problems with their supervisors and found support in addition to good relationship with their colleagues. This was confirmed by **Lee, (2019)** who found that nurses reported moderate level of job resources, and mentioned that it was esteemed as being significant means to either manage elevated rates of job demands or to safeguard appreciated resources. This was in the same line with

Adil, & Kamal (2019) who reported that nurses' job resources was at good level and somewhat sufficient to perform their duties. On the contrast, **Borst, et al (2019)** found that nurses rated their job resources as low.

Regarding head nurses' total job crafting, the finding of the present study revealed that head nurses' total job crafting was at the moderate level. This may due to that head nurses think about in what way their job gives their life purpose, think about the methods in which their work positively impact their life and reveal on the role their job had for their overall well-being as well as they give favorite to work activities that suit their abilities or interests. This was supported by **Romeo, et al (2018)** who reported that the contributors made moderate level of job crafting actions and mentioned that job crafting improves staffs' felt importance of work and fulfillment of appreciated individuality at work. It enhances workers' work lives in several esteemed methods. Confirming that job crafting is not useful to the employee only but also colleagues and public organizations can benefit from it.

In agreement of the existing study, **Audenaert, et al (2020)** stated that job crafting activities are generally connected with optimistic consequences, since proactive employees, able to adjust their working environment, are also more likely to participate positively to the association. Additionally, job crafting activities, by promoting person–job fit, place employees in a position to attain better act and also helps the employees to cope with organizational adjustment. Additionally, **Frederick & VanderWeele (2020)** found that nurses achieved moderate job crafting activities, concluding that job crafting permits personnel to appreciate the wider effects

of their work and to know the worth that their job may grasp in their life.

The results of the present study revealed that head nurses job demands and resources were positively correlated with job crafting. This is consistent with the results of **Makikangas, et al (2020)** who told that job crafting itself is influenced by the rate of job demands from the setting and the available job resources in the work. This finding supported by **Lee, et al (2017)** who specified that job crafting plays an significant role as a strong mediator mechanism, concluded that job crafting positively associated with job resources as chances for development and performance feedback, and was improved as a type of employees' reaction to the demands of the work environment.

In the same respect, **Baghdadi, et al (2020)** stated that, job crafting results in a rise in the level of job resources. This outcome is significant in today's continuously varying work setting. For example, not wholly members work in resourceful environments, but they may be capable of responding proactively to their work condition and actively mobilize their job resource. This was in agreement with **Riedl & Thomas (2019)** who stated that when individual perceiving actual high job demands including high work load and actual given job resources, they engage in actions that decrease or relieve the perceived condition through job crafting activities.

In this context, **Tims & Parker (2020)** highlighted that, Job demands play a fundamental role in the hypothesized energetic manner that might cause burnout and health complications, decreasing those demands appears to be necessary. Many preventive organizational created strategies occur to

handle high job demands, as job crafting, flexible work schedules and goal setting

Conclusion

The majority of head nurses showed moderate level of job demands, nearly two thirds of them presented moderate level of job resources and more than half of them demonstrated moderate level of job crafting activities. There was statistical significant positive relation between job crafting and both job demands and job resources. So, from the above we can conclude that head nurses demonstrate job crafting activities to cope with high job demands in the present of adequate job resources.

Recommendations:

• To promote head nurses' job crafting , it is necessary to acknowledge and reward their good performance.

• Improve head nurses' autonomy is very important to enhance task crafting, as head nurses have the freedom to plan and carry out their daily activities.

• Administrators should provide flexibility of scheduling and balance between head nurses' family life and the requirement of their work, to decrease work life conflict.

• Supervisor should understand the importance of their support to head nurses, improving their relationship with them and helping them in difficulties which improve head nurses' relational crafting.

• Managers should encourage head nurses for personal growth, giving them opportunity to learn new things and allowing them variety at work.

Conflict of interest

There were no conflicts of interest.

Funding

References

Adil, A., & Kamal, A., (2019): Authentic leadership and psychological capital in job demands-resources model among Pakistani university teachers. International Journal of Leadership in Education, DOI: 10.1080/13603124.2019.1580772.

Adil, S & Baig, M., (2018): Impact of job demands-resources model on burnout and employee's well-being: Evidence from the pharmaceutical organizations of Karachi. IIMB Management Review. 30, 119–133

Audenaert, M., George, B., & Bauwens, R., (2020): Empowering Leadership, Social Support, and Job Crafting in Public Organizations: A Multilevel Study. Public Personnel Management. 49 (3). 367-392

Baghdadi, N., Abd-ElAliem, S., & Alsayed, S., (2020): The relationship between nurses' job crafting behaviours and their work engagement. Journal of Nursing Management.1-6

Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005): Job resources buffer the impact of job demands on burnout. Journal of Occupational Health Psychology, 10 , 170–180.

Bakker, A., Cusí, P., Sellens, J., & Grau, J., (2018): The Spanish version of the Job Crafting Scale. Psicothema. 30, (1) , 136-142.

Berthelsen, H., Hakanen, J., & Westerlund, H., (2018): Copenhagen Psychosocial Questionnaire - A validation study using the Job Demand- Resources model. PLoS ONE 13(4): e0196450. https://doi.org/10.1371/journal.pone.0196450.

Borst, R., Kruyen , P., & Lako, C., (2019): Exploring the Job Demands–Resources Model of Work Engagement in Government: Bringing in a Psychological Perspective. Review of Public Personnel Administration. 39(3) 372– 397

Castner, J., (2020): Professional Flourishing: The Job Demands–Resources Model and Emergency Nursing. Journal of Emergency Nursing. 45(6).607-610

Chang, S., Han, K., & Cho, Y., (2020): Association of Happiness and Nursing Work Environments with Job Crafting among Hospital Nurses in South Korea. International Journal of Environmental Research and Public Health. 17, 4042. doi:10.3390/ijerph17114042.

Cheng, H., Ding, Y., Wang, B., (2020): A validation study of the Job Crafting Scale among nurses in public hospitals in China. Journal of Nursing Management.28(5). 1021-1029

Cho, H., & Kim, E., (2020): Effect of Nursing Organizational Culture, Organizational Health, and Job Crafting on Intent to Stay among Registered Nurses. Journal of Korean Academy of Nursing Administration. 26 (2). 172-180.

Cho, S., Noh, H., Yang, E., Lee, J., Lee, N., Schaufeli, W., (2020): Examining the job demands-resources model in a sample of Korean correctional officers. Current Psychology 39:1521–1534. https://doi.org/10.1007/s12144-020-00620-8.

De Leon, J, A., (2019): The Moderating Role of Culture in the Job Demands-Resources Model. Published Doctorate Thesis. Louisiana Tech University. 43-45.

Demerouti, E., & Bakker, A., (2012): Work orientations in the job demands-resources model. Human Performance Management.
Development. 43 (3) 232-249. DOI 10.1108/EJTD-07-2018-0059.

Dubbelt, L., Demerouti, E., & Rispens, S., (2019): The value of job crafting for work engagement, task performance, and career satisfaction: longitudinal and quasi-experimental evidence. European Journal of Work and Organizational Psychology 28(3). 300-314.

Frederick, D., & VanderWeele, T., (2020): Longitudinal meta-analysis of job crafting shows positive association with work engagement. Industrial and Organizational Psychology.1(1) 1-19.

Lee, S., Shin, Y., & Baek, S., (2017): The Impact of Job Demands And Resources on Job Crafting. The Journal of Applied Business Research. 33(4).

Lee, Y., & Eissenstat, S., (2018): An application of work engagement in the job demands–resources model to career development: Assessing gender differences. Human Resource Development Quarterly. 29(1) 143–161

Lee,Y., (2019): JD-R model on psychological well-being and the moderating effect of job discrimination in the model. European Journal of Training and

Lesener, T., Gusy, P., & Wolter, C., (2019): The job demands-resources model: A meta-analytic review of longitudinal studies. An International Journal of Work, Health & Organizations. 33 (1).

Makikangas, A., Leiter, M., Kinnunen, U., & Feldt, T., (2020): Profiling development of burnout over eight years: relation with job demands and resources. European Journal of Work and Organizational Psychology.1-12

Matsuo, M., (2019): Effect of learning goal orientation on work engagement through job crafting. Personnel Review. 48 (1), 220-233. DOI 10.1108/PR-11-2017-0346

Mudrak, J., Zabrodska, K., Kveton, P., Jelinek, M., Blatny, M., Solcova, I., & Machovcova, K., (2018): Well-being Among University Faculty: A Job Demands-Resources Model. Research Higher Education. 59(1), 325–348.

References

Riedl, E., & Thomas, J., (2019): The moderating role of work pressure on the relationships between emotional demands and tension, exhaustion, and work engagement: an experience sampling study among nurses. European Journal of Work and Organizational Psychology. 28(3) 414-429.

Romeo, M., Baldó, M., Westerberg, K., & Nordin, M., (2018): Impact of Job Crafting on Quality of Care: The Moderating Effect of Commitment. Psychology, 9 (12) 2649-2661. doi: 10.4236/psych.2018.912151.

Rothmann, S., Mostert, K., & Strydom, M., (2006): A Psychometric Evaluation of The Job Demands Resources Scale in South Africa. Journal of Industrial Psychology, 32 (4), 76-86

Schaufeli, W. B., Bakker, A. B., & van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. Journal of Organizational Behavior, 30 , 893–917.

Schaufeli, W., B., (2017): Applying the Job Demands-Resources model: A

'how to' guide to measuring and tackling work engagement and burnout. Organizational Dynamics. 46, 120—132

Slemp, G. R., & Vella-Brodrick, D. A. (2013). The job crafting questionnaire: a new scale to measure the extent to which employees engage in job crafting. International Journal of Wellbeing . 3 (2) 126–146. doi: 10.5502/ijw.v3i2.1

Tims, M., & Parker, S., (2020): How coworkers attribute, react to, and shape job crafting. Organizational Psychology Review. 10 (1) 29–54.